# Safety Data Sheet



LOCTITE TW 610J known as EMRALON TW-610J 18KG

SDS No. : 446514
V001.4
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## Section 1. Identification of the substance/preparation and of the company/undertaking

**Product name:**
LOCTITE TW 610J known as EMRALON TW-610J 18KG

**Other means of identification:**
LOCTITE TW 610J 18KG
**Product code:**
IDH1683222
**Recommended use of the chemical and restrictions on use**

**Intended use:**
EMC product

**Identification of manufacturer, importer or distributor**

**Manufacturer:** Henkel Japan Ltd., Kakogawa Site, 825, Kitano, Noguchi-cho, Kakogawa-shi, Hyogo 675-0011, Japan
Phone: +81-79-426-2188 Fax: +81-79-426-2796

**Importer:** Henkel Thailand Ltd The Offices at Centralworld, 35th Floor, 999/9 Rama 1 Rd, Kwang Patumwan, Khet Patumwan, Bangkok 10330, Thailand. Phone : + 6622098000 Fax : +6622098008

**E-mail address of person responsible for Safety Data Sheet:**
ap-ua-psra.sea@henkel.com

**Emergency information:**
FOR EMERGENCIES ONLY (Spill, major leak, Fire, Exposure, or Accident). Call CHEMTREC: +1 703-741-5970

## Section 2. Hazards identification

**GHS Classification:**

| Hazard Class | Hazard Category |
|---|---|
| Serious eye damage/eye irritation | Category 2 |
| Skin sensitizer | Category 1 |
| Chronic hazards to the aquatic environment | Category 3 |

**GHS label elements:**

**Hazard pictogram:**

**Signal word:**
Warning

**Hazard statement:**
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H412 Harmful to aquatic life with long lasting effects.

**Precaution:**

**Prevention:**
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 Wash hands thoroughly after handling.
P272 Contaminated work clothing should not be allowed out of the workplace.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

**Response:**
P302+P352 IF ON SKIN: Wash with plenty of water.
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.
P362+P364 Take off contaminated clothing and wash it before reuse.

**Disposal:**
P501 Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

## Section 3. Composition / information on ingredients

**Substance or Mixture:**
Mixture

**Declaration of hazardous chemical:**

| Hazard component CAS-No. | Content | GHS Classification |
|---|---|---|
| 2-(2-Butoxyethoxy)ethanol<br>112-34-5 | 1- 10 % | Flammable liquids 4<br>H227<br>Acute toxicity 5; Dermal<br>H313<br>Serious eye damage/eye irritation 2A<br>H319 |
| Alcohols, C11-15-secondary, ethoxylated, 9EO<br>68131-40-8 | 1- 10 % | Acute toxicity 4; Oral<br>H302<br>Acute toxicity 4; Inhalation<br>H332<br>Skin corrosion/irritation 2<br>H315<br>Serious eye damage/eye irritation 1<br>H318<br>Acute hazards to the aquatic environment 2<br>H401<br>Chronic hazards to the aquatic environment 3<br>H412 |
| Cyclohexane, 1,1'-methylenebis[4-isocyanato-, homopolymer, 1-(diethylamino)-2-propanol- and polyethylene glycol mono-Me ether-blocke<br>260057-94-1 | 1- 10 % | Skin corrosion/irritation 2<br>H315<br>Skin sensitizer 1<br>H317 |
| Silicon dioxide<br>7631-86-9 | 1- 10 % | |
| Mixture of a-3-(3-(2H-Benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-w-hydroxypoly(oxyethylene) (CAS Reg. No. 104810-48-2 | 0.1- 1 % | Skin sensitizer 1<br>H317<br>Acute hazards to the aquatic environment 2<br>H401<br>Chronic hazards to the aquatic environment 2<br>H411 |
| Reaction mass of pentamethyl-4-piperidylsebacates<br>1065336-91-5 | 0.1- 1 % | Acute toxicity 5; Oral<br>H303<br>Acute toxicity 5; Dermal<br>H313<br>Skin sensitizer 1A<br>H317<br>Acute hazards to the aquatic environment 1<br>H400<br>Chronic hazards to the aquatic environment 1<br>H410 |
| P-tert-Butylphenyl 1-(2,3-epoxy)propyl ether<br>3101-60-8 | 0.1- 1 % | Skin sensitizer 1<br>H317<br>Acute hazards to the aquatic environment 2<br>H401<br>Chronic hazards to the aquatic environment 2<br>H411 |
| 2-(2-Methoxyethoxy)ethanol<br>111-77-3 | 0.1- 1 % | Flammable liquids 4<br>H227<br>Toxic to reproduction 2<br>H361 |

## Section 4. First aid measures

**Inhalation:**
Move to fresh air, consult doctor if complaint persists.

**Skin contact:**
Rinse with running water and soap. Apply replenishing cream. Change all contaminated clothing. If necessary, see a dermatologist.

