

en	This safety data sheet file is issued for the following production lots: 1. Version 1.X is valid for HIT-RE 500 V4 with a maximum expiration date of 02/2024 (see foil pack manifold) 2. Version 2.0 is valid for HIT-RE 500 V4 with a minimum expiration date of 03/2024 (see the foil pack manifold)
de	Diese Sicherheitsdatenblatt-Datei betrifft die folgenden Fertigungslose: 1. Version 1.X ist gültig für HIT-RE 500 V4 mit einem Haltbarkeitsdatum bis 02/2024 (siehe Verbindungsteil) 2. Version 2.0 ist gültig für HIT-RE 500 V4 mit einem Haltbarkeitsdatum ab 03/2024 (siehe Verbindungsteil)
nl	Dit veiligheidsinformatiebladbestand wordt afgegeven voor de volgende productie-lots: 1. Versie 1.X is geldig voor HIT-RE 500 V4 met een maximale houdbaarheidsdatum tot 02/2024 (zie foliepak verdeler) 2. Versie 2.0 is geldig voor HIT-RE 500 V4 met een minimale houdbaarheidsdatum tot 03/2024 (zie foliepak verdeler)
fr	Ce fichier de données de sécurité est délivré pour les lots de production suivants : 1. La version 1.X est valide pour HIT-RE 500 V4 avec une date d'expiration maximale de 02/2024 (voir le raccord de cartouche souple)
da	2. La version 2.0 est valide pour HIT-RE 500 V4 avec une date d'expiration maximale de 03/2024 (voir le raccord de cartouche souple) Denne sikkerhedsdatabladsfil er udgivet for følgende produktions lots: 1. Version 1.X er gældende for HIT-RE 500 V4 med en maksimal udløbsdato d. 02/2024 (se foliepakkens manifold)
	2. Version 2.0 er gældende for HIT-RE 500 V4 med en mindste udløbsdato d. 03/2024 (se foliepakkens manifold)
sv	Denna säkerhetsdatabladsfil har utfärdats för följande tillverkningspartier: 1. Version 1.X är giltig för HIT-RE 500 V4 med ett sista giltighetsdatum den 02/2024 (se folieförpackningens grenrör) 2. Version 2.0 är giltig för HIT-RE 500 V4 med ett första giltighetsdatum den 03/2024 (se folieförpackningens grenrör)
fi	Tämä käyttöturvallisuustiedote koskee seuraavia tuotantoeriä: 1. Versio 1.X koskee HIT-RE 500 V4 -tuotetta, jonka viimeinen käyttöpäivämäärä on 02/2024 tai sitä ennen (ks. foliopakkauksen taite) 2. Versio 2.0 koskee HIT-RE 500 V4 -tuotetta, jonka viimeinen käyttöpäivämäärä on 03/2024 tai sen jälkeen (ks. foliopakkauksen taite)
hu	Ezt a biztonsági adatlapot a következő gyártási tételekhez bocsátják ki: 1. Az 1.X változat legfeljebb 2024/02 lejárati dátummal érvényes a HIT-RE 500 V4-re (lásd a fóliacsomag sokszorosított iratát) 2. Az 2.0 változat legalább 2024/03 lejárati dátummal érvényes a HIT-RE 500 V4-re (lásd a fóliacsomag sokszorosított iratát)
es	Este archivo de hoja de datos de seguridad se emite para los siguientes lotes de producción: 1. Versión 1.X válida para HIT-RE 500 V4 con una fecha de caducidad máxima de 02/2024 (consulte el colector de láminas) 2. Versión 2.0 válida para HIT-RE 500 V4 con una fecha de caducidad mínima de 03/2024 (consulte el colector de láminas)
pt	Este ficheiro com ficha de dados de segurança é emitido para os seguintes lotes de produção: 1. A versão 1.X é válida para a HIT-RE 500 V4 com um prazo máximo de validade até 02/2024 (ver as diversas embalagens) 2. A versão 2.0 é válida para a HIT-RE 500 V4 com um prazo mínimo de validade até 03/2024 (ver as diversas embalagens)
it	Questo file della scheda tecnica di sicurezza è rilasciato per i seguenti lotti di produzione: 1. La versione 1.X è valida per HIT-RE 500 V4 con data di scadenza massima 02/2024 (vedere la giunzione della confezione) 2. La versione 2.0 è valida per HIT-RE 500 V4 con data di scadenza minima 03/2024 (vedere la giunzione della confezione)
pl	Ten plik arkusza danych bezpieczeństwa jest wydany dla następujących części produkcyjnych: 1. Wersja 1.X obowiązuje w przypadku HIT-RE 500 V4 z maksymalnym dniem rozpoczęcia pracy 02/2024 (patrz opakowanie foliowe) 2. Wersja 2.0 obowiązuje w przypadku HIT-RE 500 V4 z minimalnym dniem rozpoczęcia pracy 03/2024 (patrz opakowanie foliowe)
ru	Этот файл сертификата безопасности предоставлен для следующих партий продукции: 1. Версия 1.Х действительна для HIT-RE 500 V4 с максимальным сроком годности до 02.2024 г. (см. присоединительную часть на капсуле) 2. Версия 2.0 действительна HIT-RE 500 V4 с минимальным сроком годности до 03.2024 г. (см. присоединительную часть на капсуле)
el	Το παρόν δελτίο δεδομένων ασφάλειας εκδίδεται για τις ακόλουθες παρτίδες παραγωγής: 1. Η έκδοση 1.Χ ισχύει για το HIT-RE 500 V4 με μέγιστη ημερομηνία λήξης τον 02/2024 (βλέπε διανομέα συσκευασίας μεμβράνης) 2. Η έκδοση 2.0 ισχύει για το HIT-RE 500 V4 με ελάχιστη ημερομηνία λήξης τον 03/2024 (βλέπε τον διανομέα της συσκευασίας μεμβράνης)
cs	Tento soubor s bezpečnostním listem je vystaven pro tyto výrobní závody 1. Verze 1.X je platná pro HIT-RE 500 V4 s maximálním datem expirace 02/2024 (viz fólie balení) 2. Verze 2.0 je platná pro HIT-RE 500 V4 s minimálním datem expirace 03/2024 (viz fólie balení)
bg	Този информационен лист за безопасност се публикува за следните производствени партиди: 1. Версия 1.Х е валидна за HIT-RE 500 V4 с максимален срок на валидност до 02.2024 г. (вж. фолийна опаковка за колектор) 2. Версия 2.0 е валидна за HIT-RE 500 V4 с минимален срок на изтичане 03.2024 г. (вж. фолийна опаковка за колектор)
lv	Šo drošības datu lapa ir izsniegta šādām ražojumu partijām: 1. Versija 1.X ir derīga izstrādājumam HIT-RE 500 V4, kura maksimālais derīguma termiņš ir 2024. gada februāris (skatīt folija iepakojuma kolektoru) 2. Versija 2.0 ir derīga izstrādājumam HIT-RE 500 V4, kura minimālais derīguma termiņš ir 2024. gada marts (skatīt folija iepakojuma kolektoru)
lt	Šis saugos duomenų lapo failas išduodamas šioms gamybos partijoms: 1. 1.X versija galioja HIT-RE 500 V4, kurios maksimali galiojimo data – 2024-02 (žr. folinių pakuočių rinkinį) 2. 2.0 versija galioja HIT-RE 500 V4, kurios minimali galiojimo data – 2024-03 (žr. folinių pakuočių rinkinį)
sk	Tento súbor bezpečnostných údajov sa vydáva pre tieto výrobné šarže: 1. Verzia 1.X je platná pre HIT-RE 500 V4 s maximálnym dátumom exspirácie 02/2024 (pozrite si údaj na fólii balenia) 2. Verzia 2.0 je platná pre HIT-RE 500 V4 s minimálnym dátumom exspirácie 03/2024 (pozrite si údaj na fólii balenia)
sl	Datoteka z varnostnim listom je izdana za naslednje proizvodne serije: 1. Različica 1.X je veljavna za izdelek HIT-RE 500 V4 z maksimalnim datumom poteka veljavnosti: 02/2024 (glejte pakiranje) 2. Različica 2.0 je veljavna za izdelek HIT-RE 500 V4 z minimalnim datumom poteka veljavnosti: 03/2024 (glejte pakiranje)



	See ohutuskaardi fail on välja antud järgmistele tootepartiidele:
et	Versioon 1.X kehtib tootele HIT-RE 500 V4 viimase säilimiskuupäevaga 02/2024 (vt fooliumpakendi hargnemiskohta) Versioon 2.0 kehtib tootele HIT-RE 500 V4 esimese säilimiskuupäevaga 03/2024 (vt fooliumpakendi hargnemiskohta)
ro	Acest fișier cu date tehnice de securitate este emis pentru următoarele locuri de producție: 1. Versiunea 1.X este valabilă pentru HIT-RE 500 V4 cu data maximă de expirare 02/2024 (a se vedea racordul pentru cartușe din folie) 2. Versiunea 2.0 este valabilă pentru HIT-RE 500 V4 cu data minimă de expirare 03/2024 (a se vedea racordul pentru cartușe din folie)
hr	Ovaj sigurnosno-tehnički list izdaje se za sljedeće proizvodne serije: 1. Verzija 1.X vrijedi za HIT-RE 500 V4 s maksimalnim rokom trajanja do 02/2024 (vidjeti razvodnik iz folije) 2. Verzija 2.0 vrijedi za HIT-RE 500 V4 s minimalnim rokom trajanja do 03/2024 (vidjeti razvodnik iz folije)
tr	Bu güvenlik bilgi formu dosyası aşağıdaki üretim partileri için hazırlanmıştır: 1. Versiyon 1.X, maksimum son kullanma tarihi 02/2024 olan HIT-RE 500 V4 için geçerlidir (bkz. folyo paketi manifoldu) 2. Versiyon 2.0, inimumm son kullanma tarihi 03/2024 olan HIT-RE 500 V4 için geçerlidir (bkz. folyo paketi manifoldu)
uk	Цей файл сертифіката безпеки надано для наступних партій продукції: 1. Версія 1.Х дійсна для HIT-RE 500 V4 з максимальним терміном придатності до 02.2024 р. (див. приєднувальну частину на капсулі) 2. Версія 2.0 дійсна для HIT-RE 500 V4 з мінімальним терміном придатності до 03.2024 р. (див. приєднувальну частину на капсулі)
	本安全数据表文件 针对以下生产批次发布:
zh	1. 版本 1.X 对 HIT-RE 500 V4 有效,最长失效日期为 2024 年 02 月(参见箔包装歧管)
	2. 版本 2.0 对 HIT-RE 500 V4 有效,最短失效日期为 2024 年 03 月(参见箔包装歧管)
ar	يتم إصدار ملف صحيفة بيانات السلامة لتشغيلات الإنتاج التالية: 1. الإصدار 1.X صالح لـ HIT-RE 500 V4 بحد أقصى لتاريخ انتهاء الصلاحية هو 2024/02 (انظر العبوة المصنوعة من رقانق الألومنيوم) 2. الإصدار 2.0 صالح لـ HIT-RE 500 V4 على الأقل لتاريخ انتهاء الصلاحية هو 2024/03 (انظر العبوة المصنوعة من رقائق الألومنيوم)
ja	この安全性データシートファイルは、次の生産ロット用に発行されています: 1. バージョン 1.X は、有効期限が最大 2024 年 02 月までの HIT-RE 500 V4 に対して有効です (フォイルパック連結部に表示) 2. バージョン 2.0 は、有効期限が 2024 年 03 月以降の HIT-RE 500 V4 に対して有効です (フォイルパック連結部に表示)
sr	Datoteka bezbednosnog lista se izdaje za sledeće proizvodne serije: 1. Verzija 1.X je dostupna za HIT-RE 500 V4 sa maksimalnim datumom isteka 02/2024 (pogledajte ivicu pakovanja od folije) 2. Verzija 2.0 je dostupna za HIT-RE 500 V4 sa minimalnim datumom isteka 03/2024 (pogledajte ivicu pakovanja od folije)
ms	Fail helaian data keselamatan ini dikeluarkan untuk lot pengeluaran yang berikut: 1. Versi 1.X adalah sah untuk HIT-RE 500 V4 dengan tarikh tamat tempoh maksimum pada 02/2024 (lihat manifold pek kerajang) 2. Versi 2.0 adalah sah untuk HIT-RE 500 V4 dengan tarikh tamat tempoh minimum pada 03/2024 (lihat manifold pek kerajang)
	본 안전보건자료는 다음 제품 로트에 대해 발급되었습니다.
ko	1. 버전 1.X(은)는 HIT-RE 500 V4에 대해 유효하며, 최대 만료 기한은 2024년 02월입니다(호일 팩 매니폴드 참조)
	2. 버전 2.0(은)는 HIT-RE 500 V4에 대해 유효하며, 최소 만료 기한은 2024년 03월입니다(호일 팩 매니폴드 참조)
id	File lembar data keselamatan ini diterbitkan untuk lot produksi berikut: 1. Versi 1.X berlaku untuk HIT-RE 500 V4 dengan tanggal kedaluwarsa maksimum 02/2024 (lihat foil pack manifold) 2. Versi 2.0 berlaku untuk HIT-RE 500 V4 dengan tanggal kedaluwarsa minimum 03/2024 (lihat foil pack manifold)
he	קובץ גיליון נתוני בטיחות זה מונפק עבור מגרשי הייצור הבאים: 1. גרסה 1.X תקפה ל-HIT-RE 500 V4 עם תאריך תפוגה מקסימלי של 02/2024 (ראה יריעת foil pack) 2. גרסה 2.0 תקפה ל-HIT-RE 500 V4 עם תאריך תפוגה מינימלי של 03/2024 (ראה יריעת foil pack)
th	แผ่นข้อมูลด้านความปลอดภัยนี้ที่ได้จัดทำสำหรับล็อตการผลิตดังต่อไปนี้: 1. เวอร์ชั่น 1.X ใช้ได้กับ HIT-RE 500 V4 ที่มีวันหมดอายุไม่เกิน 02/2024 (โปรดดูแผ่นพับห่อฟอยล์) 2. เวอร์ชั่น 2.0 ใช้ได้กับ HIT-RE 500 V4 ที่มีวันหมดอายุขั้นต่ำ 03/2024 (โปรดดูแผ่นพับห่อฟอยล์)
vi	Tệp bảng dữ liệu an toàn này được phát hành cho các lô sản xuất sau: 1. Phiên bản 1.X hợp lệ cho HIT-RE 500 V4 với ngày hết hạn tối đa là 02/2024 (xem ống keo cấy thép) 2. Phiên bản 2.0 hợp lệ cho HIT-RE 500 V4 với ngày hết hạn tối thiểu là 03/2024 (xem ống keo cấy thép)
zh tw	下列生產批次將獲核發本安全資料表檔案: 1. 1.X 版適用於 HIT-RE 500 V4,最長到期日 02/2024 (請見鋁箔包打字紙) 2. 2.0 版適用於 HIT-RE 500 V4,最短到期日 03/2024 (請見鋁箔包打字紙)
kk	Бұл қауіпсіздік паспорты мына өндірістік партиялар үшін шығарылады: 1. 1.Х нұсқасы жарамдылық мерзімі көп уақытты (02/2024) қамтитын HIT-RE 500 V4 үшін жарамды (жұқалтыр қаптаманы қараңыз) 2. 2.0 нұсқасы жарамдылық мерзімі аз уақытты (03/2024) қамтитын HIT-RE 500 V4 үшін жарамды (жұқалтыр қаптаманы қараңыз)



Safety information for 2-Component-products

Issue date: 11/11/2022 Revision date: 11/11/2022 Supersedes: 10/11/2022 Version: 2.0

SECTION 1: Kit identification

1.1 Product identifier

Product name HIT-RE 500 V4



Product code BU Anchor

1.2 Details of the supplier of the Safety information for 2-Component-products

Hilti (Aust.) Pty. Ltd.
Level 5, 1G Homebush Bay Drive
P.O. Box 3217
2138 Rhodes NSW - Australia
T +61 131 292 - F +61 1300 135 042
serviceaustralia@hilti.com

SECTION 2: General information

Storage temperature : 5 - 25 °C

A SDS for each of these components is included. Please do not separate any component SDS from this cover page

This Kit should be handled in accordance with good laboratory practices and appropriate personal protective equipment should be used

SECTION 3:

Classification of the Product

2.1. Classification of the hazardous chemical

Classification according to the model Work Health and Safety Regulations (WHS Regulations)

Skin corrosion/irritation, Category 1B H314
Serious eye damage/eye irritation, Category 1 H318
Skin sensitisation, Category 1 H317
Specific target organ toxicity – Single exposure, H335

Category 3, Respiratory tract irritation

2.2. Label elements

Hazard pictograms (GHS AU)

Signal word (GHS AU)

Contains





GHS05

Danger

Epoxy resin, Amines

Hazard statements (GHS AU) H314 - Causes severe skin burns and eye damage

H317 - May cause an allergic skin reaction

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Safety information for 2-Component-products

H335 - May cause respiratory irritation

Precautionary statements (GHS AU) P280 - Wear eye protection, protective clothing, protective gloves.

