# Safety Data Sheet



LOCTITE® EA 3463™ Epoxy Putty

SDS No. : 826045
V001.0
Date of issue: 15.11.2024

## Section 1. Identification of the substance/preparation and of the company/undertaking

**Product name:** LOCTITE® EA 3463™ Epoxy Putty

**Intended use:** Filler

**Supplier:**
Henkel Australia Pty Ltd
135-141 Canterbury Road
Kilsyth, Victoria, 3137
Australia

Phone: +61 (3) 9724 6444

**E-mail address of person responsible for Safety Data Sheet:** SDSinfo.Adhesive@henkel.com

**Emergency Telephone for Chemical Accidents:** 24 HOUR EMERGENCY CONTACT NUMBER: 1800 032 379

## Section 2. Hazards identification

**Classification of the substance or mixture**
Hazardous according to the criteria of Safe Work Australia.

**GHS Classification:**

| Hazard Class | Hazard Category |
|---|---|
| Skin irritation | Category 2 |
| Serious eye irritation | Category 2A |
| Skin sensitizer | Category 1 |
| Acute hazards to the aquatic environment | Category 2 |
| Chronic hazards to the aquatic environment | Category 2 |

**Hazard pictogram:**

**Signal word:** Warning

| | |
|---|---|
| **Hazard statement(s):** | H315 Causes skin irritation.<br>H317 May cause an allergic skin reaction.<br>H319 Causes serious eye irritation.<br>H411 Toxic to aquatic life with long lasting effects. |
| **Precautionary Statement(s):** | |
| **Prevention:** | P261 Avoid breathing dust or fumes.<br>P264 Wash hands thoroughly after handling.<br>P272 Contaminated work clothing should not be allowed out of the workplace.<br>P273 Avoid release to the environment.<br>P280 Wear protective gloves, eye protection, and face protection. |
| **Response:** | P302+P352 IF ON SKIN: Wash with plenty of water.<br>P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.<br>P333+P313 If skin irritation or rash occurs: Get medical advice/attention.<br>P337+P313 If eye irritation persists: Get medical advice/attention.<br>P362+P364 Take off contaminated clothing and wash it before reuse.<br>P391 Collect spillage. |
| **Disposal:** | P501 Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations. |

**Dangerous Goods information:**
Not classified as Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code).
Exempt under Special Provision AU01 : Environmentally Hazardous Substances meeting the descriptions of UN3077 or UN3082 are not subject to this Code when transported by road or rail in;
a) Packagings that do not incorporate a receptacle exceeding 500 kg (L); or
b) Intermediate Bulk Containers.

## Section 3. Composition / information on ingredients

**General chemical description:** Mixture

**Identity of ingredients:**

| Chemical ingredients | CAS-No. | Proportion |
|---|---|---|
| Talc | 14807-96-6 | 30- < 60 % |
| 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, number average molecular weight ≤ 700 | 25068-38-6 | 30- < 60 % |
| Glass, oxide, chemicals | 65997-17-3 | 10- < 30 % |

## Section 4. First aid measures

| | |
|---|---|
| **Ingestion:** | Seek immediate medical attention. Do not induce vomiting.<br>Never give anything by mouth to an unconscious person. |
| **Skin:** | Rinse with running water and soap.<br>Remove contaminated clothing and shoes.<br>If symptoms develop and persist, get medical attention.<br>Wash contaminated clothing before reuse.<br>Thoroughly clean shoes before reuse.<br>Discard any shoes or clothing items that cannot be decontaminated. |
| **Eyes:** | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.<br>Seek medical attention immediately. |

| | |
|---|---|
| **Inhalation:** | If not breathing, give artificial respiration. If breathing is difficult, oxygen should be administered by qualified personnel.<br>Move to fresh air. If symptoms persist, seek medical advice. |
| **First Aid facilities:** | Eye wash<br>Normal washroom facilities |
| **Medical attention and special treatment:** | Treat symptomatically. |

## Section 5. Fire fighting measures

| | |
|---|---|
| **Suitable extinguishing media:** | Water spray (fog), foam, dry chemical or carbon dioxide. |
| **Decomposition products in case of fire:** | Oxides of carbon.<br>Oxides of sulfur.<br>Phenolics.<br>Halogenated compounds.<br>Metal oxide fumes.<br>Toxic fumes.<br>Irritating vapors. |
| **Particular danger in case of fire:** | Closed containers may rupture (due to build up of pressure) when exposed to extreme heat.<br>In case of fire, keep containers cool with water spray.<br>Do not allow run-off from fire fighting to enter drains or water courses. |
| **Special protective equipment for fire-fighters:** | Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear.<br>Keep unnecessary personnel away. |

## Section 6. Accidental release measures

| | |
|---|---|
| **Environmental precautions:** | Do not allow product to enter sewer or waterways. |
| **Clean-up methods:** | Ensure adequate ventilation.<br>Remove all sources of ignition.<br>Keep unnecessary personnel away.<br>Wear appropriate personal protective equipment.<br>Refer to Section 8 "Exposure Controls / Personal Protection" prior to clean up.<br>Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).<br>Scrape up spilled material and place in a closed container for disposal. |

## Section 7. Handling and storage

| | |
|---|---|
| **Precautions for safe handling:** | Use only with adequate ventilation.<br>Remove all sources of ignition.<br>Prevent contact with eyes, skin and clothing. Do not breathe vapor and mist. Wash thoroughly after handling.<br>Wear suitable protective clothing, safety glasses and gloves.<br>See Section 8 of the SDS for Personal Protective Equipment.<br>When using do not eat, drink or smoke.<br>Keep container closed. |
| **Conditions for safe storage:** | Storage at 10 to 30°C is recommended. |