P262 - Do not get in eyes, on skin, or on clothing.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

P333+P313 - If skin irritation or rash occurs: Get medical advice/attention. P337+P313 - If eye irritation persists: Get medical advice/attention.

P302+P352 - IF ON SKIN: Wash with plenty of water.

2.3. Other hazards not contributing to the classification

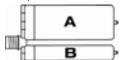
No additional information available

Additional information

2-component-foilpack, contains:

Component A. Epoxy resin, Reactive diluent, inorganic filler

Component B: Amine hardener, inorganic filler



Name	General description	Quantity	Unit	Classification according to the model Work Health and Safety Regulations (WHS Regulations)
HIT-RE 500 V4, A		1	pcs (pieces)	Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317
HIT-RE 500 V4, B		1	pcs (pieces)	Skin Corr. 1B, H314 Skin Sens. 1, H317 STOT SE 3, H335

SECTION 4: General advice

General advice For professional users only

SECTION 5: Safe handling advice

General measures Spilled material may present a slipping hazard Environmental precautions Prevent entry to sewers and public waters

Notify authorities if liquid enters sewers or public waters

Avoid release to the environment

Full or only partially emptied cartridges must be disposed of as special waste in accordance

with official regulations.

After curing, the product can be disposed of with household waste.

Storage conditions Protect from sunlight. Store in a well-ventilated place.

Technical measures

Comply with applicable regulations

Precautions for safe handling

Wear personal protective equipment

Avoid contact with skin and eyes

Wash hands and other exposed areas with mild soap and water before eating, drinking or

smoking and when leaving work

Avoid contact during pregnancy/while nursing

Methods for cleaning up

This material and its container must be disposed of in a safe way, and as per local legislation

Mechanically recover the product

On land, sweep or shovel into suitable containers

Store away from other materials.

For containment Collect spillage.

Incompatible materials Sources of ignition Direct sunlight

Incompatible products Strong bases

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Safety information for 2-Component-products

Strong acids

SECTION 6: First aid measures

First-aid measures after eye contact Get immediate medical advice/attention.

Immediately rinse with water for a prolonged period while holding the eyelids wide open

Remove contact lenses, if present and easy to do. Continue rinsing.

Consult an eye specialist

First-aid measures after ingestion Do not induce vomiting

Rinse mouth

Immediately call a POISON CENTER/doctor.

First-aid measures after inhalation Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact Wash with plenty of water/...

Take off immediately all contaminated clothing. Wash contaminated clothing before reuse.

If skin irritation or rash occurs: Get immediate medical advice/attention.

First-aid measures general Never give anything by mouth to an unconscious person

If you feel unwell, seek medical advice (show the label where possible)

Symptoms/effects Causes severe skin burns and eye damage.

Symptoms/effects after eye contact Causes serious eye damage.

Symptoms/effects after skin contact May cause an allergic skin reaction.

SECTION 7: Fire fighting measures

Firefighting instructions

Use water spray or fog for cooling exposed containers

Exercise caution when fighting any chemical fire

Prevent fire fighting water from entering the environment

Protection during firefighting Self-contained breathing apparatus

Do not enter fire area without proper protective equipment, including respiratory protection

Hazardous decomposition products in case of

fire

Thermal decomposition generates:

Carbon dioxide
Carbon monoxide

SECTION 8: Other information

No data available

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Safety Data Sheet

according to the Work Health and Safety (WHS) Regulations Issue date: 10/11/2022 Revision date: 10/11/2022

SECTION 1: Product identifier

1.1. GHS Product identifier

Product form Mixture

Trade name HIT-RE 500 V4. B Product code **BU** Anchor

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Recommended use For professional use only

Composite mortar component for fasteners in the construction industry

Version: 1.0

1.4. Details of manufacturer or importer

Supplier Department issuing data specification sheet:

Hilti Entwicklungsgesellschaft mbH Hilti (Aust.) Pty. Ltd.

Level 5, 1G Homebush Bay Drive Hiltistraße 6 P.O. Box 3217 Kaufering 86916 Rhodes NSW 2138 Deutschland Australia T +49 8191 906876

T+61 131 292 - F+61 1300 135 042 anchor.hse@hilti.com

serviceaustralia@hilti.com

1.5. Emergency phone number

Emergency number Schweizerisches Toxikologisches Informationszentrum – 24h Service

+41 44 251 51 51 (international)

+61 2 8748 1000

SECTION 2: Hazard identification

2.1. Classification of the hazardous chemical

Classification according to the model Work Health and Safety Regulations (WHS Regulations)

Skin corrosion/irritation, Category 1B Skin sensitisation, Category 1 H317 Specific target organ toxicity - Single exposure, Category 3, Respiratory H335

tract irritation

2.2. GHS Label elements, including precautionary statements

Hazard pictograms (GHS AU)





Corrosion

Exclamation

mark

Signal word (GHS AU)

2-methyl-1,5-pentanediamine (25 - 35 %); Phenol, styrenated (5 - 10 %); m-Contains

Xylylenediamine (4 - < 8%); 2,4,6-tris(dimethylaminomethyl)phenol (1 - 3%); 3-

Aminopropyltriethoxysilan (1 – 3 %)

Hazard statements (GHS AU) H314 - Causes severe skin burns and eye damage

> H317 - May cause an allergic skin reaction H335 - May cause respiratory irritation

P280 - Wear eye protection, protective clothing, protective gloves. Precautionary statements (GHS AU)

P262 - Do not get in eyes, on skin, or on clothing.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

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Safety Data Sheet

according to the Work Health and Safety (WHS) Regulations

contact lenses, if present and easy to do. Continue rinsing.

P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.

P337+P313 - If eye irritation persists: Get medical advice/attention.

P302+P352 - IF ON SKIN: Wash with plenty of water.

2.3. Other hazards which do not result in classification

No additional information available

SECTION 3: Composition and information on ingredients

Name	CAS-No.	%	Classification according to the model Work Health and Safety Regulations (WHS Regulations)
2-methyl-1,5-pentanediamine	15520-10-2	25 – 35	Flam. Liq. 4, H227 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Corr. 1A, H314 Eye Dam. 1, H318 STOT SE 3, H335
Phenol, styrenated	61788-44-1	5 – 10	Skin Irrit. 2, H315 Skin Sens. 1, H317
m-Xylylenediamine	1477-55-0	4 – <8	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1B, H317
2,4,6-tris(dimethylaminomethyl)phenol	90-72-2	1-3	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2A, H319
3-Aminopropyltriethoxysilan	919-30-2	1 – 3	Flam. Liq. 4, H227 Acute Tox. 4 (Oral), H302 Acute Tox. 5 (Dermal), H313 Skin Corr. 1B, H314 Skin Sens. 1, H317

SECTION 4: First aid measures

4.1. Description of necessary first-aid measures

First-aid measures general Never give anything by mouth to an unconscious person. If you feel unwell, seek medical

advice (show the label where possible).

First-aid measures after inhalation Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact Wash with plenty of water/.... Take off immediately all contaminated clothing. Wash

 $contaminated \ clothing \ before \ reuse. \ If \ skin \ irritation \ or \ rash \ occurs: \ Get \ immediate \ medical$

advice/attention.

First-aid measures after eye contact Get immediate medical advice/attention. Immediately rinse with water for a prolonged period

while holding the eyelids wide open. Remove contact lenses, if present and easy to do.

Continue rinsing. Consult an eye specialist.

First-aid measures after ingestion Do not induce vomiting. Rinse mouth. Immediately call a POISON CENTER/doctor.

4.2. Symptoms caused by exposure

Symptoms/effects Causes severe skin burns and eye damage.

Symptoms/effects after skin contact May cause an allergic skin reaction.
Symptoms/effects after eye contact Causes serious eye damage.

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4.3. Medical attention and special treatment

SECTION 5: Fire-fighting measures

5.1. Extinguishing media

Suitable extinguishing media Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

General measures Spilled material may present a slipping hazard.

Hazardous decomposition products in case of fire Thermal decomposition generates: Carbon dioxide. Carbon monoxide.

5.3. Special protective equipment and precautions for fire-fighters

chemical fire. Prevent fire fighting water from entering the environment.

Protection during firefighting Self-contained breathing apparatus. Do not enter fire area without proper protective

equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures Spilled material may present a slipping hazard.

6.1.1. For non-emergency personnel

Emergency procedures Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment Use personal protective equipment as required. Equip cleanup crew with proper protection.

Emergency procedures Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment. Full or only partially emptied cartridges must be disposed of as special waste in accordance with official regulations. After curing, the product can be disposed of with household waste

6.3. Methods and materials for containment and cleaning up

For containment Collect spillage.

Methods for cleaning up

This material and its container must be disposed of in a safe way, and as per local

legislation. Mechanically recover the product. On land, sweep or shovel into suitable

containers. Store away from other materials.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling Wear personal protective equipment. Avoid contact with skin and eyes. Wash hands and

other exposed areas with mild soap and water before eating, drinking or smoking and when

leaving work. Avoid contact during pregnancy/while nursing.

Hygiene measures Do not eat, drink or smoke when using this product. Always wash hands after handling the

product. Contaminated work clothing should not be allowed out of the workplace. Wash

contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures Comply with applicable regulations.

Storage conditions Protect from sunlight. Store in a well-ventilated place.

Incompatible products Strong bases. Strong acids.
Incompatible materials Sources of ignition. Direct sunlight.

Storage temperature 5 – 25 °C

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according to the Work Health and Safety (WHS) Regulations

Heat and ignition sources

Keep away from heat and direct sunlight.

SECTION 8: Exposure controls and personal protection

8.1. Control parameters - exposure standards

HIT-RE 500 V4, B				
Australia - Occupational Exposure Limits				
Local name	m-Xylene-alpha,alpha'-diamine (m-Xylylendiamine; 1,3-Benzenedimethanamine)			
OES C	0.1 mg/m³			
Remark (AU)	Sk - Absorption through the skin may be a significant source of exposure.			
Regulatory reference	Workplace exposure standards for airborne contaminants (2022)			
m-Xylylenediamine (1477-55-0)				
Australia - Occupational Exposure Limits				
Local name	m-Xylene-alpha,alpha'-diamine (m-Xylylendiamine; 1,3-Benzenedimethanamine)			
OES C	0.1 mg/m³			
Remark (AU)	Sk - Absorption through the skin may be a significant source of exposure.			
Regulatory reference	Workplace exposure standards for airborne contaminants (2022)			

8.2. Biological Monitoring

No additional information available

8.3. Engineering controls

Appropriate engineering controls

Ensure good ventilation of the work station.

8.4. Individual protection measures, such as personal protective equipment (PPE)

Personal protective equipment

Materials for protective clothing

Long sleeved protective clothing

Hand protection

Wear protective gloves. The permeation time is not the maximum wearing time! Generally speaking, it must be reduced. Contact with either mixtures of substances or different

substances may shorten the protective function's effective duration.

Permeation Standard

Safety glasses. Gloves. Protective clothing. Avoid all unnecessary exposure.

Type	/laterial	Permeation	Thickness (mm)	Penetration	Standard
Disposable gloves Ni	litrile rubber (NBR)	6 (> 480 minutes)	> 0,4		EN ISO 374

Eye protection Wear security glasses which protect from splashes

Туре	Field of application	Characteristics	Standard
Safety glasses	Droplet	clear	EN 166, EN 170

Personal protective equipment symbol(s)







Environmental exposure controls

Consumer exposure controls
Other information

No specific measures are required provided the product is handled in accordance with the general rules of occupational hygiene and safety.

Avoid contact during pregnancy/while nursing.

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

 Physical state
 Solid

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Appearance Thixotropic paste. Colour Odour Amine-like Odour threshold No data available No data available рΗ pH solution No data available Relative evaporation rate (butylacetate=1) No data available Melting point / Freezing point No data available Boiling point No data available Flash point No data available Auto-ignition temperature No data available Flammability No data available Vapour pressure No data available Relative density No data available Density Density: 1.31 g/cm³ Solubility insoluble in water. Partition coefficient n-octanol/water (Log Pow) No data available Viscosity, dynamic 50 - 70 Pa·s HN-0333 Explosive properties No data available **Explosive limits** No data available Minimum ignition energy No data available

SECTION 10: Stability and reactivity

Fat solubility

Reactivity Corrosive vapours.

Chemical stability

Stable under normal conditions.

Possibility of hazardous reactions

No additional information available.

Conditions to avoid Direct sunlight. Extremely high or low temperatures.

Incompatible materials Strong acids. Strong bases.

Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not

be produced. Thermal decomposition generates: fume. Carbon monoxide. Carbon dioxide.

Corrosive vapours.