## Section 8. Exposure controls / personal protection

**National exposure standards:**

| Ingredient [Regulated substance] | form of exposure | TWA (ppm) | TWA (mg/m3) | Peak Limit. (ppm) | Peak Limit. (mg/m3) | STEL (ppm) | STEL (mg/m3) |
|---|---|---|---|---|---|---|---|
| TALC, (CONTAINING NO ASBESTOS FIBRES) 14807-96-6 | | | 2.5 | | | | |
| Man-Made Vitreous (Silicate) Fibres (MMVF): Refractory Ceramic Fibres (RCF), Special Purpose Glass Fibres and High Biopersistence MM 65997-17-3 | Inhalable dust. | | 2 | | | | |
| Man-Made Vitreous (Silicate) Fibres (MMVF): Glass wool, rock (stone) wool, slag wool and continuous glass filament and Low Biopersis 65997-17-3 | Inhalable dust. | | 2 | | | | |
| Man-Made Vitreous (Silicate) Fibres (MMVF): Refractory Ceramic Fibres (RCF), Special Purpose Glass Fibres and High Biopersistence MM 65997-17-3 | Respirable fibers. | | | | | | |

**Eye protection:** Safety goggles or safety glasses with side shields.
Full face protection should be used if the potential for splashing or spraying of product exists.
Safety showers and eye wash stations should be available.

**Skin protection:** Use chemical resistant, impermeable clothing including gloves and either an apron or body suit to prevent skin contact.
Suitable protective gloves.

**Respiratory protection:** If inhalation risk exists, wear a respirator or air supplied mask complying with the requirements of AS/NZS 1715 and AS/NZS 1716.

## Section 9. Physical and chemical properties

**Appearance:** Dark grey
Solid
**Odor:** Pungent
**pH:**(Concentration: 100 % product) 7
**Flash point:** > 93.3 °C (> 199.94 °F)
(Closed cup)
**Flammability (solid, gas):** flammable
**Viscosity (dynamic):** 342,000 cp(; 20 °C (68 °F))

## Section 10. Stability and reactivity

**Stability:** Stable under normal conditions of temperature and pressure.

**Conditions to avoid:** Do not allow molten material to contact water or liquids as this can cause violent eruptions, splatter hot material, or ignite flammable material.
Take measures to prevent the build-up of electrostatic charges.

**Incompatible materials:** Oxidizing agents.
Acids.
Bases.
Amines.

**Hazardous decomposition products:** Oxides of carbon.

Oxides of nitrogen.

## Section 11. Toxicological information

**Health Effects:**

**Ingestion:** Not expected under normal conditions of use.
May cause gastrointestinal tract irritation if swallowed.

**Skin:** Causes skin irritation.
May cause allergic skin reaction.

**Eyes:** Causes serious eye irritation.

**Inhalation:** Inhalation of vapors or mists of the product may be irritating to the respiratory system.

**Acute toxicity:**

| Hazardous components<br>CAS-No. | Value type | Value | Route of application | Exposure time | Species | Method |
|---|---|---|---|---|---|---|
| Talc<br>14807-96-6 | LD50<br>LC50<br>LD50 | > 5,000 mg/kg<br>> 2.1 mg/l<br>> 2,000 mg/kg | oral<br>inhalation<br>dermal | <br>4 h<br> | rat<br>rat<br>rat | OECD Guideline 423 (Acute Oral toxicity)<br>OECD Guideline 403 (Acute Inhalation Toxicity)<br>OECD Guideline 402 (Acute Dermal Toxicity) |
| 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, number average molecular weight ≤ 700<br>25068-38-6 | LD50<br>LD50 | > 2,000 mg/kg<br>> 2,000 mg/kg | oral<br><br>dermal | | rat<br>rat | OECD Guideline 420 (Acute Oral Toxicity)<br>OECD Guideline 402 (Acute Dermal Toxicity) |

**Skin corrosion/irritation:**

| Hazardous components<br>CAS-No. | Result | Exposure time | Species | Method |
|---|---|---|---|---|
| Talc<br>14807-96-6 | slightly irritating | 4 h | rabbit | OECD Guideline 404 (Acute Dermal Irritation / Corrosion) |
| 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, number average molecular weight ≤ 700<br>25068-38-6 | slightly irritating | 4 h | rabbit | OECD Guideline 404 (Acute Dermal Irritation / Corrosion) |

**Serious eye damage/irritation:**

| Hazardous components<br>CAS-No. | Result | Exposure time | Species | Method |
|---|---|---|---|---|
| Talc<br>14807-96-6 | not irritating | | rabbit | OECD Guideline 405 (Acute Eye Irritation / Corrosion) |
| 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, number average molecular weight ≤ 700<br>25068-38-6 | slightly irritating | | rabbit | OECD Guideline 405 (Acute Eye Irritation / Corrosion) |

**Respiratory or skin sensitization:**

| Hazardous components<br>CAS-No. | Result | Test type | Species | Method |
|---|---|---|---|---|
| Talc<br>14807-96-6 | not sensitising | Guinea pig maximisation test | guinea pig | OECD Guideline 406 (Skin Sensitisation) |
| 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, number average molecular weight ≤ 700<br>25068-38-6 | sensitising | Mouse local lymphnode assay (LLNA) | mouse | OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay) |

**Germ cell mutagenicity:**

| Hazardous components<br>CAS-No. | Result | Type of study / Route of administration | Metabolic activation / Exposure time | Species | Method |
|---|---|---|---|---|---|
| Talc<br>14807-96-6 | negative<br>negative | bacterial reverse mutation assay (e.g Ames test)<br>in vitro mammalian cell transformation assay | with and without<br>without | | equivalent or similar to OECD Guideline 471 (Bacterial Reverse Mutation Assay)<br>equivalent or similar to OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test) |
| Talc<br>14807-96-6 | negative | oral: gavage | | rat | equivalent or similar to OECD Guideline 478 (Genetic Toxicology: Rodent Dominant Lethal Test) |
| 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, number average molecular weight ≤ 700<br>25068-38-6 | negative | bacterial reverse mutation assay (e.g Ames test) | with and without | | OECD Guideline 472 (Genetic Toxicology: Escherichia coli, Reverse Mutation Assay) |
| 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, number average molecular weight ≤ 700<br>25068-38-6 | negative | oral: gavage | | mouse | not specified |