No data available

SECTION 11: Toxicological information

Acute toxicity (oral)

Acute toxicity (dermal)

Acute toxicity (inhalation)

Not classified

Not classified

reads terminy (minanation)			
2-methyl-1,5-pentanediamine (15520-10-2)			
LD50 oral rat	1690 mg/kg (Rat)		
LD50 dermal rat	1870 mg/kg		
LC50 Inhalation - Rat	4.9 mg/l		
Phenol, styrenated (61788-44-1)			
LD50 oral rat	> 2500 mg/kg		
LD50 dermal rat	> 2000 mg/kg		
LC50 Inhalation - Rat	158.31 mg/l/4h		
m-Xylylenediamine (1477-55-0)			
LD50 oral rat	1090 mg/kg		
LD50 dermal rat	> 3100 mg/kg		
LD50 dermal	> 3100 mg/kg		
LC50 Inhalation - Rat (Dust/Mist)	1.34 mg/l/4h		

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2,4,6-tris(dimethylaminomethyl)phenol (90-72-	2)
LD50 oral rat	2169 mg/kg (Rat; Equivalent or similar to OECD 401; Literature study; 2169 mg/kg bodyweight; Rat; Experimental value)
LD50 dermal rat	> 2000 mg/kg (Rat; Literature study; Other; >1 ml/kg; Rat; Experimental value)
3-Aminopropyltriethoxysilan (919-30-2)	
LD50 oral rat	1.57 – 2.83 ml/kg (EPA OTS 798.1175, Rat, Male / female, Experimental value, Oral)
LD50 dermal rabbit	4.29 ml/kg (EPA OTS 798.1100, 24 h, Rabbit, Male / female, Experimental value, Dermal)
LC50 Inhalation - Rat [ppm]	> 5 ppm (OECD 403: Acute Inhalation Toxicity, 6 h, Rat, Male, Experimental value, Inhalation (vapours))
Skin corrosion/irritation	Causes severe skin burns.
Serious eye damage/irritation	Assumed to cause serious eye damage
Respiratory or skin sensitisation	May cause an allergic skin reaction.
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Not classified
STOT-single exposure	May cause respiratory irritation.
2-methyl-1,5-pentanediamine (15520-10-2)	
STOT-single exposure	May cause respiratory irritation.
STOT-repeated exposure	Not classified
Aspiration hazard	Not classified
Potential adverse human health effects and symptoms	No additional information available

SECTION 12: Ecological information

According to the National Code of Practice for the Preparation of Material Safety Data Sheets, Environmental classification information is not mandatory. Information relevant for GHS classification is available on request

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Ecology - water Harmful to aquatic life with long lasting effects.

Hazardous to the aquatic environment, short-term Not classified

Hazardous to the aquatic environment, long-term Not classified

(chronic)

Other information	Avoid release to the environment.			
2-methyl-1,5-pentanediamine (15520-10-2)				
LC50 - Fish [1]	130 mg/l (LC50; 48 h)			
LOEC (acute)	1800 mg/l			
NOEC (acute)	1000 mg/l			
Partition coefficient n-octanol/water (Log Pow)	0.27 (Estimated value)			
Phenol, styrenated (61788-44-1)				
LC50 - Fish [1]	5.6 mg/l			
LC50 - Other aquatic organisms [1]	9.7 mg/l			
EC50 - Crustacea [1]	1.44 mg/l			
NOEC (acute)	3.2 mg/l			
BCF - Fish [1]	3246 I/kg (BCFBAF v3.01, Pisces, Fresh water, Weight of evidence, Fresh weight)			
BCF - Fish [2]	3246 mg/l			

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Persistence and degradability

Chemical oxygen demand (COD)

HIT-RE 500 V4, B

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Phenol, styrenated (61788-44-1)	
Partition coefficient n-octanol/water (Log Pow)	6.24 – 7.77 (Experimental value; OECD 123: Partition Coefficient (1-Octanol/Water): Slow-Stirring Method)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	3.145 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value)
Threshold limit - Algae [1]	0.326 mg/l (72 h; Algae)
Threshold limit - Algae [2]	0.14 mg/l (72 h; Algae)
m-Xylylenediamine (1477-55-0)	
LC50 - Fish [1]	75 mg/l
LC50 - Other aquatic organisms [1]	20.3 ppb
EC50 - Crustacea [1]	15 mg/l
LOEC (chronic)	15 mg/l
NOEC (acute)	10.5 mg/kg
NOEC (chronic)	4.7 mg/l
NOEC chronic crustacea	4.7 mg/l
2,4,6-tris(dimethylaminomethyl)phenol (90-72-2)	
LC50 - Fish [1]	> 100 mg/l (96 h; Pisces; Nominal concentration)
LC50 - Fish [2]	70.9 mg/l (96 h; Pisces)
EC50 - Other aquatic organisms [1]	84 mg/l (72 h; Desmodesmus subspicatus; growth rate; ECHA)
ErC50 algae	84 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, GLP)
NOEC (chronic)	2 mg/l (28 d; activated sludge, domestic; respiration rate; ECHA)
Partition coefficient n-octanol/water (Log Pow)	0.77 (Literature; 0.219; Experimental value; Equivalent or similar to OECD 107; 21.5 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.32 (log Koc, Calculated value)
Threshold limit - Algae [1]	10 - 100,Algae
Threshold limit - Algae [2]	84 mg/l (72 h; Scenedesmus subspicatus; Growth rate)
3-Aminopropyltriethoxysilan (919-30-2)	
LC50 - Fish [1]	> 934 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Brachydanio rerio, Semi-static system, Fresh water, Experimental value, GLP)
EC50 - Crustacea [1]	331 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP)
ErC50 algae	> 1000 mg/l (EU Method C.3, 72 h, Scenedesmus subspicatus, Static system, Fresh water, Experimental value, GLP)
	3.4 (OECD 305: Bioconcentration: Flow-Through Fish Test, 8 week(s), Cyprinus carpio,
BCF - Fish [1]	Flow-through system, Fresh water, Experimental value, Fresh weight)

 Phenol, styrenated (61788-44-1)

 Biochemical oxygen demand (BOD)
 0.000231 g O₂/g substance

0.004827 g O₂/g substance

May cause long-term adverse effects in the environment.

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m-Xylylenediamine (1477-55-0)				
Not rapidly degradable				
3-Aminopropyltriethoxysilan (919-30-2)				
Persistence and degradability	Not readily biodegradable in water.			
12.3. Bioaccumulative potential				
HIT-RE 500 V4, B				
Bioaccumulative potential	Not established.			
2-methyl-1,5-pentanediamine (15520-10-2)				
Partition coefficient n-octanol/water (Log Pow)	0.27 (Estimated value)			
Bioaccumulative potential	Low bioaccumulation potential (Log Kow < 4).			
Phenol, styrenated (61788-44-1)				
BCF - Fish [1]	3246 l/kg (BCFBAF v3.01, Pisces, Fresh water, Weight of evidence, Fresh weight)			
BCF - Fish [2]	3246 mg/l			
Partition coefficient n-octanol/water (Log Pow)	6.24 – 7.77 (Experimental value; OECD 123: Partition Coefficient (1-Octanol/Water): Slow-Stirring Method)			
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	3.145 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value)			
Bioaccumulative potential	Bioaccumulative potential.			
2,4,6-tris(dimethylaminomethyl)phenol (90-72-2)				
Partition coefficient n-octanol/water (Log Pow)	0.77 (Literature; 0.219; Experimental value; Equivalent or similar to OECD 107; 21.5 °C)			
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.32 (log Koc, Calculated value)			
Bioaccumulative potential	Low bioaccumulation potential (Log Kow < 4).			
3-Aminopropyltriethoxysilan (919-30-2)				
BCF - Fish [1]	3.4 (OECD 305: Bioconcentration: Flow-Through Fish Test, 8 week(s), Cyprinus carpio, Flow-through system, Fresh water, Experimental value, Fresh weight)			
Partition coefficient n-octanol/water (Log Pow)	1.7 (QSAR, 20 °C)			
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).			
12.4. Mobility in soil				
2-methyl-1,5-pentanediamine (15520-10-2)				
Partition coefficient n-octanol/water (Log Pow)	0.27 (Estimated value)			
Phenol, styrenated (61788-44-1)				
Ecology - soil	Low potential for mobility in soil.			
Partition coefficient n-octanol/water (Log Pow)	6.24 – 7.77 (Experimental value; OECD 123: Partition Coefficient (1-Octanol/Water): Slow-Stirring Method)			
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	3.145 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value)			
2,4,6-tris(dimethylaminomethyl)phenol (90-72-2)				
Surface tension	No data available in the literature			
Ecology - soil	Highly mobile in soil.			
Partition coefficient n-octanol/water (Log Pow)	0.77 (Literature; 0.219; Experimental value; Equivalent or similar to OECD 107; 21.5 °C)			

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2,4,6-tris(dimethylaminomethyl)phenol (90-72-2)		
Organic Carbon Normalized Adsorption Coefficient (Log Koc) 1.32 (log Koc, Calculated value)		
3-Aminopropyltriethoxysilan (919-30-2)		
Ecology - soil	No (test)data on mobility of the substance available.	
Partition coefficient n-octanol/water (Log Pow)	1.7 (QSAR, 20 °C)	

12.5. Other adverse effects

Ozone Not classified

Other adverse effects

No additional information available

SECTION 13: Disposal considerations

Regional legislation (waste)

Disposal must be done according to official regulations.

Product/Packaging disposal recommendations After curing, the product can be disposed of with household waste. . Full or only partially

emptied cartridges must be disposed of as special waste in accordance with official regulations. Packaging contaminated by the product : Dispose in a safe manner in

accordance with local/national regulations.

Ecology - waste materials Avoid release to the environment.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / RID

ADR	IMDG	IATA	RID
14.1. UN number or ID number			
UN 3259	UN 3259	UN 3259	UN 3259
14.2. UN proper shipping name			
AMINES, SOLID, CORROSIVE, N.O.S. (2-methyl-1,5- pentanediamine, m- Xylylenediamine)	AMINES, SOLID, CORROSIVE, N.O.S. (2-methyl-1,5- pentanediamine, m- Xylylenediamine)	Amines, solid, corrosive, n.o.s. (2- methyl-1,5-pentanediamine, m- Xylylenediamine)	AMINES, SOLID, CORROSIVE, N.O.S. (2-methyl-1,5- pentanediamine, m- Xylylenediamine)
Transport document description			
UN 3259 AMINES, SOLID, CORROSIVE, N.O.S. (2-methyl- 1,5-pentanediamine, m- Xylylenediamine), 8, II, (E)	UN 3259 AMINES, SOLID, CORROSIVE, N.O.S. (2-methyl- 1,5-pentanediamine, m- Xylylenediamine), 8, II	UN 3259 Amines, solid, corrosive, n.o.s. (2-methyl-1,5- pentanediamine, m- Xylylenediamine), 8, II	UN 3259 AMINES, SOLID, CORROSIVE, N.O.S. (2-methyl- 1,5-pentanediamine, m- Xylylenediamine), 8, II
14.3. Transport hazard class(es)			
8	8	8	8
8	8		S S S S S S S S S S S S S S S S S S S
14.4. Packing group			
II	II	II	II
14.5. Environmental hazards			
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No	Dangerous for the environment: No
No supplementary information availa	able		

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14.6. Special precautions for user

Overland transport

Classification code (ADR) C8
Special provisions (ADR) 274
Limited quantities (ADR) 1kg

Packing instructions (ADR) P002, IBC08
Mixed packing provisions (ADR) MP10
Transport category (ADR) 2

Orange plates

80 3259

Ε

Tunnel restriction code (ADR)

Transport by sea

Special provisions (IMDG) 274
Limited quantities (IMDG) 1 kg
Packing instructions (IMDG) P002
EmS-No. (Fire) F-A
EmS-No. (Spillage) S-B
Stowage category (IMDG) A
MFAG-No 154

Air transport

PCA packing instructions (IATA) 859
PCA max net quantity (IATA) 15kg
CAO packing instructions (IATA) 863
Special provisions (IATA) A3

Rail transport

Special provisions (RID) 274
Limited quantities (RID) 1kg

Packing instructions (RID) P002, IBC08

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations specific for the product in question

Australian Industrial Chemicals Introduction Scheme (AICIS)

Australian Inventory of Industrial Chemicals (AICIS All the chemicals contained in this product are listed introductions Inventory) status

15.2. International agreements

No additional information available

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SECTION 16: Other information

Abbreviations and acronyms

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

ADR - European Agreement concerning the International Carriage of Dangerous Goods by

ATE - Acute Toxicity Estimate

BCF - Bioconcentration factor

CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008

DMEL - Derived Minimal Effect level DNEL - Derived-No Effect Level

IATA - International Air Transport Association

EC50 - Median effective concentration

IMDG - International Maritime Dangerous Goods

LC50 - Median lethal concentration

LD50 - Median lethal dose

LOAEL - Lowest Observed Adverse Effect Level NOAEC - No-Observed Adverse Effect Concentration

NOAEL - No-Observed Adverse Effect Level NOEC - No-Observed Effect Concentration PBT - Persistent Bioaccumulative Toxic PNEC - Predicted No-Effect Concentration

REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation

(EC) No 1907/2006

RID - Regulations concerning the International Carriage of Dangerous Goods by Rail

SDS - Safety Data Sheet

vPvB - Very Persistent and Very Bioaccumulative

Revision date 10/11/2022 Other information None.

Classification		
Skin Corr. 1B	H314	
Skin Sens. 1	H317	
STOT SE 3	H335	

Full text of H-statements	
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Acute Tox. 5 (Dermal)	Acute toxicity (dermal), Category 5
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2A	Serious eye damage/eye irritation, Category 2A
Flam. Liq. 4	Flammable liquids, Category 4
Skin Corr. 1A	Skin corrosion/irritation, Category 1A
Skin Corr. 1B	Skin corrosion/irritation, Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
Skin Sens. 1B	Skin sensitisation, category 1B
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation

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Full text of H-statements	
H227	Combustible liquid
H302	Harmful if swallowed
H312	Harmful in contact with skin
H313	May be harmful in contact with skin
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H319	Causes serious eye irritation
H332	Harmful if inhaled
H335	May cause respiratory irritation

SDS_AU_Hilti

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

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Safety Data Sheet

according to the Work Health and Safety (WHS) Regulations

Issue date: 11/11/2022 Revision date: 11/11/2022 Supersedes: 10/11/2022 Version: 2.0

SECTION 1: Product identifier

1.1. GHS Product identifier

Product form Mixture

Product name HIT-RE 500 V4. A Product code **BU** Anchor

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Recommended use For professional use only

Composite mortar component for fasteners in the construction industry

1.4. Details of manufacturer or importer

Supplier

Hilti (Aust.) Pty. Ltd.