**Repeated dose toxicity:**

| Hazardous components CAS-No. | Result | Route of application | Exposure time / Frequency of treatment | Species | Method |
|---|---|---|---|---|---|
| Talc 14807-96-6 | NOAEL=100 mg/kg | oral: feed | 101 d7 d/w | rat | equivalent or similar to OECD Guideline 452 (Chronic Toxicity Studies) |
| 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, number average molecular weight ≤ 700 25068-38-6 | NOAEL=50 mg/kg | oral: gavage | 14 wdaily | rat | OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents) |

## Section 12. Ecological information

**General ecological information:** Do not empty into drains / surface water / ground water.

**Ecotoxicity:** H411 Toxic to aquatic life with long lasting effects.

**Toxicity:**

| Hazardous components CAS-No. | Value type | Value | Acute Toxicity Study | Exposure time | Species | Method |
|---|---|---|---|---|---|---|
| Talc 14807-96-6 | LC50 | Toxicity > Water solubility | Fish | 96 h | Brachydanio rerio (new name: Danio rerio) | OECD Guideline 203 (Fish, Acute Toxicity Test) |
| 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, number average molecular weight ≤ 700 25068-38-6 | LC50 | 1.75 mg/l | Fish | 96 h | Oncorhynchus mykiss | OECD Guideline 203 (Fish, Acute Toxicity Test) |
| 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, number average molecular weight ≤ 700 25068-38-6 | EC50 | 1.7 mg/l | Daphnia | 48 h | Daphnia magna | OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test) |
| 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, number average molecular weight ≤ 700 25068-38-6 | EC50 | > 11 mg/l | Algae | 72 h | Scenedesmus capricornutum | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, number average molecular weight ≤ 700 25068-38-6 | NOEC | 4.2 mg/l | Algae | 72 h | Scenedesmus capricornutum | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, number average molecular weight ≤ 700 25068-38-6 | IC50 | > 100 mg/l | Bacteria | 3 h | activated sludge, industrial | other guideline: |

**Persistence and degradability:**

| Hazardous components CAS-No. | Result | Route of application | Degradability | Method |
|---|---|---|---|---|
| 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, number average molecular weight ≤ 700 25068-38-6 | not readily biodegradable. | aerobic | 5 % | OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test) |

**Bioaccumulative potential / Mobility in soil:**

| Hazardous components CAS-No. | LogPow | Bioconcentration factor (BCF) | Exposure time | Species | Temperature | Method |
|---|---|---|---|---|---|---|

| | | | | | | |
|---|---|---|---|---|---|---|
| Talc<br>14807-96-6 | -9.4 | | | | 25 °C | QSAR (Quantitative Structure Activity Relationship) |
| 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, number average molecular weight ≤ 700<br>25068-38-6 | 3.242 | | | | 25 °C | EU Method A.8 (Partition Coefficient) |

## Section 13. Disposal considerations

**Waste disposal of product:** Dispose of in accordance with local and national regulations.

**Disposal for uncleaned package:** Disposal must be made according to official regulations.

## Section 14. Transport information

**Road and Rail Transport:**

Dangerous Goods information: Not classified as Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code).
Exempt under Special Provision AU01 : Environmentally Hazardous Substances meeting the descriptions of UN3077 or UN3082 are not subject to this Code when transported by road or rail in;
a) Packagings that do not incorporate a receptacle exceeding 500 kg (L); or
b) Intermediate Bulk Containers.

**Marine transport IMDG:**

UN no.: 3077
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Epoxy resin)
Class or division: 9
Packing group: III
EmS: F-A ,S-F
Seawater pollutant: Marine pollutant

**Air transport IATA:**

| | |
|---|---|
| UN no.: | 3077 |
| Proper shipping name: | Environmentally hazardous substance, solid, n.o.s. (Epoxy resin) |
| Class or division: | 9 |
| Packing group: | III |
| Packing instructions (passenger) | 956 |
| Packing instructions (cargo) | 956 |

**Further information for transport:**

The transport classifications in this section apply generally to packed and bulk goods alike. For containers with a net volume of no more than 5 L for liquid substances or a net mass of no more than 5 kg for solid substances per individual or inner package, the exemptions SP 375 (ADR), A197 (IATA), 2.10.2.7 (IMDG), NZ 4.3(10) may be applied, which can result in a deviation from the transport classification for packed goods.

## Section 15. Regulatory information

**SUSMP Poisons Schedule** None

## Section 16. Other information

**Abbreviations/acronyms:**

ADGC - Australian Dangerous Goods Code
SUSMP - Standard for the Uniform Medicines of Medicines and Poisons
GHS: Globally Harmonized System
CAS: Chemical Abstracts Service
IATA-DGR: International Air Transport Association – Dangerous Goods Regulations
IMDG: International Maritime Dangerous Goods code
AIIC - Australian Inventory of Industrial Chemicals (AIIC)
AICIS - Australian Industrial Chemicals Introduction Scheme