Level 5, 1G Homebush Bay Drive

P.O. Box 3217 Rhodes NSW 2138

Australia

T+61 131 292 - F+61 1300 135 042

serviceaustralia@hilti.com

Department issuing data specification sheet:

Hilti Entwicklungsgesellschaft mbH

Hiltistraße 6 Kaufering 86916 Deutschland T +49 8191 906876

anchor.hse@hilti.com

1.5. Emergency phone number

Emergency number Schweizerisches Toxikologisches Informationszentrum – 24h Service

+41 44 251 51 51 (international)

+61 28748 1000

SECTION 2: Hazard identification

2.1. Classification of the hazardous chemical

Classification according to the model Work Health and Safety Regulations (WHS Regulations)

Skin corrosion/irritation, Category 2 Serious eye damage/eye irritation, Category 1 H318 H317 Skin sensitisation, Category 1

2.2. GHS Label elements, including precautionary statements

Hazard pictograms (GHS AU)





Corrosion

Exclamation

Signal word (GHS AU)

Danger

Contains 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane (25 – 40 %);

Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol (10 - 25 %); Trimethylol ethane triglycidyl ether Polymer (5 - 10 %); butanedioldiglycidyl ether

(5-10%); [3-(2,3-epoxypropoxy)propy]trimethoxysilane (2.5-5%)

Hazard statements (GHS AU) H315 - Causes skin irritation

> H317 - May cause an allergic skin reaction H318 - Causes serious eye damage

P280 - Wear eye protection, protective clothing, protective gloves. Precautionary statements (GHS AU)

P262 - Do not get in eyes, on skin, or on clothing.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

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contact lenses, if present and easy to do. Continue rinsing.

P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.

P337+P313 - If eye irritation persists: Get medical advice/attention.

P302+P352 - IF ON SKIN: Wash with plenty of water.

2.3. Other hazards which do not result in classification

No additional information available

SECTION 3: Composition and information on ingredients

Name	CAS-No.	%	Classification according to the model Work Health and Safety Regulations (WHS Regulations)
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane	1675-54-3	25 – 40	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1, H317
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	9003-36-5	10 – 25	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1, H317
Trimethylol ethane triglycidyl ether Polymer	68460-21-9	5 – 10	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1, H317
butanedioldiglycidyl ether	2425-79-8	5 – 10	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	2530-83-8	2.5 – 5	Acute Tox. 5 (Dermal), H313 Eye Dam. 1, H318

SECTION 4: First aid measures

4.1. Description of necessary first-aid measures

First-aid measures general Never give anything by mouth to an unconscious person. If you feel unwell, seek medical

advice (show the label where possible).

First-aid measures after inhalation Remove person to fresh air and keep comfortable for breathing. Allow affected person to

breathe fresh air. Allow the victim to rest.

First-aid measures after skin contact Gently wash with plenty of soap and water. Wash contaminated clothing before reuse. If

skin irritation occurs: Get immediate medical advice/attention.

First-aid measures after eye contact Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do.

Continue rinsing. Obtain medical attention if pain, blinking or redness persists.

First-aid measures after ingestion Rinse mouth. Get medical advice/attention. Do not induce vomiting. Obtain emergency

medical attention.

4.2. Symptoms caused by exposure

Symptoms/effects after skin contact

Causes skin irritation. May cause an allergic skin reaction.

Symptoms/effects after eye contact Causes serious eye irritation.

4.3. Medical attention and special treatment

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SECTION 5: Fire-fighting measures

5.1. Extinguishing media

Suitable extinguishing media Water spray. Carbon dioxide. Dry powder. Foam. Sand.

Unsuitable extinguishing media Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

General measures Spilled material may present a slipping hazard.

Hazardous decomposition products in case of fire Thermal decomposition generates: Carbon dioxide. Carbon monoxide.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions

Use water spray or fog for cooling exposed containers. Exercise caution when fighting any

chemical fire. Prevent fire fighting water from entering the environment.

Protection during firefighting Self-contained breathing apparatus. Do not enter fire area without proper protective

equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures Spilled material may present a slipping hazard.

6.1.1. For non-emergency personnel

Emergency procedures Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment Use personal protective equipment as required. Equip cleanup crew with proper protection.

Emergency procedures Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment. Full or only partially emptied cartridges must be disposed of as special waste in accordance with official regulations. After curing, the product can be disposed of with household waste.

6.3. Methods and materials for containment and cleaning up

For containment Collect spillage.

Methods for cleaning up

This material and its container must be disposed of in a safe way, and as per local

legislation. Mechanically recover the product. On land, sweep or shovel into suitable

containers. Store away from other materials.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling Wear personal protective equipment. Avoid contact with skin and eyes. Wash hands and

other exposed areas with mild soap and water before eating, drinking or smoking and when

leaving work.

Hygiene measures Do not eat, drink or smoke when using this product. Always wash hands after handling the

product. Contaminated work clothing should not be allowed out of the workplace. Wash

contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions Protect from sunlight.

Incompatible products Strong bases. Strong acids.

Incompatible materials Sources of ignition. Direct sunlight.

Storage temperature 5 – 25 °C

Heat and ignition sources Keep away from heat and direct sunlight.

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SECTION 8: Exposure controls and personal protection

8.1. Control parameters - exposure standards

No additional information available

8.2. Biological Monitoring

No additional information available

8.3. Engineering controls

Appropriate engineering controls

No specific measures identified.

8.4. Individual protection measures, such as personal protective equipment (PPE)

Personal protective equipment Safety glasses. Gloves. Protective clothing. Avoid all unnecessary exposure.

Materials for protective clothing Long sleeved protective clothing

Hand protection Wear protective gloves. The permeation time is not the maximum wearing time! Generally

speaking, it must be reduced. Contact with either mixtures of substances or different substances may shorten the protective function's effective duration.

Туре	Material	Permeation	Thickness (mm)	Penetration	Standard
Disposable gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	> 0,4		EN ISO 374

Eye protection Wear security glasses which protect from splashes

Туре	Field of application	Characteristics	Standard
Safety glasses	Droplet	clear	EN 166, EN 170

Personal protective equipment symbol(s)







Environmental exposure controls

No specific measures are required provided the product is handled in accordance with the general rules of occupational hygiene and safety.

Consumer exposure controls

Avoid contact during pregnancy/while nursing.

Other information Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

Physical stateSolidAppearanceThixotropic paste.ColourLight grey

Odour characteristic
Odour threshold No data available

pH 6.6

No data available pH solution No data available Relative evaporation rate (butylacetate=1) No data available Melting point / Freezing point Boiling point No data available Flash point No data available Auto-ignition temperature No data available Flammability No data available Vapour pressure No data available Relative density No data available Density: 1.45 g/cm³ Density

Solubility insoluble in water.

Partition coefficient n-octanol/water (Log Pow)

Viscosity, dynamic

Explosive properties

Explosive limits

No data available

No data available

No data available

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Minimum ignition energy No data available Fat solubility No data available

SECTION 10: Stability and reactivity

Reactivity
No additional information available
Chemical stability
Stable under normal conditions.
Possibility of hazardous reactions
No additional information available.

Conditions to avoid Direct sunlight. Extremely high or low temperatures.

Incompatible materials Strong acids. Strong bases.

Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not

be produced. Thermal decomposition generates : fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

Acute toxicity (oral)

Acute toxicity (dermal)

Acute toxicity (inhalation)

Not classified

Not classified

Not classified

Acute toxicity (inhalation)	Not classified	
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane (1675-54-3)		
LD50 oral rat	> 2000 mg/kg (Rat; OECD 420: Acute Oral toxicity – Acute Toxic Class Method; Experimental value)	
LD50 oral	11400 mg/kg	
LD50 dermal rat	> 2000 mg/kg (Rat; Experimental value; OECD 402: Acute Dermal Toxicity)	
butanedioldiglycidyl ether (2425-79-8)		
LD50 oral rat	2980 mg/kg (Rat)	
LD50 oral	1163 mg/kg (Rat; Exp. Key study ECHA)	
LD50 dermal rat	> 2150 mg/kg bodyweight (Equivalent or similar to OECD 402, 24 h, Rat, Male / female, Experimental value, Dermal, 7 day(s))	
LD50 dermal rabbit	1130 mg/kg (Rabbit)	
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane (2530-83-8)		
LD50 oral rat	8025 mg/kg bodyweight (Rat; Equivalent or similar to OECD 401; Experimental value)	
LD50 dermal rabbit	4250 mg/kg bodyweight (Rabbit; Experimental value; Equivalent or similar to OECD 402)	
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol (9003-36-5)		

Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol (9003-36-5)		
LD50 oral rat	> 5000 mg/kg bodyweight (Rat; ECHA)	
LD50 dermal rat	> 2000 mg/kg bodyweight (Rat; ECHA)	

Skin corrosion/irritation Causes skin irritation.

pH: 6.6

Serious eye damage/irritation Causes serious eye damage.

pH: 6.6

Respiratory or skin sensitisation May cause an allergic skin reaction.

Germ cell mutagenicity

Carcinogenicity

Reproductive toxicity

STOT-single exposure

STOT-repeated exposure

Aspiration hazard

Not classified

Not classified

Not classified

Not classified

Potential adverse human health effects and

symptoms

No additional information available

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SECTION 12: Ecological information

According to the National Code of Practice for the Preparation of Material Safety Data Sheets, Environmental classification information is not mandatory. Information relevant for GHS classification is available on request

Not classified

12.1. Ecotoxicity

Ecology - water Toxic to aquatic life with long lasting effects.

Hazardous to the aquatic environment, short-term

Hazardous to the aquatic environment, long-term Not classified

(chronic)

Other information Avoid release to the environment

LC50 - Fish [2] 2.3 mg/l (96 h; Oncorhynchus mykiss; Nominal concentration) EC50 - Crustacea [1] 2 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Nominal concentration) Partition coefficient n-octanol/water (Log Pow) ≥ 2.918 (Experimental value; EU Method A.8: Partition Coefficient; 25 °C) Threshold limit - Algae [1] > 11 mg/l (72 h; Scenedesmus sp.) Threshold limit - Algae [2] 4.2 mg/l (72 h; Scenedesmus sp.) butanedioldiglycidyl ether (2425-79-8) LC50 - Fish [1] 24 mg/l (96 h; Pisces) ECHA LC50 - Other aquatic organisms [1] > 160 mg/l NOEC (acute) Partition coefficient n-octanol/water (Log Pow) -0.27 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 25 °C) Organic Carbon Normalized Adsorption Coefficient (Log Koc) Organic Carbon Normalized Adsorption Coefficient (Log Koc) B8930 mg/l (96 h; Algae) [3-(2,3-epoxypropoxy)propyl]trimethoxysilane (2530-83-8) LC50 - Fish [1] 55 mg/l (96 h; Cyprinus carpio; Young) LC50 - Fish [2] 237 mg/l 96 h; Salmo gairdneri (Oncorhynchus mykiss) EC50 - Crustacea [1] 473 - 710 mg/l (48 h; Daphnia magna) Partition coefficient n-octanol/water (Log Pow) -0.92 (Estimated value) Threshold limit - Algae [1] 119 mg/l (7 days; Anabaena flosaquae)	Other Information	Avoid release to the environment.		
LC50 - Fish [2] 2.3 mg/l (96 h; Oncorhynchus mykiss; Nominal concentration) EC50 - Crustacea [1] 2 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Nominal concentration) Partition coefficient n-octanol/water (Log Pow) ≥ 2.918 (Experimental value; EU Method A.8: Partition Coefficient; 25 °C) Threshold limit - Algae [1] > 11 mg/l (72 h; Scenedesmus sp.) Threshold limit - Algae [2] 4.2 mg/l (72 h; Scenedesmus sp.) butanedioldiglycidyl ether (2425-79-8) LC50 - Fish [1] 24 mg/l (96 h; Pisces) ECHA LC50 - Other aquatic organisms [1] > 160 mg/l NOEC (acute) Partition coefficient n-octanol/water (Log Pow) -0.27 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 25 °C) Organic Carbon Normalized Adsorption Coefficient (Log Koc) Organic Carbon Normalized Adsorption Coefficient (Log Koc) B8930 mg/l (96 h; Algae) [3-(2,3-epoxypropoxy)propyl]trimethoxysilane (2530-83-8) LC50 - Fish [1] 55 mg/l (96 h; Cyprinus carpio; Young) LC50 - Fish [2] 237 mg/l 96 h; Salmo gairdneri (Oncorhynchus mykiss) EC50 - Crustacea [1] 473 - 710 mg/l (48 h; Daphnia magna) Partition coefficient n-octanol/water (Log Pow) -0.92 (Estimated value) Threshold limit - Algae [1] 119 mg/l (7 days; Anabaena flosaquae)	2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane (1675-54-3)			
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system, Fresh water, Experimental value, Nominal concentration) Partition coefficient n-octanol/water (Log Pow) ≥ 2.918 (Experimental value; EU Method A.8: Partition Coefficient; 25 °C) Threshold limit - Algae [1] > 11 mg/l (72 h; Scenedesmus sp.) butanedioldiglycidyl ether (2425-79-8) LC50 - Fish [1] LC50 - Other aquatic organisms [1] NOEC (acute) Partition coefficient n-octanol/water (Log Pow) Organic Carbon Normalized Adsorption Coefficient (Log Koc) Threshold limit - Algae [1] 1.1 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value, GLP) Threshold limit - Algae [1] 88930 mg/l (96 h; Algae) [3-(2,3-epoxypropoxy)propyl]trimethoxysilane (2530-83-8) LC50 - Fish [1] 55 mg/l (96 h; Cyprinus carpio; Young) LC50 - Fish [2] 237 mg/l 96 h; Salmo gairdneri (Oncorhynchus mykiss) EC50 - Crustacea [1] 473 - 710 mg/l (48 h; Daphnia magna) Partition coefficient n-octanol/water (Log Pow) Threshold limit - Algae [1] 119 mg/l (7 days; Anabaena flosaquae)	LC50 - Fish [2]	2.3 mg/l (96 h; Oncorhynchus mykiss; Nominal concentration)		
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LC50 - Other aquatic organisms [1] > 160 mg/l NOEC (acute) 40 mg/l Partition coefficient n-octanol/water (Log Pow) -0.27 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 25 °C) Organic Carbon Normalized Adsorption Coefficient (Log Koc) 1.1 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value, GLP) Threshold limit - Algae [1] 88930 mg/l (96 h; Algae) [3-(2,3-epoxypropoxy)propyl]trimethoxysilane (2530-83-8) LC50 - Fish [1] 55 mg/l (96 h; Cyprinus carpio; Young) LC50 - Fish [2] 237 mg/l 96 h; Salmo gairdneri (Oncorhynchus mykiss) EC50 - Crustacea [1] 473 - 710 mg/l (48 h; Daphnia magna) Partition coefficient n-octanol/water (Log Pow) -0.92 (Estimated value) Threshold limit - Algae [1] 119 mg/l (7 days; Anabaena flosaquae)	butanedioldiglycidyl ether (2425-79-8)			
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Partition coefficient n-octanol/water (Log Pow) Organic Carbon Normalized Adsorption Coefficient (Log Koc) 1.1 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value, GLP) Threshold limit - Algae [1] 88930 mg/l (96 h; Algae) [3-(2,3-epoxypropoxy)propyl]trimethoxysilane (2530-83-8) LC50 - Fish [1] 55 mg/l (96 h; Cyprinus carpio; Young) LC50 - Fish [2] 237 mg/l 96 h; Salmo gairdneri (Oncorhynchus mykiss) EC50 - Crustacea [1] 473 - 710 mg/l (48 h; Daphnia magna) Partition coefficient n-octanol/water (Log Pow) 7-0.92 (Estimated value) Threshold limit - Algae [1] 119 mg/l (7 days; Anabaena flosaquae)	LC50 - Other aquatic organisms [1]	> 160 mg/l		
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Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value, GLP) Threshold limit - Algae [1] 88930 mg/l (96 h; Algae) [3-(2,3-epoxypropoxy)propyl]trimethoxysilane (2530-83-8) LC50 - Fish [1] 55 mg/l (96 h; Cyprinus carpio; Young) LC50 - Fish [2] 237 mg/l 96 h; Salmo gairdneri (Oncorhynchus mykiss) EC50 - Crustacea [1] 473 - 710 mg/l (48 h; Daphnia magna) Partition coefficient n-octanol/water (Log Pow) Threshold limit - Algae [1] 119 mg/l (7 days; Anabaena flosaquae)	Partition coefficient n-octanol/water (Log Pow)			
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LC50 - Fish [2] 237 mg/l 96 h; Salmo gairdneri (Oncorhynchus mykiss) EC50 - Crustacea [1] 473 - 710 mg/l (48 h; Daphnia magna) Partition coefficient n-octanol/water (Log Pow) -0.92 (Estimated value) Threshold limit - Algae [1] 119 mg/l (7 days; Anabaena flosaquae)	[3-(2,3-epoxypropoxy)propyl]trimethoxysilane (253	0-83-8)		
EC50 - Crustacea [1] 473 - 710 mg/l (48 h; Daphnia magna) Partition coefficient n-octanol/water (Log Pow) -0.92 (Estimated value) Threshold limit - Algae [1] 119 mg/l (7 days; Anabaena flosaquae)	LC50 - Fish [1]	55 mg/l (96 h; Cyprinus carpio; Young)		
Partition coefficient n-octanol/water (Log Pow) -0.92 (Estimated value) Threshold limit - Algae [1] 119 mg/l (7 days; Anabaena flosaquae)	LC50 - Fish [2]	237 mg/l 96 h; Salmo gairdneri (Oncorhynchus mykiss)		
Threshold limit - Algae [1] 119 mg/l (7 days; Anabaena flosaquae)	EC50 - Crustacea [1]	473 – 710 mg/l (48 h; Daphnia magna)		
	Partition coefficient n-octanol/water (Log Pow)	-0.92 (Estimated value)		
Threshold limit - Algae [2] 250 mg/l (72 h: Selenastrum capricornutum)	Threshold limit - Algae [1]	119 mg/l (7 days; Anabaena flosaquae)		
The short limit / rigue [2]	Threshold limit - Algae [2]	250 mg/l (72 h; Selenastrum capricornutum)		