**Reason for issue:** First issue. involved chapters: 1-16

**Disclaimer:**

The percentage weight (% w/w) of ingredients is not to be taken as a specification guaranteed by Henkel Australia Pty. Limited, but only as an approximate guide to the content of hazardous ingredients in the material. The information contained herein does not constitute a guarantee by Henkel Australia Pty. Limited concerning the properties of the material.
The information contained in the Safety Data Sheet is offered in good faith and has been developed from what is believed to be accurate and reliable sources. The information is offered without warranty, representation, inducement or licence and Henkel Australia Pty. Limited assumes no legal responsibility for reliance upon same. Henkel Australia Pty. Limited disclaims any liability for loss, injury or damage incurred in connection with the use of the material or its associated Safety Data Sheet.
This information is not to be construed as a representation that the material is suitable for any particular purpose or use except those conditions and warranties implied by either Commonwealth or State statutes. Customers are encouraged to make their own enquiries as to the material's characteristics and, where appropriate, to conduct their own tests in the specific context of the material's intended use.
No warranty or representation of any kind is given with respect to the substantive or export laws of any other jurisdiction or country. Please confirm that the information provided herein conforms to the substantive export or other law of any other jurisdiction prior to export. Please contact Henkel Product Safety and Regulatory Affairs for additional assistance.

# Safety Data Sheet



LOCTITE® Advanced Pipe Repair O

SDS No. : 826229
V001.1
Date of issue: 15.11.2024

## Section 1. Identification of the substance/preparation and of the company/undertaking

**Product name:** LOCTITE® Advanced Pipe Repair O

**Intended use:** Pre-impregnated fabric/fiber

**Supplier:**
Henkel Australia Pty Ltd
135-141 Canterbury Road
Kilsyth, Victoria, 3137
Australia

Phone: +61 (3) 9724 6444

**E-mail address of person responsible for Safety Data Sheet:** SDSinfo.Adhesive@henkel.com

**Emergency Telephone for Chemical Accidents:** 24 HOUR EMERGENCY CONTACT NUMBER: 1800 032 379

## Section 2. Hazards identification

**Classification of the substance or mixture**
Hazardous according to the criteria of Safe Work Australia.

**GHS Classification:**

| Hazard Class | Hazard Category | Route of Exposure | Target organ |
|---|---|---|---|
| Acute toxicity | Category 4 | Inhalation | |
| Skin irritation | Category 2 | | |
| Serious eye irritation | Category 2A | | |
| Respiratory sensitizer | Category 1 | | |
| Skin sensitizer | Category 1 | | |
| Carcinogenicity | Category 2 | | |
| Target Organ Systemic Toxicant - Single exposure | Category 3 | | respiratory tract irritation |
| Target Organ Systemic Toxicant - Repeated exposure | Category 2 | | |

**Hazard pictogram:**

**Signal word:** Danger

| | |
|---|---|
| **Hazard statement(s):** | H315 Causes skin irritation.<br>H317 May cause an allergic skin reaction.<br>H319 Causes serious eye irritation.<br>H332 Harmful if inhaled.<br>H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.<br>H335 May cause respiratory irritation.<br>H351 Suspected of causing cancer.<br>H373 May cause damage to organs through prolonged or repeated exposure. |
| **Precautionary Statement(s):** | |
| **Prevention:** | P201 Obtain special instructions before use.<br>P202 Do not handle until all safety precautions have been read and understood.<br>P260 Do not breathe dust or fumes.<br>P264 Wash hands thoroughly after handling.<br>P271 Use only outdoors or in a well-ventilated area.<br>P272 Contaminated work clothing should not be allowed out of the workplace.<br>P280 Wear protective gloves/protective clothing/eye protection/face protection.<br>P284 [In case of inadequate ventilation] wear respiratory protection. |
| **Response:** | P302+P352 IF ON SKIN: Wash with plenty of water.<br>P304+P340+P312 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel unwell.<br>P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.<br>P308+P313 IF exposed or concerned: Get medical advice/attention.<br>P333+P313 If skin irritation or rash occurs: Get medical advice/attention.<br>P337+P313 If eye irritation persists: Get medical advice/attention.<br>P362+P364 Take off contaminated clothing and wash it before reuse. |
| **Storage:** | P403+P233 Store in a well-ventilated place. Keep container tightly closed.<br>P405 Store locked up. |
| **Disposal:** | P501 Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations. |

**Dangerous Goods information:**
Not classified as Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code).

## Section 3. Composition / information on ingredients

**Identity of ingredients:**

| Chemical ingredients | CAS-No. | Proportion |
|---|---|---|
| Isocyanic acid, polymethylenepolyphenylene ester, polymer with a-hydro-w-hydroxypoly[oxy(methyl-1,2-ethanediyl)] | 53862-89-8 | 10- < 20 % |
| 4,4'- methylenediphenyl diisocyanate | 101-68-8 | 1- < 5 % |
| Isocyanic acid, polymethylenepolyphenylene ester | 9016-87-9 | 1- < 5 % |
| o-(p-Isocyanatobenzyl)phenyl isocyanate | 5873-54-1 | 1- < 5 % |
| 4-isocyanatosulphonyltoluene | 4083-64-1 | < 1 % |
| non hazardous ingredients~ | | 60- <= 100 % |

## Section 4. First aid measures

| | |
|---|---|
| **Ingestion:** | If material is ingested, immediately contact a physician or poison control center.<br>Keep individual calm.<br>DO NOT induce vomiting unless directed to do so by medical personnel.<br>Never give anything by mouth to an unconscious person.<br>Seek medical attention immediately. |
| **Skin:** | Rinse with running water and soap.<br>Remove contaminated clothing and shoes.<br>Wash contaminated clothing before reuse.<br>Thoroughly clean shoes before reuse.<br>Seek medical attention immediately. |
| **Eyes:** | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.<br>Seek medical attention immediately. |
| **Inhalation:** | If not breathing, give artificial respiration. If breathing is difficult, oxygen should be administered by qualified personnel.<br>Move to fresh air. If symptoms persist, seek medical advice.<br>Asthmatic-type symptoms may develop and may be immediate or delayed up to several hours.<br>Extreme asthmatic reactions can be life threatening. |
| **First Aid facilities:** | Eye wash<br>Normal washroom facilities |
| **Medical attention and special treatment:** | Treat symptomatically. |

## Section 5. Fire fighting measures

| | |
|---|---|
| **Suitable extinguishing media:** | Use extinguishing measures appropriate to local circumstances and the surrounding environment.<br>Foam, dry chemical or carbon dioxide.<br>Water may be an ineffective extinguishing medium.<br>Do not use high volume water jet. |
| **Decomposition products in case of fire:** | Irritating and toxic gases or fumes may be released during a fire.<br>Isocyanate vapors.<br>Oxides of carbon.<br>Oxides of nitrogen.<br>Hydrogen cyanide. |
| **Particular danger in case of fire:** | At higher temperatures isocyanate may be released.<br>Sealed containers at elevated temperatures or contaminated with water may rupture explosively.<br>In case of fire, keep containers cool with water spray.<br>Do not allow run-off from fire fighting to enter drains or water courses. |
| **Special protective equipment for fire-fighters:** | Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear.<br>Water may be unsuitable as an extinguishing media, but may be helpful in keeping adjacent containers cool.<br>Keep unnecessary personnel away. |

## Section 6. Accidental release measures

| | |
|---|---|
| **Environmental precautions:** | Do not empty into drains / surface water / ground water. |
| **Clean-up methods:** | Remove all sources of ignition.<br>Evacuate and ventilate spill area; dike spill to prevent entry into water system; wear full protective equipment during clean-up.<br>Refer to Section 8 "Exposure Controls / Personal Protection" prior to clean up.<br>Persons not wearing appropriate protective equipment should be excluded from area of spill until clean-up has been completed. |

Large quantities may be pumped into closed, but not sealed containers for disposal.
Spilled material will solidify.
Avoid dust formation.

## Section 7. Handling and storage

**Precautions for safe handling:** Use only in well-ventilated areas.
Prevent contact with eyes, skin and clothing. Do not breathe vapor and mist. Wash thoroughly after handling.
Wear suitable protective clothing, gloves and eye/face protection.
Refer to Section 8.
Protect from moisture.

**Conditions for safe storage:** Refer to Technical Data Sheet.

## Section 8. Exposure controls / personal protection

**National exposure standards:**

| Ingredient [Regulated substance] | form of exposure | TWA (ppm) | TWA (mg/m3) | Peak Limit. (ppm) | Peak Limit. (mg/m3) | STEL (ppm) | STEL (mg/m3) |
|---|---|---|---|---|---|---|---|
| ISOCYANATES, ALL (AS-NCO)<br>101-68-8 | | | 0.02 | | | | |
| ISOCYANATES, ALL (AS-NCO)<br>101-68-8 | | | | | | | 0.07 |
| Isocyanates, all (as-NCO)<br>9016-87-9 | | | 0.02 | | | | |
| Isocyanates, all (as-NCO)<br>9016-87-9 | | | | | | | 0.07 |
| Isocyanates, all (as-NCO)<br>5873-54-1 | | | | | | | 0.07 |
| Isocyanates, all (as-NCO)<br>5873-54-1 | | | 0.02 | | | | |
| Isocyanates, all (as-NCO)<br>4083-64-1 | | | 0.02 | | | | |
| Isocyanates, all (as-NCO)<br>4083-64-1 | | | | | | | 0.07 |

**Eye protection:** Safety goggles or safety glasses with side shields.
Full face protection should be used if the potential for splashing or spraying of product exists.
Safety showers and eye wash stations should be available.

**Skin protection:** Use chemical resistant, impermeable clothing including gloves and either an apron or body suit to prevent skin contact.
Suitable protective gloves.

**Respiratory protection:** If inhalation risk exists, wear a respirator or air supplied mask complying with the requirements of AS/NZS 1715 and AS/NZS 1716.

## Section 9. Physical and chemical properties

| | |
|---|---|
| **Appearance:** | White<br>Fiberglass cloth coated with viscous white resin |
| **Odor:** | Odorless |
| **pH:** | Not applicable, Product reacts with water. |
| **Specific gravity:** | 1.5 - 2.5 |
| **Boiling point:** | 649 °C (1200.2 °F) |
| **Flash point:** | 110 °C (230 °F) |
| **Vapor pressure:** (; 20 °C (68 °F)) | 0.0039 mbar |
| **Vapor density:** | 8.5 |

## Section 10. Stability and reactivity

| | |
|---|---|
| **Conditions to avoid:** | Avoid moisture.<br>Contamination with water.<br>Extremes of temperature and direct sunlight.<br>Container can be pressurised by carbon dioxide due to reaction with humid air and/or water.<br>Protect from direct sunlight.<br>Do not freeze. |
| **Incompatible materials:** | Water.<br>Alcohols.<br>Amines.<br>Moisture.<br>Strong acids and strong bases. |
| **Hazardous decomposition products:** | Upon decomposition, this product may yield gaseous nitrogen oxides, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.<br>Hydrogen cyanide.<br>Isocyanate vapors<br>Irritating vapors. |

## Section 11. Toxicological information

**Health Effects:**

**Ingestion:** Not expected under normal conditions of use.
May cause gastrointestinal tract irritation if swallowed.

**Skin:** Causes skin irritation.
May cause allergic skin reaction.
Isocyanates react with skin protein and moisture and can cause irritation which may include the following symptoms: reddening, swelling, rash, scaling or blistering.

**Eyes:** Causes serious eye irritation.
Liquid or vapor can cause moderate to severe irritation.
Symptoms can include irritation, redness, scratching of the cornea, and tearing.
Conjunctivitis.