12.2. Persistence and degradability

HIT-RE 500 V4, A		
Persistence and degradability	May cause long-term adverse effects in the environment.	
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane (1675-54-3)		
Not rapidly degradable		
butanedioldiglycidyl ether (2425-79-8)		
Biochemical oxygen demand (BOD) 0.01982 g O ₂ /g substance		
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol (9003-36-5)		
Not rapidly degradable		

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according to the Work Health and Safety (WHS) Regulations

400			
12.3.	Bioaccum	ulative	potential

12.0. Bloaccumulative potential			
HIT-RE 500 V4, A			
Bioaccumulative potential	Not established.		
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymeth	nylene)]bisoxirane (1675-54-3)		
Partition coefficient n-octanol/water (Log Pow)	≥ 2.918 (Experimental value; EU Method A.8: Partition Coefficient; 25 °C)		
Bioaccumulative potential	Low bioaccumulation potential (BCF < 500).		
butanedioldiglycidyl ether (2425-79-8)			
Partition coefficient n-octanol/water (Log Pow)	-0.27 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 25 °C)		
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.1 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value, GLP)		
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane (2530-83-8)			
Partition coefficient n-octanol/water (Log Pow)	-0.92 (Estimated value)		

12.4. Mobility in soil

·			
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane (1675-54-3)			
Surface tension	59 mN/m (20 °C, 0.09 g/l)		
Ecology - soil	No (test)data on mobility of the substance available.		
Partition coefficient n-octanol/water (Log Pow)	≥ 2.918 (Experimental value; EU Method A.8: Partition Coefficient; 25 °C)		
butanedioldiglycidyl ether (2425-79-8)			
Surface tension	44.4 mN/m (20 °C, 90 %, EU Method A.5: Surface tension)		
Ecology - soil	Highly mobile in soil.		
Partition coefficient n-octanol/water (Log Pow)	-0.27 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 25 °C)		
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.1 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value, GLP)		
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane (2530-83-8)			
Partition coefficient n-octanol/water (Log Pow)	-0.92 (Estimated value)		

12.5. Other adverse effects

Ozone Not classified

Other adverse effects No additional information available

SECTION 13: Disposal considerations

Regional legislation (waste) Disposal must be done according to official regulations.

Product/Packaging disposal recommendations After curing, the product can be disposed of with household waste. . Full or only partially

emptied cartridges must be disposed of as special waste in accordance with official regulations. Packaging contaminated by the product : Dispose in a safe manner in

accordance with local/national regulations.

Ecology - waste materials Avoid release to the environment.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / RID

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ADR	IMDG	IATA	RID		
Special provision(s) applied : 375	Special provision(s) applied : 969	Special provision(s) applied : A197	Special provision(s) applied : 375		
These substances when carried in single or combination packagings containing a net quantity per single or inner packaging of 5 l or less for liquids or having a net mass per single or inner packaging of 5 kg or less for solids, are not subject to any other provisions of ADR provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.					
14.1. UN number or ID number					
UN 3077	UN 3077	UN 3077	UN 3077		
14.2. UN proper shipping name					
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (2,2'-[(1- methylethylidene)bis(4,1- phenyleneoxymethylene)]bisoxiran e; Formaldehyde, oligomeric reaction products with 1-chloro-2,3- epoxypropane and phenol)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (2,2'-[(1- methylethylidene)bis(4,1- phenyleneoxymethylene)]bisoxiran e; Formaldehyde, oligomeric reaction products with 1-chloro-2,3- epoxypropane and phenol)	Environmentally hazardous substance, solid, n.o.s. (2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxiran e; Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (2,2'-[(1- methylethylidene)bis(4,1- phenyleneoxymethylene)]bisoxiran e; Formaldehyde, oligomeric reaction products with 1-chloro-2,3- epoxypropane and phenol)		
Transport document description					
UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (2,2'-[(1- methylethylidene)bis(4,1- phenyleneoxymethylene)]bisoxiran e; Formaldehyde, oligomeric reaction products with 1-chloro-2,3- epoxypropane and phenol), 9, III, (-)	UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (2,2'-[(1- methylethylidene)bis(4,1- phenyleneoxymethylene)]bisoxiran e; Formaldehyde, oligomeric reaction products with 1-chloro-2,3- epoxypropane and phenol), 9, III	UN 3077 Environmentally hazardous substance, solid, n.o.s. (2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxiran e; Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol), 9, III	UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (2,2'-[(1- methylethylidene)bis(4,1- phenyleneoxymethylene)]bisoxiran e; Formaldehyde, oligomeric reaction products with 1-chloro-2,3- epoxypropane and phenol), 9, III		
14.3. Transport hazard class(es)					
9	9	9	9		
14.4. Packing group					
III	III	III	III		
14.5. Environmental hazards					
Dangerous for the environment: Yes	Dangerous for the environment: Yes Marine pollutant: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes		
Environmentally hazardous substances derogation applies (quantity of liquids ≤ 5 litres or net mass of solids ≤ 5 kg). The environmentally hazardous substance mark is therefore not required, as stated in the ADR regulation, section 5.2.1.8.1.					
not restricted according ADR Specia	Il Provision SP375, IATA-DGR Specia	al Provision A197 and IMDG-Code 2.	10.2.7		
14.6. Special precautions for u					

14.6. Special precautions for user

Overland transport

Classification code (ADR) M7

Special provisions (ADR) 274, 335, 375, 601

Limited quantities (ADR)

Packing instructions (ADR) P002, IBC08, LP02, R001

Mixed packing provisions (ADR) MP10

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Transport category (ADR)

Orange plates

90 3077

Tunnel restriction code (ADR)

Transport by sea

Special provisions (IMDG) 274, 335, 966, 967, 969

Limited quantities (IMDG) 5 kg
Packing instructions (IMDG) LP02, P002
EmS-No. (Fire) F-A
EmS-No. (Spillage) S-F
Stowage category (IMDG) A
Stowage and handling (IMDG) SW23
MFAG-No 171

Air transport

PCA packing instructions (IATA) 956
PCA max net quantity (IATA) 400kg
CAO packing instructions (IATA) 956

Special provisions (IATA) A97, A158, A179, A197, A215

Rail transport

Special provisions (RID) 274, 335, 375, 601

Limited quantities (RID) 5kg

Packing instructions (RID) P002, IBC08, LP02, R001

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations specific for the product in question

Australian Industrial Chemicals Introduction Scheme (AICIS)

Australian Inventory of Industrial Chemicals (AICIS All the chemicals contained in this product are listed introductions

Inventory) status

15.2. International agreements

No additional information available

SECTION 16: Other information

Indication of changes:

Composition/information on ingredients. Hazards identification. Added.

Indication of changes				
Section	Changed item	Change	Comments	
2.1	Classification (GHS AU)	Modified		
2.2	Hazard pictograms (GHS AU)	Modified		
2.2	Hazard statements (GHS AU)	Modified		
3	Composition/information on ingredients	Modified		
14	Transport information	Modified		

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Safety Data Sheet

according to the Work Health and Safety (WHS) Regulations

Abbreviations and acronyms

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road

ATE - Acute Toxicity Estimate

BCF - Bioconcentration factor

CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008

DMEL - Derived Minimal Effect level

DNEL - Derived-No Effect Level

IATA - International Air Transport Association EC50 - Median effective concentration

IMDG - International Maritime Dangerous Goods

LC50 - Median lethal concentration LD50 - Median lethal dose

LOAEL - Lowest Observed Adverse Effect Level

NOAEC - No-Observed Adverse Effect Concentration

NOAEL - No-Observed Adverse Effect Level NOEC - No-Observed Effect Concentration

PBT - Persistent Bioaccumulative Toxic

PNEC - Predicted No-Effect Concentration

REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation

(EC) No 1907/2006

RID - Regulations concerning the International Carriage of Dangerous Goods by Rail

SDS - Safety Data Sheet

vPvB - Very Persistent and Very Bioaccumulative

11/11/2022 None.

Revision date Other information

Classification		
Skin Irrit. 2	H315	
Eye Dam. 1	H318	
Skin Sens. 1	H317	

Full text of H-statements	
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Acute Tox. 5 (Dermal)	Acute toxicity (dermal), Category 5
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2A	Serious eye damage/eye irritation, Category 2A
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
H302	Harmful if swallowed
H312	Harmful in contact with skin
H313	May be harmful in contact with skin
H315	Causes skin irritation
H317	May cause an allergic skin reaction

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Safety Data Sheet

according to the Work Health and Safety (WHS) Regulations

Full text of H-statements		
H318	Causes serious eye damage	
H319	Causes serious eye irritation	
H332	Harmful if inhaled	

SDS_AU_Hilti

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

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Safety information for 2-Component-products

Issue date: 10/11/2022 Revision date: 10/11/2022 Version: 1.0

SECTION 1: Kit identification

1.1 Product identifier

Product name HIT-RE 500 V4



Product code BU Anchor

1.2 Details of the supplier of the Safety information for 2-Component-products

Hilti (Aust.) Pty. Ltd.
Level 5, 1G Homebush Bay Drive
P.O. Box 3217
2138 Rhodes NSW - Australia
T +61 131 292 - F +61 1300 135 042
serviceaustralia@hilti.com

SECTION 2: General information

Storage temperature : 5 - 25 °C

A SDS for each of these components is included. Please do not separate any component SDS from this cover page

This Kit should be handled in accordance with good laboratory practices and appropriate personal protective equipment should be used

SECTION 3:

Classification of the Product

2.1. Classification of the hazardous chemical

Classification according to the model Work Health and Safety Regulations (WHS Regulations)

Skin corrosion/irritation, Category 1B H314
Serious eye damage/eye irritation, Category 1 H318
Skin sensitisation, Category 1 H317
Germ cell mutagenicity, Category 2 H341
Reproductive toxicity, Category 1B H360
Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation

2.2. Label elements

Hazard pictograms (GHS AU)



GHS05

Danger





Signal word (GHS AU)

Contains Epoxy resin, Amines

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Safety information for 2-Component-products

Hazard statements (GHS AU) H314 - Causes severe skin burns and eye damage

H317 - May cause an allergic skin reaction H335 - May cause respiratory irritation H341 - Suspected of causing genetic defects H360 - May damage fertility or the unborn child

Precautionary statements (GHS AU) P280 - Wear eye protection, protective clothing, protective gloves.

P262 - Do not get in eyes, on skin, or on clothing.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

P333+P313 - If skin irritation or rash occurs: Get medical advice/attention. P337+P313 - If eye irritation persists: Get medical advice/attention.

P302+P352 - IF ON SKIN: Wash with plenty of water.

2.3. Other hazards not contributing to the classification

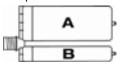
No additional information available

Additional information

2-component-foilpack, contains:

Component A. Epoxy resin, Reactive diluent, inorganic filler

Component B: Amine hardener, inorganic filler



Name	General description	Quantity	Unit	Classification according to the model Work Health and Safety Regulations (WHS Regulations)
HIT-RE 500 V4, B		1	pcs (pieces)	Skin Corr. 1B, H314 Skin Sens. 1, H317 STOT SE 3, H335
HIT-RE 500 V4, A (GHS08)		1	pcs (pieces)	Skin Corr. 1C, H314 Skin Sens. 1, H317 Muta. 2, H341 Repr. 1B, H360

SECTION 4: General advice

General advice For professional users only

SECTION 5: Safe handling advice

General measures Spilled material may present a slipping hazard

Environmental precautions Prevent entry to sewers and public waters

Notify authorities if liquid enters sewers or public waters

Avoid release to the environment

Full or only partially emptied cartridges must be disposed of as special waste in accordance

with official regulations.

After curing, the product can be disposed of with household waste.

Storage conditions Protect from sunlight. Store in a well-ventilated place.

Technical measures Comply with applicable regulations

Precautions for safe handling Wear personal protective equipment Avoid contact with skin and eyes

Wash hands and other exposed areas with mild soap and water before eating, drinking or

smoking and when leaving work

Avoid contact during pregnancy/while nursing

Methods for cleaning up

This material and its container must be disposed of in a safe way, and as per local legislation

Mechanically recover the product

On land, sweep or shovel into suitable containers

Store away from other materials.

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Safety information for 2-Component-products

For containment Collect spillage.

Incompatible materials Sources of ignition
Direct sunlight

Incompatible products Strong bases

Strong acids

SECTION 6: First aid measures

First-aid measures after ingestion

First-aid measures after eye contact Get immediate medical advice/attention.

Immediately rinse with water for a prolonged period while holding the eyelids wide open

Remove contact lenses, if present and easy to do. Continue rinsing.