**Inhalation:** Methylene bisphenyl isocyanate (MDI) vapors or mist at concentrations above the TLV can irritate the mucous membranes in the respiratory tract (nose, throat, lungs) causing runny nose, sore throat, coughing, chest discomfort, shortness of breath and reduced lung function (breathing obstruction).
May cause allergic respiratory reaction.
Persons with preexisting, nonspecific bronchial hyper-reactivity can respond to concentrations below the TLV with similar symptoms as well as lead to bronchitis, bronchial spasm and pulmonary edema (fluid in lungs).

**Acute toxicity:**

| Hazardous components<br>CAS-No. | Value type | Value | Route of application | Exposure time | Species | Method |
|---|---|---|---|---|---|---|
| Isocyanic acid, polymethylenepolyphenylene ester, polymer with a-hydro-w-hydroxypoly[oxy(methyl-1,2-ethanediyl)]<br>53862-89-8 | LD50<br>LD50 | > 10,000 mg/kg<br>> 9,400 mg/kg | oral<br>dermal | | rat<br>rabbit | OECD Guideline 401 (Acute Oral Toxicity)<br>OECD Guideline 402 (Acute Dermal Toxicity) |
| 4,4'- methylenediphenyl diisocyanate<br>101-68-8 | LD50<br>Acute toxicity estimate (ATE)<br>LD50 | > 2,000 mg/kg<br>1.5 mg/l<br>> 9,400 mg/kg | oral<br>inhalation<br>dermal | 4 h | rat<br>rabbit | other guideline:<br>Expert judgement<br>OECD Guideline 402 (Acute Dermal Toxicity) |
| Isocyanic acid, polymethylenepolyphenylene ester<br>9016-87-9 | LD50<br>Acute toxicity estimate (ATE)<br>LD50 | > 10,000 mg/kg<br>1.5 mg/l<br>> 9,400 mg/kg | oral<br>inhalation<br>dermal | 4 h | rat<br>rat | OECD Guideline 401 (Acute Oral Toxicity)<br>Expert judgement<br>OECD Guideline 402 (Acute Dermal Toxicity) |
| o-(p-Isocyanatobenzyl)phenyl isocyanate<br>5873-54-1 | LD50<br>Acute toxicity estimate (ATE)<br>LD50 | > 2,000 mg/kg<br>1.5 mg/l<br>> 9,400 mg/kg | oral<br>inhalation<br>dermal | 4 h | rat<br>rabbit | other guideline:<br>Expert judgement<br>OECD Guideline 402 (Acute Dermal Toxicity) |
| 4-isocyanatosulphonyltoluene<br>4083-64-1 | LD50<br>LD50 | 2,330 mg/kg<br>> 2,000 mg/kg | oral<br>dermal | | rat<br>rat | equivalent or similar to OECD Guideline 401 (Acute Oral Toxicity)<br>OECD Guideline 402 (Acute Dermal Toxicity) |

**Skin corrosion/irritation:**

| Hazardous components<br>CAS-No. | Result | Exposure time | Species | Method |
|---|---|---|---|---|
| Isocyanic acid, polymethylenepolyphenylene ester, polymer with a-hydro-w-hydroxypoly[oxy(methyl-1,2-ethanediyl)]<br>53862-89-8 | irritating | | rabbit | OECD Guideline 404 (Acute Dermal Irritation / Corrosion) |
| 4,4'- methylenediphenyl diisocyanate<br>101-68-8 | irritating | 4 h | rabbit | OECD Guideline 404 (Acute Dermal Irritation / Corrosion) |
| Isocyanic acid, polymethylenepolyphenylene ester<br>9016-87-9 | irritating | | rabbit | OECD Guideline 404 (Acute Dermal Irritation / Corrosion) |
| o-(p-Isocyanatobenzyl)phenyl isocyanate<br>5873-54-1 | irritating | | rabbit | OECD Guideline 404 (Acute Dermal Irritation / Corrosion) |

**Serious eye damage/irritation:**

| Hazardous components<br>CAS-No. | Result | Exposure time | Species | Method |
|---|---|---|---|---|
| Isocyanic acid, polymethylenepolyphenylene ester, polymer with a-hydro-w-hydroxypoly[oxy(methyl-1,2-ethanediyl)]<br>53862-89-8 | irritating | | rabbit | OECD Guideline 405 (Acute Eye Irritation / Corrosion) |
| 4,4'- methylenediphenyl diisocyanate<br>101-68-8 | irritating | | human | Weight of evidence |
| Isocyanic acid, polymethylenepolyphenylene ester<br>9016-87-9 | irritating | | human | Weight of evidence |

**Respiratory or skin sensitization:**

| Hazardous components<br>CAS-No. | Result | Test type | Species | Method |
|---|---|---|---|---|
| 4,4'- methylenediphenyl diisocyanate<br>101-68-8 | sensitising | Buehler test | guinea pig | OECD Guideline 406 (Skin Sensitisation) |
| 4,4'- methylenediphenyl diisocyanate<br>101-68-8 | sensitising | Respiratory sensitisation | guinea pig | not specified |
| Isocyanic acid, polymethylenepolyphenylene ester<br>9016-87-9 | sensitising | Skin sensitisation | guinea pig | OECD Guideline 406 (Skin Sensitisation) |
| o-(p-Isocyanatobenzyl)phenyl isocyanate<br>5873-54-1 | sensitising | Respiratory sensitisation | guinea pig | not specified |
| o-(p-Isocyanatobenzyl)phenyl isocyanate<br>5873-54-1 | not sensitising | Buehler test | guinea pig | OECD Guideline 406 (Skin Sensitisation) |
| o-(p-Isocyanatobenzyl)phenyl isocyanate<br>5873-54-1 | sensitising | Mouse local lymphnode assay (LLNA) | mouse | OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay) |