Consult an eye specialist

Do not induce vomiting

Rinse mouth

Immediately call a POISON CENTER/doctor.

First-aid measures after inhalation Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact Wash with plenty of water/...

Take off immediately all contaminated clothing. Wash contaminated clothing before reuse.

If skin irritation or rash occurs: Get immediate medical advice/attention.

First-aid measures general Never give anything by mouth to an unconscious person

If you feel unwell, seek medical advice (show the label where possible)

Symptoms/effects Causes severe skin burns and eye damage.

Symptoms/effects after eye contact Causes serious eye damage.

Symptoms/effects after skin contact May cause an allergic skin reaction.

SECTION 7: Fire fighting measures

Exercise caution when fighting any chemical fire

Prevent fire fighting water from entering the environment

Protection during firefighting Self-contained breathing apparatus

Do not enter fire area without proper protective equipment, including respiratory protection

Hazardous decomposition products in case of

fire

Thermal decomposition generates:

Carbon dioxide
Carbon monoxide

SECTION 8: Other information

No data available

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Safety Data Sheet

according to the Work Health and Safety (WHS) Regulations Issue date: 10/11/2022 Revision date: 10/11/2022

SECTION 1: Product identifier

1.1. GHS Product identifier

Product form Mixture
Trade name HIT-RE 500 V4, A
Product code BU Anchor

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Recommended use For professional use only

Composite mortar component for fasteners in the construction industry

Version: 1.0

1.4. Details of manufacturer or importer

Supplier Department issuing data specification sheet:

Hilti (Aust.) Pty. Ltd. Hilti Entwicklungsgesellschaft mbH

 Level 5, 1G Homebush Bay Drive
 Hiltistraße 6

 P.O. Box 3217
 Kaufering 86916

 Rhodes NSW 2138
 Deutschland

 Australia
 T +49 8191 906876

 T +61 131 292 - F +61 1300 135 042
 anchor.hse@hilti.com

serviceaustralia@hilti.com

1.5. Emergency phone number

Emergency number Schweizerisches Toxikologisches Informationszentrum – 24h Service

+41 44 251 51 51 (international)

+61 2 8748 1000

SECTION 2: Hazard identification

2.1. Classification of the hazardous chemical

Classification according to the model Work Health and Safety Regulations (WHS Regulations)

Skin corrosion/irritation, Category 1C H314
Skin sensitisation, Category 1 H317
Germ cell mutagenicity, Category 2 H341
Reproductive toxicity, Category 1B H360

2.2. GHS Label elements, including precautionary statements

Hazard pictograms (GHS AU)







Corrosion

Exclamation Health hazard

mark

Signal word (GHS AU)

Contains 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane (25 – 40 %);

Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol (10 -25 %); butanedioldiglycidyl ether (5 -10 %); 1,3 Propanediol, 2 ethyl-2-(hydroxymethyl)-,

polymer with 2-(chloromethyl)oxirane (5 - 10 %); [3-(2,3-epoxypropoxy)propyl]trimethoxysilane (2.5 - 5 %)

Hazard statements (GHS AU) H314 - Causes severe skin burns and eye damage

H317 - May cause an allergic skin reaction H341 - Suspected of causing genetic defects H360 - May damage fertility or the unborn child

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Precautionary statements (GHS AU) P280 - Wear eye protection, protective clothing, protective gloves.

P262 - Do not get in eyes, on skin, or on clothing.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.

P337+P313 - If eye irritation persists: Get medical advice/attention.

P302+P352 - IF ON SKIN: Wash with plenty of water.

2.3. Other hazards which do not result in classification

No additional information available

SECTION 3: Composition and information on ingredients

Name	CAS-No.	%	Classification according to the model Work Health and Safety Regulations (WHS Regulations)
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane	1675-54-3	25 – 40	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1, H317
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	9003-36-5	10 – 25	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1, H317
butanedioldiglycidyl ether	2425-79-8	5 – 10	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317
1,3 Propanediol, 2 ethyl-2-(hydroxymethyl)-, polymer with 2-(chloromethyl)oxirane	30499-70-8	5 – 10	Skin Corr. 1C, H314 Eye Dam. 1, H318 Skin Sens. 1B, H317 Muta. 2, H341 Repr. 1B, H360
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	2530-83-8	2.5 – 5	Acute Tox. 5 (Dermal), H313 Eye Dam. 1, H318

SECTION 4: First aid measures

4.1. Description of necessary first-aid measures

First-aid measures general Never give anything by mouth to an unconscious person. If you feel unwell, seek medical

advice (show the label where possible).

First-aid measures after inhalation Remove person to fresh air and keep comfortable for breathing. Allow affected person to

breathe fresh air. Allow the victim to rest.

First-aid measures after skin contact Gently wash with plenty of soap and water. Wash contaminated clothing before reuse. If

skin irritation occurs: Get immediate medical advice/attention.

First-aid measures after eye contact Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do.

Continue rinsing. Obtain medical attention if pain, blinking or redness persists.

First-aid measures after ingestion Rinse mouth. Get medical advice/attention. Do not induce vomiting. Obtain emergency

medical attention.

4.2. Symptoms caused by exposure

Symptoms/effects after skin contact Causes skin irritation. May cause an allergic skin reaction.

Symptoms/effects after eye contact Causes serious eye irritation.

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Safety Data Sheet

according to the Work Health and Safety (WHS) Regulations

4.3. Medical attention and special treatment

SECTION 5: Fire-fighting measures

5.1. Extinguishing media

Suitable extinguishing media Water spray. Carbon dioxide. Dry powder. Foam. Sand.

Unsuitable extinguishing media Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

General measures Spilled material may present a slipping hazard.

Hazardous decomposition products in case of fire Thermal decomposition generates: Carbon dioxide. Carbon monoxide.

5.3. Special protective equipment and precautions for fire-fighters

chemical fire. Prevent fire fighting water from entering the environment.

Protection during firefighting Self-contained breathing apparatus. Do not enter fire area without proper protective

equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures Spilled material may present a slipping hazard.

6.1.1. For non-emergency personnel

Emergency procedures Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment Use personal protective equipment as required. Equip cleanup crew with proper protection.

Emergency procedures Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment. Full or only partially emptied cartridges must be disposed of as special waste in accordance with official regulations. After curing, the product can be disposed of with household waste

6.3. Methods and materials for containment and cleaning up

For containment Collect spillage.

Methods for cleaning up

This material and its container must be disposed of in a safe way, and as per local

legislation. Mechanically recover the product. On land, sweep or shovel into suitable

containers. Store away from other materials.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling Wear personal protective equipment. Avoid contact with skin and eyes. Wash hands and

other exposed areas with mild soap and water before eating, drinking or smoking and when

leaving work.

Hygiene measures Do not eat, drink or smoke when using this product. Always wash hands after handling the

product. Contaminated work clothing should not be allowed out of the workplace. Wash

contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions Protect from sunlight.

Incompatible products Strong bases. Strong acids.

Incompatible materials Sources of ignition. Direct sunlight.

Storage temperature 5 – 25 °C

Heat and ignition sources Keep away from heat and direct sunlight.

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Safety Data Sheet

according to the Work Health and Safety (WHS) Regulations

SECTION 8: Exposure controls and personal protection

8.1. Control parameters - exposure standards

No additional information available

8.2. Biological Monitoring

No additional information available

8.3. Engineering controls

Appropriate engineering controls No specific measures identified.

8.4. Individual protection measures, such as personal protective equipment (PPE)

Safety glasses. Gloves. Protective clothing. Avoid all unnecessary exposure. Personal protective equipment

Materials for protective clothing Long sleeved protective clothing

Hand protection Wear protective gloves. The permeation time is not the maximum wearing time! Generally

speaking, it must be reduced. Contact with either mixtures of substances or different substances may shorten the protective function's effective duration.

Type Material Permeation Thickness (mm) Penetration Standard Disposable gloves Nitrile rubber (NBR) 6 (> 480 minutes) > 0,4 **EN ISO 374**

Wear security glasses which protect from splashes Eye protection

Туре	Field of application	Characteristics	Standard
Safety glasses	Droplet	clear	EN 166, EN 170

Personal protective equipment symbol(s)







Environmental exposure controls

Consumer exposure controls

No specific measures are required provided the product is handled in accordance with the

general rules of occupational hygiene and safety. Avoid contact during pregnancy/while nursing.

Other information Do not eat, drink or smoke during use.

Solid

SECTION 9: Physical and chemical properties

Physical state Appearance Thixotropic paste. Colour Light grey characteristic Odour Odour threshold No data available No data available pH solution No data available Relative evaporation rate (butylacetate=1) No data available No data available Melting point / Freezing point Boiling point No data available Flash point No data available Auto-ignition temperature No data available Flammability No data available Vapour pressure No data available Relative density No data available Density: 1.45 g/cm³ Density insoluble in water Solubility Partition coefficient n-octanol/water (Log Pow) No data available 45 - 59 Pa·s 23 °C Viscosity, dynamic No data available Explosive properties **Explosive limits** No data available

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Minimum ignition energy No data available Fat solubility No data available

SECTION 10: Stability and reactivity

Reactivity

No additional information available
Chemical stability

Stable under normal conditions.

Possibility of hazardous reactions

No additional information available.

Conditions to avoid Direct sunlight. Extremely high or low temperatures.

Incompatible materials Strong acids. Strong bases.

Hazardous decomposition products Under normal conditions of storage and use, hazardous decomposition products should not

be produced. Thermal decomposition generates: fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

Acute toxicity (oral)

Acute toxicity (dermal)

Acute toxicity (inhalation)

Not classified

Not classified

Not classified

2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymeth	1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane (1675-54-3)	
	> 2000 mg/kg (Rat; OECD 420: Acute Oral toxicity – Acute Toxic Class Method; Experimental value)	
LD50 oral	11400 mg/kg	
LD50 dermal rat	> 2000 mg/kg (Rat; Experimental value; OECD 402: Acute Dermal Toxicity)	

rmaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol (9003-36-5)	
LD50 oral rat	> 5000 mg/kg bodyweight (Rat; ECHA)
LD50 dermal rat	> 2000 mg/kg bodyweight (Rat; ECHA)
butanedioldiglycidyl ether (2425-79-8)	
LD50 oral rat	2980 mg/kg (Rat)

LD50 oral rat	2980 mg/kg (Rat)
LD50 oral	1163 mg/kg (Rat; Exp. Key study ECHA)
LD50 dermal rat	> 2150 mg/kg bodyweight (Equivalent or similar to OECD 402, 24 h, Rat, Male / female, Experimental value, Dermal, 7 day(s))
LD50 dermal rabbit	1130 mg/kg (Rabbit)

(2,3-epoxypropoxy)propyl]trimethoxysilane (2530-83-8)	
LD50 oral rat	8025 mg/kg bodyweight (Rat; Equivalent or similar to OECD 401; Experimental value)
LD50 dermal rabbit	4250 mg/kg bodyweight (Rabbit; Experimental value; Equivalent or similar to OECD 402)

Skin corrosion/irritation Causes severe skin burns.

Serious eye damage/irritation Assumed to cause serious eye damage
Respiratory or skin sensitisation May cause an allergic skin reaction.
Germ cell mutagenicity Suspected of causing genetic defects.

Carcinogenicity Not classified

Reproductive toxicity May damage fertility or the unborn child.

STOT-single exposure Not classified STOT-repeated exposure Not classified Aspiration hazard Not classified

Potential adverse human health effects and No additional information available

symptoms

SECTION 12: Ecological information

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According to the National Code of Practice for the Preparation of Material Safety Data Sheets, Environmental classification information is not mandatory. Information relevant for GHS classification is available on request

Toxic to aquatic life with long lasting effects.

12.1. Ecotoxicity

Ecology - water Not classified

Hazardous to the aquatic environment, short-term

Hazardous to the aquatic environment, long-term

(chronic)

Not classified

Other information Avoid release to the environment. 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane (1675-54-3) LC50 - Fish [1] 1.2 mg/l (96 h; Oncorhynchus mykiss; Lethal) LC50 - Fish [2] 2.3 mg/l (96 h; Oncorhynchus mykiss; Nominal concentration) 2 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static EC50 - Crustacea [1] system, Fresh water, Experimental value, Nominal concentration) Partition coefficient n-octanol/water (Log Pow) ≥ 2.918 (Experimental value; EU Method A.8: Partition Coefficient; 25 °C) Threshold limit - Algae [1] > 11 mg/l (72 h; Scenedesmus sp.) Threshold limit - Algae [2] 4.2 mg/l (72 h; Scenedesmus sp.) butanedioldiglycidyl ether (2425-79-8) LC50 - Fish [1] 24 mg/l (96 h; Pisces) ECHA LC50 - Other aquatic organisms [1] > 160 mg/l NOEC (acute) 40 mg/l Partition coefficient n-octanol/water (Log Pow) -0.27 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 25 °C) Organic Carbon Normalized Adsorption Coefficient 1.1 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental (Log Koc) value, GLP) Threshold limit - Algae [1] 88930 mg/l (96 h; Algae) [3-(2,3-epoxypropoxy)propyl]trimethoxysilane (2530-83-8) LC50 - Fish [1] 55 mg/l (96 h; Cyprinus carpio; Young) LC50 - Fish [2] 237 mg/l 96 h; Salmo gairdneri (Oncorhynchus mykiss) EC50 - Crustacea [1] 473 - 710 mg/l (48 h; Daphnia magna) Partition coefficient n-octanol/water (Log Pow) -0.92 (Estimated value) Threshold limit - Algae [1] 119 mg/l (7 days; Anabaena flosaquae) Threshold limit - Algae [2] 250 mg/l (72 h; Selenastrum capricornutum)

12.2. Persistence and degradability

HIT-RE 500 V4, A				
Persistence and degradability May cause long-term adverse effects in the environment.				
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane (1675-54-3)				
Not rapidly degradable				
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol (9003-36-5)				
Not rapidly degradable				
butanedioldiglycidyl ether (2425-79-8)				
Biochemical oxygen demand (BOD)	0.01982 g O ₂ /g substance			

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1,3 Propanediol, 2 ethyl-2-(hydroxymethyl)-, polymer with 2-(chloromethyl)oxirane (30499-70-8)		
Not rapidly degradable		

12.3. Bioaccumulative potential

12.5. bloaccumulative potential				
HIT-RE 500 V4, A				
Bioaccumulative potential Not established.				
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymeth	nylene)]bisoxirane (1675-54-3)			
Partition coefficient n-octanol/water (Log Pow)	≥ 2.918 (Experimental value; EU Method A.8: Partition Coefficient; 25 °C)			
Bioaccumulative potential	Low bioaccumulation potential (BCF < 500).			
butanedioldiglycidyl ether (2425-79-8)				
Partition coefficient n-octanol/water (Log Pow)	-0.27 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 25 °C)			
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.1 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value, GLP)			
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane (2530-83-8)				
Partition coefficient n-octanol/water (Log Pow)	-0.92 (Estimated value)			

12.4. Mobility in soil

2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane (1675-54-3)			
Surface tension	59 mN/m (20 °C, 0.09 g/l)		
Ecology - soil	No (test)data on mobility of the substance available.		
Partition coefficient n-octanol/water (Log Pow)	≥ 2.918 (Experimental value; EU Method A.8: Partition Coefficient; 25 °C)		
butanedioldiglycidyl ether (2425-79-8)			
Surface tension	44.4 mN/m (20 °C, 90 %, EU Method A.5: Surface tension)		
Ecology - soil	Highly mobile in soil.		
Partition coefficient n-octanol/water (Log Pow)	-0.27 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 25 °C)		
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.1 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value, GLP)		
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane (2530-83-8)			
Partition coefficient n-octanol/water (Log Pow)	-0.92 (Estimated value)		

12.5. Other adverse effects

Ozone Not classified

Other adverse effects No additional information available

SECTION 13: Disposal considerations

Regional legislation (waste) Disposal must be done according to official regulations.

Product/Packaging disposal recommendations After curing, the product can be disposed of with household waste. . Full or only partially

emptied cartridges must be disposed of as special waste in accordance with official regulations. Packaging contaminated by the product : Dispose in a safe manner in

accordance with local/national regulations.

Ecology - waste materials Avoid release to the environment.

SECTION 14: Transport information

 In accordance with ADR / IMDG / IATA / RID

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ADR	IMDG	IATA	RID				
14.1. UN number or ID number							
UN 1759	UN 1759	UN 1759	UN 1759				
14.2. UN proper shipping name							
CORROSIVE SOLID, N.O.S. (trimethylolpropane triglycidylether)	CORROSIVE SOLID, N.O.S. (trimethylolpropane triglycidylether)	Corrosive solid, n.o.s. (trimethylolpropane triglycidylether)	CORROSIVE SOLID, N.O.S. (trimethylolpropane triglycidylether)				
Transport document description							
UN 1759 CORROSIVE SOLID, N.O.S. (trimethylolpropane triglycidylether), 8, III, (E), ENVIRONMENTALLY HAZARDOUS	UN 1759 CORROSIVE SOLID, N.O.S. (trimethylolpropane triglycidylether), 8, III, MARINE POLLUTANT/ENVIRONMENTALL Y HAZARDOUS	UN 1759 Corrosive solid, n.o.s. (trimethylolpropane triglycidylether), 8, III, ENVIRONMENTALLY HAZARDOUS	UN 1759 CORROSIVE SOLID, N.O.S. (trimethylolpropane triglycidylether), 8, III, ENVIRONMENTALLY HAZARDOUS				
14.3. Transport hazard class(es)							
8	8	8	8				
8	8	8	8				
14.4. Packing group							
III	III	III	III				
14.5. Environmental hazards							
Dangerous for the environment: Yes	Dangerous for the environment: Yes Marine pollutant: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes				
No supplementary information available							

14.6. Special precautions for user

Overland transport

Classification code (ADR)

Special provisions (ADR)

Limited quantities (ADR)

C10

274

5kg

Packing instructions (ADR) P002, IBC08, LP02, R001

Mixed packing provisions (ADR) MP10
Transport category (ADR) 3

Orange plates

80 1759

Ε

Tunnel restriction code (ADR)

Transport by sea

Special provisions (IMDG) 223, 274
Packing instructions (IMDG) P002, LP02
EmS-No. (Fire) F-A
EmS-No. (Spillage) S-B
Stowage category (IMDG) A

Air transport

PCA packing instructions (IATA) 860
PCA max net quantity (IATA) 25kg

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CAO packing instructions (IATA) 864
Special provisions (IATA) A3, A803

Rail transport

Special provisions (RID) 274

Packing instructions (RID) P002, IBC08, LP02, R001

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations specific for the product in question

No additional information available

15.2. International agreements

No additional information available

SECTION 16: Other information

Indication of changes:

Composition/information on ingredients. Hazards identification. Added.

Abbreviations and acronyms ADN - European Agreement concerning the International Carriage of Dangerous Goods by

Inland Waterways

ADR - European Agreement concerning the International Carriage of Dangerous Goods by

Road

ATE - Acute Toxicity Estimate

BCF - Bioconcentration factor

CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008

DMEL - Derived Minimal Effect level

DNEL - Derived-No Effect Level

IATA - International Air Transport Association

EC50 - Median effective concentration

IMDG - International Maritime Dangerous Goods

LC50 - Median lethal concentration

LD50 - Median lethal dose

LOAEL - Lowest Observed Adverse Effect Level

NOAEC - No-Observed Adverse Effect Concentration

NOAEL - No-Observed Adverse Effect Level

NOEC - No-Observed Effect Concentration

PBT - Persistent Bioaccumulative Toxic

PNEC - Predicted No-Effect Concentration

REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation

(EC) No 1907/2006

RID - Regulations concerning the International Carriage of Dangerous Goods by Rail

SDS - Safety Data Sheet

vPvB - Very Persistent and Very Bioaccumulative

Revision date 10/11/2022
Other information None.

Classification	
Skin Corr. 1C	H314
Skin Sens. 1	H317
Muta. 2	H341

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Classification	
Repr. 1B	H360

Full text of H-statements			
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4		
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4		
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4		
Acute Tox. 5 (Dermal)	Acute toxicity (dermal), Category 5		
Eye Dam. 1	Serious eye damage/eye irritation, Category 1		
Eye Irrit. 2A	Serious eye damage/eye irritation, Category 2A		
Muta. 2	Germ cell mutagenicity, Category 2		
Repr. 1B	Reproductive toxicity, Category 1B		
Skin Corr. 1C	Skin corrosion/irritation, Category 1C		
Skin Irrit. 2	Skin corrosion/irritation, Category 2		
Skin Sens. 1	Skin sensitisation, Category 1		
Skin Sens. 1B	Skin sensitisation, category 1B		
H302	Harmful if swallowed		
H312	Harmful in contact with skin		
H313	May be harmful in contact with skin		
H314	Causes severe skin burns and eye damage		
H315	Causes skin irritation		
H317	May cause an allergic skin reaction		
H318	Causes serious eye damage		
H319	Causes serious eye irritation		
H332	Harmful if inhaled		
H341	Suspected of causing genetic defects		
H360	May damage fertility or the unborn child		

SDS_AU_Hilti

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

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Safety Data Sheet

according to the Work Health and Safety (WHS) Regulations Issue date: 10/11/2022 Revision date: 10/11/2022

SECTION 1: Product identifier

1.1. GHS Product identifier

Product form Mixture

Product name HIT-RE 500 V4, B Product code BU Anchor

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Recommended use For professional use only

Composite mortar component for fasteners in the construction industry

Version: 1.0

1.4. Details of manufacturer or importer

Supplier Department issuing data specification sheet:

Hilti (Aust.) Pty. Ltd. Hilti Entwicklungsgesellschaft mbH

Level 5, 1G Homebush Bay DriveHiltistraße 6P.O. Box 3217Kaufering 86916Rhodes NSW 2138DeutschlandAustraliaT +49 8191 906876

T +61 131 292 - F +61 1300 135 042 <u>anchor.hse@hilti.com</u>

serviceaustralia@hilti.com

1.5. Emergency phone number

Emergency number Schweizerisches Toxikologisches Informationszentrum – 24h Service

+41 44 251 51 51 (international)

+61 2 8748 1000

SECTION 2: Hazard identification

2.1. Classification of the hazardous chemical

Classification according to the model Work Health and Safety Regulations (WHS Regulations)

Skin corrosion/irritation, Category 1B H314
Skin sensitisation, Category 1 H317
Specific target organ toxicity – Single exposure, Category 3, Respiratory H335

tract irritation

2.2. GHS Label elements, including precautionary statements

Hazard pictograms (GHS AU)



Corrosion Exclamation mark

Signal word (GHS AU) Dange

Contains 2-methyl-1,5-pentanediamine ($25-35\,$ %); Phenol, styrenated ($5-10\,$ %); m-

Xylylenediamine (4 - < 8 %); 2,4,6-tris(dimethylaminomethyl)phenol (1 - 3 %); 3-

Aminopropyltriethoxysilan (1 – 3 %)

Hazard statements (GHS AU) H314 - Causes severe skin burns and eye damage

H317 - May cause an allergic skin reaction H335 - May cause respiratory irritation

Precautionary statements (GHS AU) P280 - Wear eye protection, protective clothing, protective gloves.

P262 - Do not get in eyes, on skin, or on clothing.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

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according to the Work Health and Safety (WHS) Regulations

contact lenses, if present and easy to do. Continue rinsing.

P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.

P337+P313 - If eye irritation persists: Get medical advice/attention.

P302+P352 - IF ON SKIN: Wash with plenty of water.

2.3. Other hazards which do not result in classification

No additional information available

SECTION 3: Composition and information on ingredients

Name	CAS-No.	%	Classification according to the model Work Health and Safety Regulations (WHS Regulations)
2-methyl-1,5-pentanediamine	15520-10-2	25 – 35	Flam. Liq. 4, H227 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Corr. 1A, H314 Eye Dam. 1, H318 STOT SE 3, H335
Phenol, styrenated	61788-44-1	5 – 10	Skin Irrit. 2, H315 Skin Sens. 1, H317
m-Xylylenediamine	1477-55-0	4 – <8	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1B, H317
2,4,6-tris(dimethylaminomethyl)phenol	90-72-2	1 – 3	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2A, H319
3-Aminopropyltriethoxysilan	919-30-2	1 – 3	Flam. Liq. 4, H227 Acute Tox. 4 (Oral), H302 Acute Tox. 5 (Dermal), H313 Skin Corr. 1B, H314 Skin Sens. 1, H317

SECTION 4: First aid measures

4.1.	Descrip	tion of	necessary	y first-aic	i measures

First-aid measures general Never give anything by mouth to an unconscious person. If you feel unwell, seek medical

advice (show the label where possible).

First-aid measures after inhalation Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact Wash with plenty of water/.... Take off immediately all contaminated clothing. Wash

contaminated clothing before reuse. If skin irritation or rash occurs: Get immediate medical

advice/attention.

First-aid measures after eye contact Get immediate medical advice/attention. Immediately rinse with water for a prolonged period

while holding the eyelids wide open. Remove contact lenses, if present and easy to do.

Continue rinsing. Consult an eye specialist.

First-aid measures after ingestion Do not induce vomiting. Rinse mouth. Immediately call a POISON CENTER/doctor.

4.2. Symptoms caused by exposure

Symptoms/effects Causes severe skin burns and eye damage.

Symptoms/effects after skin contact May cause an allergic skin reaction.

Symptoms/effects after eye contact Causes serious eye damage.

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according to the Work Health and Safety (WHS) Regulations

4.3. Medical attention and special treatment

SECTION 5: Fire-fighting measures

5.1. Extinguishing media

Suitable extinguishing media Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

General measures Spilled material may present a slipping hazard.

Hazardous decomposition products in case of fire Thermal decomposition generates: Carbon dioxide. Carbon monoxide.

5.3. Special protective equipment and precautions for fire-fighters

chemical fire. Prevent fire fighting water from entering the environment.

Protection during firefighting Self-contained breathing apparatus. Do not enter fire area without proper protective

equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures Spilled material may present a slipping hazard.

6.1.1. For non-emergency personnel

Emergency procedures Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment Use personal protective equipment as required. Equip cleanup crew with proper protection.

Emergency procedures Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment. Full or only partially emptied cartridges must be disposed of as special waste in accordance with official regulations. After curing, the product can be disposed of with household waste

6.3. Methods and materials for containment and cleaning up

For containment Collect spillage.

Methods for cleaning up

This material and its container must be disposed of in a safe way, and as per local

legislation. Mechanically recover the product. On land, sweep or shovel into suitable

containers. Store away from other materials.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling Wear personal protective equipment. Avoid contact with skin and eyes. Wash hands and

other exposed areas with mild soap and water before eating, drinking or smoking and when

leaving work. Avoid contact during pregnancy/while nursing.

Hygiene measures Do not eat, drink or smoke when using this product. Always wash hands after handling the

product. Contaminated work clothing should not be allowed out of the workplace. Wash

contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures Comply with applicable regulations.

Storage conditions Protect from sunlight. Store in a well-ventilated place.

Incompatible products Strong bases. Strong acids.
Incompatible materials Sources of ignition. Direct sunlight.

Storage temperature 5 – 25 °C

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according to the Work Health and Safety (WHS) Regulations

Heat and ignition sources

Keep away from heat and direct sunlight.

SECTION 8: Exposure controls and personal protection

8.1. Control parameters - exposure standards

HIT-RE 500 V4, B				
Australia - Occupational Exposure Limits				
Local name	m-Xylene-alpha,alpha'-diamine (m-Xylylendiamine; 1,3-Benzenedimethanamine)			
OES C	0.1 mg/m³			
Remark (AU)	Sk - Absorption through the skin may be a significant source of exposure.			
Regulatory reference	Workplace exposure standards for airborne contaminants (2022)			
m-Xylylenediamine (1477-55-0)				
Australia - Occupational Exposure Limits				
Local name	m-Xylene-alpha,alpha'-diamine (m-Xylylendiamine; 1,3-Benzenedimethanamine)			
OES C	0.1 mg/m³			
Remark (AU)	Sk - Absorption through the skin may be a significant source of exposure.			
Regulatory reference	Workplace exposure standards for airborne contaminants (2022)			

8.2. Biological Monitoring

No additional information available

8.3. Engineering controls

Appropriate engineering controls

Ensure good ventilation of the work station.

8.4. Individual protection measures, such as personal protective equipment (PPE)

Personal protective equipment

Materials for protective clothing

Long sleeved protective clothing

Hand protection

Wear protective gloves. The permeation time is not the maximum wearing time! Generally speaking, it must be reduced. Contact with either mixtures of substances or different substances may shorten the protective function's effective duration.

Safety glasses. Gloves. Protective clothing. Avoid all unnecessary exposure.

Туре	Material	Permeation	Thickness (mm)	Penetration	Standard
Disposable gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	> 0,4		EN ISO 374

Eye protection Wear security glasses which protect from splashes

Туре	Field of application	Characteristics	Standard
Safety glasses	Droplet	clear	EN 166, EN 170

Personal protective equipment symbol(s)







Environmental exposure controls

Consumer exposure controls Other information

No specific measures are required provided the product is handled in accordance with the general rules of occupational hygiene and safety.

Avoid contact during pregnancy/while nursing.

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

Physical state Solid 21/03/2023 EN (English) 17/25



Appearance

HIT-RE 500 V4, B

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according to the Work Health and Safety (WHS) Regulations

Colour red
Odour Amine-like
Odour threshold No data available
pH No data available
pH solution No data available
Relative evaporation rate (butylacetate=1) No data available

Relative evaporation rate (butylacetate=1)

Melting point / Freezing point

Boiling point

Flash point

No data available

Auto-ignition temperature

No data available

Flammability No data available Vapour pressure No data available Relative density No data available Density Density: 1.31 g/cm³ Solubility insoluble in water. Partition coefficient n-octanol/water (Log Pow) No data available Viscosity, dynamic 50 - 70 Pa·s HN-0333 Explosive properties No data available **Explosive limits** No data available Minimum ignition energy No data available Fat solubility No data available

SECTION 10: Stability and reactivity

Reactivity Corrosive vapours.