**Germ cell mutagenicity:**

| Hazardous components CAS-No. | Result | Type of study / Route of administration | Metabolic activation / Exposure time | Species | Method |
|---|---|---|---|---|---|
| 4,4'- methylenediphenyl diisocyanate 101-68-8 | negative | bacterial reverse mutation assay (e.g Ames test) | with and without | | EU Method B.13/14 (Mutagenicity) |
| 4,4'- methylenediphenyl diisocyanate 101-68-8 | negative | inhalation | | rat | OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test) |
| Isocyanic acid, polymethylenepolyphenylene ester 9016-87-9 | negative | bacterial reverse mutation assay (e.g Ames test) | with and without | | EU Method B.13/14 (Mutagenicity) |
| o-(p-Isocyanatobenzyl)phenyl isocyanate 5873-54-1 | negative | bacterial reverse mutation assay (e.g Ames test) | with and without | | OECD Guideline 471 (Bacterial Reverse Mutation Assay) |
| o-(p-Isocyanatobenzyl)phenyl isocyanate 5873-54-1 | negative | inhalation | | rat | OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test) |
| 4-isocyanatosulphonyltoluene 4083-64-1 | negative<br>negative | bacterial reverse mutation assay (e.g Ames test)<br>in vitro mammalian chromosome aberration test | with and without<br>with and without | | not specified<br>not specified |

**Repeated dose toxicity:**

| Hazardous components CAS-No. | Result | Route of application | Exposure time / Frequency of treatment | Species | Method |
|---|---|---|---|---|---|
| 4,4'- methylenediphenyl diisocyanate 101-68-8 | NOAEL=0.0002 mg/l | inhalation: aerosol | main: 2 y; satellite:1 y6 h/d; 5 d/w | rat | OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies) |
| Isocyanic acid, polymethylenepolyphenylene ester 9016-87-9 | NOAEL=0.0002 mg/l | inhalation: aerosol | 2 y6 h per d, 5 d per week | rat | OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies) |
| o-(p-Isocyanatobenzyl)phenyl isocyanate 5873-54-1 | NOAEL=0,2 mg/m³ | inhalation: aerosol | 2 y6 h/d, 5 d/w | rat | OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies) |

## Section 12. Ecological information

**General ecological information:** Do not empty into drains / surface water / ground water.

**Ecotoxicity:**

**Toxicity:**

| Hazardous components CAS-No. | Value type | Value | Acute Toxicity Study | Exposure time | Species | Method |
|---|---|---|---|---|---|---|
| Isocyanic acid, polymethylenepolyphenylene ester, polymer with a-hydro-w-hydroxypoly[oxy(methyl-1,2-ethanediyl)] 53862-89-8 | LC50 | > 1,000 mg/l | Fish | 96 h | Brachydanio rerio (new name: Danio rerio) | OECD Guideline 203 (Fish, Acute Toxicity Test) |
| Isocyanic acid, polymethylenepolyphenylene ester, polymer with a-hydro-w-hydroxypoly[oxy(methyl-1,2-ethanediyl)] 53862-89-8 | EC50 | > 1,000 mg/l | Daphnia | 24 h | Daphnia magna | OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test) |
| 4,4'- methylenediphenyl diisocyanate 101-68-8 | LL50 | > 100 mg/l | Fish | 96 h | Danio rerio | OECD Guideline 203 (Fish, Acute Toxicity Test) |
| 4,4'- methylenediphenyl diisocyanate 101-68-8 | EC50 | > 100 mg/l | Daphnia | 48 h | Daphnia magna | EU Method C.2 (Acute Toxicity for Daphnia) |
| 4,4'- methylenediphenyl diisocyanate 101-68-8 | EL50 | > 100 mg/l | Algae | 72 h | Desmodesmus subspicatus | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| 4,4'- methylenediphenyl diisocyanate 101-68-8 | NOELR | 100 mg/l | Algae | 72 h | Desmodesmus subspicatus | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| 4,4'- methylenediphenyl diisocyanate 101-68-8 | EC50 | > 1,000 mg/l | Bacteria | 3 h | activated sludge of a predominantly domestic sewage | OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test) |
| Isocyanic acid, polymethylenepolyphenylene ester 9016-87-9 | LC50 | > 1,000 mg/l | Fish | 96 h | Brachydanio rerio (new name: Danio rerio) | OECD Guideline 203 (Fish, Acute Toxicity Test) |
| Isocyanic acid, polymethylenepolyphenylene ester 9016-87-9 | EC50 | > 1,000 mg/l | Daphnia | 24 h | Daphnia magna | OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test) |
| Isocyanic acid, polymethylenepolyphenylene ester 9016-87-9 | EC50 | > 1,640 mg/l | Algae | 72 h | Desmodesmus subspicatus | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| Isocyanic acid, polymethylenepolyphenylene ester 9016-87-9 | EC50 | > 100 mg/l | Bacteria | 3 h | activated sludge | OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test) |
| o-(p-Isocyanatobenzyl)phenyl isocyanate 5873-54-1 | LC50 | Toxicity > Water Solubility | Fish | 96 h | Danio rerio | OECD Guideline 203 (Fish, Acute Toxicity Test) |
| o-(p-Isocyanatobenzyl)phenyl isocyanate 5873-54-1 | EC50 | Toxicity > Water Solubility | Daphnia | 24 h | Daphnia magna | OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test) |
| o-(p-Isocyanatobenzyl)phenyl isocyanate 5873-54-1 | EC50 | Toxicity > Water Solubility | Algae | 72 h | Desmodesmus subspicatus (reported as Scenedesmus subspicatus) | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| o-(p-Isocyanatobenzyl)phenyl isocyanate 5873-54-1 | NOELR | Toxicity > Water Solubility | Algae | 72 h | Desmodesmus subspicatus (reported as Scenedesmus subspicatus) | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| 4-isocyanatosulphonyltoluene 4083-64-1 | LC50 | > 45 mg/l | Fish | 96 h | Oncorhynchus mykiss | OECD Guideline 203 (Fish, Acute Toxicity Test) |
| 4-isocyanatosulphonyltoluene 4083-64-1 | EC50 | > 100 mg/l | Daphnia | 48 h | Daphnia magna | OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test) |

| | | | | | | |
|---|---|---|---|---|---|---|
| 4-isocyanatosulphonyltoluene 4083-64-1 | EC50 | 30 mg/l | Algae | 72 h | Pseudokirchneriella subcapitata | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| 4-isocyanatosulphonyltoluene 4083-64-1 | EC10 | 23 mg/l | Algae | 72 h | Pseudokirchneriella subcapitata | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| 4-isocyanatosulphonyltoluene 4083-64-1 | EC 50 | 2,511 mg/l | Bacteria | | | OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test) |

**Persistence and degradability:**

| **Hazardous components CAS-No.** | **Result** | **Route of application** | **Degradability** | **Method** |
|---|---|---|---|---|
| 4,4'- methylenediphenyl diisocyanate 101-68-8 | not readily biodegradable. | aerobic | 0 % | OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test) |
| Isocyanic acid, polymethylenepolyphenylene ester 9016-87-9 | not inherently biodegradable | aerobic | 0 % | OECD Guideline 302 C (Inherent Biodegradability: Modified MITI Test (II)) |
| Isocyanic acid, polymethylenepolyphenylene ester 9016-87-9 | not readily biodegradable. | not specified | 0 % | OECD 301 A - F |
| o-(p-Isocyanatobenzyl)phenyl isocyanate 5873-54-1 | not inherently biodegradable | aerobic | 0 % | OECD Guideline 302 C (Inherent Biodegradability: Modified MITI Test (II)) |
| 4-isocyanatosulphonyltoluene 4083-64-1 | readily biodegradable | aerobic | 83 % | OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test) |

**Bioaccumulative potential / Mobility in soil:**

| **Hazardous components** CAS-No. | LogPow | Bioconcentration factor (BCF) | Exposure time | Species | Temperature | Method |
|---|---|---|---|---|---|---|
| 4,4'- methylenediphenyl diisocyanate 101-68-8 | | 92 - 200 | 28 d | Cyprinus carpio | | OECD Guideline 305 E (Bioaccumulation: Flow-through Fish Test) |
| 4,4'- methylenediphenyl diisocyanate 101-68-8 | 4.51 | | | | 22 °C | OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC Method) |
| Isocyanic acid, polymethylenepolyphenylene ester 9016-87-9 | | 200 | | Cyprinus carpio | | OECD Guideline 305 (Bioconcentration: Flow-through Fish Test) |
| o-(p-Isocyanatobenzyl)phenyl isocyanate 5873-54-1 | | 200 | 28 day | Cyprinus carpio | | OECD Guideline 305 E (Bioaccumulation: Flow-through Fish Test) |
| o-(p-Isocyanatobenzyl)phenyl isocyanate 5873-54-1 | 5.22 | | | | | QSAR (Quantitative Structure Activity Relationship) |
| 4-isocyanatosulphonyltoluene 4083-64-1 | 0.6 | | | | 30 °C | OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC Method) |

## Section 13. Disposal considerations

**Waste disposal of product:** Dispose of in accordance with local and national regulations.

**Disposal for uncleaned package:** Disposal must be made according to official regulations.

## Section 14. Transport information

**Road and Rail Transport:**

Dangerous Goods information: Not classified as Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code).

**Marine transport IMDG:**
Not dangerous goods

**Air transport IATA:**
Not dangerous goods

## Section 15. Regulatory information

**SUSMP Poisons Schedule** None

**AIIC:** All components are listed or are exempt from listing on the Australian Inventory of Industrial Chemicals or Introduced under AICIS.

## Section 16. Other information

**Abbreviations/acronyms:**
ADGC - Australian Dangerous Goods Code
SUSMP - Standard for the Uniform Medicines of Medicines and Poisons
GHS: Globally Harmonized System
CAS: Chemical Abstracts Service
IMDG: International Maritime Dangerous Goods code
IATA-DGR: International Air Transport Association – Dangerous Goods Regulations
AIIC - Australian Inventory of Industrial Chemicals (AIIC)
AICIS - Australian Industrial Chemicals Introduction Scheme

**Disclaimer:**

The percentage weight (% w/w) of ingredients is not to be taken as a specification guaranteed by Henkel Australia Pty. Limited, but only as an approximate guide to the content of hazardous ingredients in the material. The information contained herein does not constitute a guarantee by Henkel Australia Pty. Limited concerning the properties of the material.
The information contained in the Safety Data Sheet is offered in good faith and has been developed from what is believed to be accurate and reliable sources. The information is offered without warranty, representation, inducement or licence and Henkel Australia Pty. Limited assumes no legal responsibility for reliance upon same. Henkel Australia Pty. Limited disclaims any liability for loss, injury or damage incurred in connection with the use of the material or its associated Safety Data Sheet.
This information is not to be construed as a representation that the material is suitable for any particular purpose or use except those conditions and warranties implied by either Commonwealth or State statutes. Customers are encouraged to make their own enquiries as to the material's characteristics and, where appropriate, to conduct their own tests in the specific context of the material's intended use.
No warranty or representation of any kind is given with respect to the substantive or export laws of any other jurisdiction or country. Please confirm that the information provided herein conforms to the substantive export or other law of any other jurisdiction prior to export. Please contact Henkel Product Safety and Regulatory Affairs for additional assistance.