Chemical stability

Stable under normal conditions.

Possibility of hazardous reactions

No additional information available.

Conditions to avoid Direct sunlight. Extremely high or low temperatures.

Incompatible materials Strong acids. Strong bases.

Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not

be produced. Thermal decomposition generates: fume. Carbon monoxide. Carbon dioxide.

Corrosive vapours.

Thixotropic paste.

SECTION 11: Toxicological information

Acute toxicity (oral)

Acute toxicity (dermal)

Acute toxicity (inhalation)

Not classified

Not classified

Not classified

Acute toxicity (innalation)	Not classified	
2-methyl-1,5-pentanediamine (15520-10-2)		
LD50 oral rat	1690 mg/kg (Rat)	
LD50 dermal rat	1870 mg/kg	
LC50 Inhalation - Rat	4.9 mg/l	
Phenol, styrenated (61788-44-1)		
LD50 oral rat	> 2500 mg/kg	
LD50 dermal rat	> 2000 mg/kg	
LC50 Inhalation - Rat	158.31 mg/l/4h	
m-Xylylenediamine (1477-55-0)		
LD50 oral rat	1090 mg/kg	
LD50 dermal rat	> 3100 mg/kg	
LD50 dermal	> 3100 mg/kg	
LC50 Inhalation - Rat (Dust/Mist)	1.34 mg/l/4h	

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2,4,6-tris(dimethylaminomethyl)phenol (90-72-2)			
LD50 oral rat	2169 mg/kg (Rat; Equivalent or similar to OECD 401; Literature study; 2169 mg/kg bodyweight; Rat; Experimental value)		
LD50 dermal rat	> 2000 mg/kg (Rat; Literature study; Other; >1 ml/kg; Rat; Experimental value)		
3-Aminopropyltriethoxysilan (919-30-2)			
LD50 oral rat	1.57 – 2.83 ml/kg (EPA OTS 798.1175, Rat, Male / female, Experimental value, Oral)		
LD50 dermal rabbit	4.29 ml/kg (EPA OTS 798.1100, 24 h, Rabbit, Male / female, Experimental value, Dermal)		
LC50 Inhalation - Rat [ppm]	> 5 ppm (OECD 403: Acute Inhalation Toxicity, 6 h, Rat, Male, Experimental value, Inhalation (vapours))		
Skin corrosion/irritation	Causes severe skin burns.		
Serious eye damage/irritation	Assumed to cause serious eye damage		
Respiratory or skin sensitisation	May cause an allergic skin reaction.		
Germ cell mutagenicity	Not classified		
Carcinogenicity	Not classified		
Reproductive toxicity	Not classified		
STOT-single exposure	May cause respiratory irritation.		
2-methyl-1,5-pentanediamine (15520-10-2)			
STOT-single exposure	May cause respiratory irritation.		
STOT-repeated exposure	Not classified		
Aspiration hazard	Not classified		
Potential adverse human health effects and symptoms	No additional information available		

SECTION 12: Ecological information

According to the National Code of Practice for the Preparation of Material Safety Data Sheets, Environmental classification information is not mandatory. Information relevant for GHS classification is available on request

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Ecology - water Harmful to aquatic life with long lasting effects.

Hazardous to the aquatic environment, short–term Not classified

(acute)

Hazardous to the aquatic environment, long-term Not classified

(chronic)

Other information Avoid release to the environment

Other information	Avoid release to the environment.		
2-methyl-1,5-pentanediamine (15520-10-2)			
LC50 - Fish [1]	130 mg/l (LC50; 48 h)		
LOEC (acute)	1800 mg/l		
NOEC (acute)	1000 mg/l		
Partition coefficient n-octanol/water (Log Pow)	0.27 (Estimated value)		
Phenol, styrenated (61788-44-1)			
LC50 - Fish [1]	5.6 mg/l		
LC50 - Other aquatic organisms [1]	9.7 mg/l		
EC50 - Crustacea [1]	1.44 mg/l		
NOEC (acute)	3.2 mg/l		
BCF - Fish [1]	3246 l/kg (BCFBAF v3.01, Pisces, Fresh water, Weight of evidence, Fresh weight)		
BCF - Fish [2]	3246 mg/l		

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Persistence and degradability

HIT-RE 500 V4, B

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Phenol, styrenated (61788-44-1)	
Partition coefficient n-octanol/water (Log Pow)	6.24 – 7.77 (Experimental value; OECD 123: Partition Coefficient (1-Octanol/Water): Slow-Stirring Method)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	3.145 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value)
Threshold limit - Algae [1]	0.326 mg/l (72 h; Algae)
Threshold limit - Algae [2]	0.14 mg/l (72 h; Algae)
m-Xylylenediamine (1477-55-0)	
LC50 - Fish [1]	75 mg/l
LC50 - Other aquatic organisms [1]	20.3 ppb
EC50 - Crustacea [1]	15 mg/l
LOEC (chronic)	15 mg/l
NOEC (acute)	10.5 mg/kg
NOEC (chronic)	4.7 mg/l
NOEC chronic crustacea	4.7 mg/l
2,4,6-tris(dimethylaminomethyl)phenol (90-72-2)	
LC50 - Fish [1]	> 100 mg/l (96 h; Pisces; Nominal concentration)
LC50 - Fish [2]	70.9 mg/l (96 h; Pisces)
EC50 - Other aquatic organisms [1]	84 mg/l (72 h; Desmodesmus subspicatus; growth rate; ECHA)
ErC50 algae	84 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, GLP)
NOEC (chronic)	2 mg/l (28 d; activated sludge, domestic; respiration rate; ECHA)
Partition coefficient n-octanol/water (Log Pow)	0.77 (Literature; 0.219; Experimental value; Equivalent or similar to OECD 107; 21.5 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.32 (log Koc, Calculated value)
Threshold limit - Algae [1]	10 - 100,Algae
Threshold limit - Algae [2]	84 mg/l (72 h; Scenedesmus subspicatus; Growth rate)
3-Aminopropyltriethoxysilan (919-30-2)	
LC50 - Fish [1]	> 934 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Brachydanio rerio, Semi-static system, Fresh water, Experimental value, GLP)
EC50 - Crustacea [1]	331 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP)
ErC50 algae	> 1000 mg/l (EU Method C.3, 72 h, Scenedesmus subspicatus, Static system, Fresh water, Experimental value, GLP)
BCF - Fish [1]	3.4 (OECD 305: Bioconcentration: Flow-Through Fish Test, 8 week(s), Cyprinus carpio, Flow-through system, Fresh water, Experimental value, Fresh weight)
Partition coefficient n-octanol/water (Log Pow)	1.7 (QSAR, 20 °C)
12.2. Persistence and degradability	

 Phenol, styrenated (61788-44-1)

 Biochemical oxygen demand (BOD)
 0.000231 g O₂/g substance

 Chemical oxygen demand (COD)
 0.004827 g O₂/g substance

May cause long-term adverse effects in the environment.

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m-Xylylenediamine (1477-55-0)	
Not rapidly degradable	
3-Aminopropyltriethoxysilan (919-30-2)	
Persistence and degradability	Not readily biodegradable in water.
12.3. Bioaccumulative potential	
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Bioaccumulative potential	Not established.
2-methyl-1,5-pentanediamine (15520-10-2)	
Partition coefficient n-octanol/water (Log Pow)	0.27 (Estimated value)
Bioaccumulative potential	Low bioaccumulation potential (Log Kow < 4).
Phenol, styrenated (61788-44-1)	
BCF - Fish [1]	3246 l/kg (BCFBAF v3.01, Pisces, Fresh water, Weight of evidence, Fresh weight)
BCF - Fish [2]	3246 mg/l
Partition coefficient n-octanol/water (Log Pow)	6.24 – 7.77 (Experimental value; OECD 123: Partition Coefficient (1-Octanol/Water): Slow-Stirring Method)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	3.145 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value)
Bioaccumulative potential	Bioaccumulative potential.
2,4,6-tris(dimethylaminomethyl)phenol (90-72-2)	
Partition coefficient n-octanol/water (Log Pow)	0.77 (Literature; 0.219; Experimental value; Equivalent or similar to OECD 107; 21.5 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.32 (log Koc, Calculated value)
Bioaccumulative potential	Low bioaccumulation potential (Log Kow < 4).
3-Aminopropyltriethoxysilan (919-30-2)	
BCF - Fish [1]	3.4 (OECD 305: Bioconcentration: Flow-Through Fish Test, 8 week(s), Cyprinus carpio, Flow-through system, Fresh water, Experimental value, Fresh weight)
Partition coefficient n-octanol/water (Log Pow)	1.7 (QSAR, 20 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
12.4. Mobility in soil	
2-methyl-1,5-pentanediamine (15520-10-2)	
Partition coefficient n-octanol/water (Log Pow)	0.27 (Estimated value)
Phenol, styrenated (61788-44-1)	
Ecology - soil	Low potential for mobility in soil.
Partition coefficient n-octanol/water (Log Pow)	6.24 – 7.77 (Experimental value; OECD 123: Partition Coefficient (1-Octanol/Water): Slow-Stirring Method)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	3.145 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value)
2,4,6-tris(dimethylaminomethyl)phenol (90-72-2)	
Surface tension	No data available in the literature
Ecology - soil	Highly mobile in soil.
Partition coefficient n-octanol/water (Log Pow)	0.77 (Literature; 0.219; Experimental value; Equivalent or similar to OECD 107; 21.5 °C)

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2,4,6-tris(dimethylaminomethyl)phenol (90-72-2)		
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.32 (log Koc, Calculated value)	
3-Aminopropyltriethoxysilan (919-30-2)		
Ecology - soil	No (test)data on mobility of the substance available.	
Partition coefficient n-octanol/water (Log Pow)	1.7 (QSAR, 20 °C)	

12.5. Other adverse effects

Ozone Not classified

Other adverse effects No additional information available

SECTION 13: Disposal considerations

Regional legislation (waste)

Disposal must be done according to official regulations.

Product/Packaging disposal recommendations After curing, the product can be disposed of with household waste. . Full or only partially

emptied cartridges must be disposed of as special waste in accordance with official regulations. Packaging contaminated by the product : Dispose in a safe manner in

accordance with local/national regulations.

Ecology - waste materials Avoid release to the environment.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / RID

ADR	IMDG	IATA	RID
14.1. UN number or ID number			
UN 3259	UN 3259	UN 3259	UN 3259
14.2. UN proper shipping name			
AMINES, SOLID, CORROSIVE, N.O.S. (2-methyl-1,5- pentanediamine, m- Xylylenediamine)	AMINES, SOLID, CORROSIVE, N.O.S. (2-methyl-1,5- pentanediamine, m- Xylylenediamine)	Amines, solid, corrosive, n.o.s. (2- methyl-1,5-pentanediamine, m- Xylylenediamine)	AMINES, SOLID, CORROSIVE, N.O.S. (2-methyl-1,5- pentanediamine, m- Xylylenediamine)
Transport document description			
UN 3259 AMINES, SOLID, CORROSIVE, N.O.S. (2-methyl- 1,5-pentanediamine, m- Xylylenediamine), 8, II, (E)	UN 3259 AMINES, SOLID, CORROSIVE, N.O.S. (2-methyl- 1,5-pentanediamine, m- Xylylenediamine), 8, II	UN 3259 Amines, solid, corrosive, n.o.s. (2-methyl-1,5- pentanediamine, m- Xylylenediamine), 8, II	UN 3259 AMINES, SOLID, CORROSIVE, N.O.S. (2-methyl- 1,5-pentanediamine, m- Xylylenediamine), 8, II
14.3. Transport hazard class(es)			
8	8	8	8
8	8	3	B S S S S S S S S S S S S S S S S S S S
14.4. Packing group			
II	II	II	=
14.5. Environmental hazards			
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No	Dangerous for the environment: No
No supplementary information availa	able		

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14.6. Special precautions for user

Overland transport

Classification code (ADR) C8
Special provisions (ADR) 274
Limited quantities (ADR) 1kg

Packing instructions (ADR) P002, IBC08
Mixed packing provisions (ADR) MP10
Transport category (ADR) 2

Orange plates

80 3259

Ε

Tunnel restriction code (ADR)

Transport by sea

Special provisions (IMDG) 274
Limited quantities (IMDG) 1 kg
Packing instructions (IMDG) P002
EmS-No. (Fire) F-A
EmS-No. (Spillage) S-B
Stowage category (IMDG) A
MFAG-No 154

Air transport

PCA packing instructions (IATA) 859
PCA max net quantity (IATA) 15kg
CAO packing instructions (IATA) 863
Special provisions (IATA) A3

Rail transport

Special provisions (RID) 274
Limited quantities (RID) 1kg

Packing instructions (RID) P002, IBC08

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations specific for the product in question

Australian Industrial Chemicals Introduction Scheme (AICIS)

Australian Inventory of Industrial Chemicals (AICIS All the chemicals contained in this product are listed introductions Inventory) status

15.2. International agreements

No additional information available

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SECTION 16: Other information

Abbreviations and acronyms

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

ADR - European Agreement concerning the International Carriage of Dangerous Goods by

ATE - Acute Toxicity Estimate BCF - Bioconcentration factor

CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008

DMEL - Derived Minimal Effect level DNEL - Derived-No Effect Level

IATA - International Air Transport Association

EC50 - Median effective concentration

IMDG - International Maritime Dangerous Goods

LC50 - Median lethal concentration

LD50 - Median lethal dose

LOAEL - Lowest Observed Adverse Effect Level NOAEC - No-Observed Adverse Effect Concentration

NOAEL - No-Observed Adverse Effect Level NOEC - No-Observed Effect Concentration PBT - Persistent Bioaccumulative Toxic PNEC - Predicted No-Effect Concentration

 $\label{lem:REACH-Registration} \textbf{REACH-Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation}$

(EC) No 1907/2006

RID - Regulations concerning the International Carriage of Dangerous Goods by Rail

SDS - Safety Data Sheet

vPvB - Very Persistent and Very Bioaccumulative

Revision date 10/11/2022 Other information None.

Classification		
Skin Corr. 1B	H314	
Skin Sens. 1	H317	
STOT SE 3	H335	

Full text of H-statements	
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Acute Tox. 5 (Dermal)	Acute toxicity (dermal), Category 5
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2A	Serious eye damage/eye irritation, Category 2A
Flam. Liq. 4	Flammable liquids, Category 4
Skin Corr. 1A	Skin corrosion/irritation, Category 1A
Skin Corr. 1B	Skin corrosion/irritation, Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
Skin Sens. 1B	Skin sensitisation, category 1B
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation

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Full text of H-statements	
H227	Combustible liquid
H302	Harmful if swallowed
H312	Harmful in contact with skin
H313	May be harmful in contact with skin
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H319	Causes serious eye irritation
H332	Harmful if inhaled
H335	May cause respiratory irritation

SDS_AU_Hilti

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

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