**Eye contact:**
Rinse immediately with plenty of running water (for 10 minutes). Seek medical attention if necessary.

**Ingestion:**
Rinse out mouth, drink 1-2 glasses of water, do not induce vomiting.
In case of adverse health effects seek medical advice.

## Section 5. Fire fighting measures

**Suitable extinguishing media:**
Foam, extinguishing powder, carbon dioxide.
Water spray jet

**Specific hazards arising from the chemical:**
Formation of toxic gases is possible during heating or in fires.

**Special protection equipment and precautions for firefighters:**
Wear protective equipment.
Wear self-contained breathing apparatus.

**Additional fire fighting advice:**
In case of fire, keep containers cool with water spray.

## Section 6. Accidental release measures

**Personal precautions:**
Avoid skin and eye contact.
Ensure adequate ventilation.
Danger of slipping on spilled product.

**Environmental precautions:**
Do not empty into drains / surface water / ground water.
Do not allow to enter the ground / soil.

**Clean-up methods:**
Remove with liquid-absorbing material (sand, peat, sawdust).
Wash away residue with plenty of water.
Dispose of contaminated material as waste according to Section 13.

## Section 7. Handling and storage

**Handling:**
Avoid skin and eye contact.
Gloves and safety glasses should be worn
Use only in well-ventilated areas.

**Storage:**
Ensure good ventilation/extraction.
Temperatures between + 5 °C and + 30 °C

## Section 8. Exposure controls / personal protection

**Components with specific control parameters for workplace:**

| | | |
|---|---|---|
| Silicon dioxide<br>7631-86-9 | **Value type** | Time Weighted Average (TWA): |
| | **mg/m³** | 6 |

**Respiratory protection:**
In case of aerosol formation, we recommend wearing of appropriate respiratory protection equipment with ABEK P2 filter (EN 14387).
This recommendation should be matched to local conditions.

**Hand protection:**
Chemical-resistant protective gloves (EN 374). Suitable materials for short-term contact or splashes (recommended: at least protection index 2, corresponding to > 30 minutes permeation time as per EN 374): Polychloroprene (CR; >= 1 mm thickness) or natural rubber (NR; >=1 mm thickness) Suitable materials for longer, direct contact (recommended: protection index 6, corresponding to > 480 minutes permeation time as per EN 374): Polychloroprene (CR; >= 1 mm thickness) or natural rubber (NR; >=1 mm thickness) This information is based on literature references and on information provided by glove manufacturers, or is derived by analogy with similar substances. Please note that in practice the working life of chemical-resistant protective gloves may be considerably shorter than the permeation time determined in accordance with EN 374 as a result of the many influencing factors (e.g. temperature). If signs of wear and tear are noticed then the gloves should be replaced.

**Eye protection:**
Goggles which can be tightly sealed.

**Body protection:**
Wear protective equipment.

**Engineering controls:**
Ensure good ventilation/extraction.

**General protection and hygiene measures:**
Eyewash fountains and emergency showers are required.

**Hygienic measures:**
Wash hands before work breaks and after finishing work.
Do not eat, drink or smoke while working.
Take off contaminated clothing and wash before reuse.

## Section 9. Physical and chemical properties

| | |
|---|---|
| **Appearance:** | black<br>dispersion, liquid |
| **Odor:** | specific |
| **Odor threshold (CA):** | No data available. |
| **pH:** | 8.0 - 9.5 |
| **Melting point / freezing point:** | No data available. |
| **Specific gravity:** | No data available. |
| **Boiling point:** | No data available. |
| **Flash point:** | > 100 °C (> 212 °F) |
| **Evaporation rate:** | No data available. |
| **Flammability (solid, gas):** | No data available. |
| **Lower explosive limit:** | No data available. |
| **Upper explosive limit:** | No data available. |

| | |
|---|---|
| **Vapor pressure:** | No data available. |
| **Vapor density:** | No data available. |
| **Density:** | 1.03 g/cm3 |
| **Solubility:** | No data available. |
| **Partition coefficient: n-octanol/water:** | No data available. |
| **Auto ignition:** | No data available. |
| **Decomposition temperature:** | No data available. |
| **Viscosity:** | No data available. |
| **VOC content:** | No data available. |

## Section 10. Stability and reactivity

**Reactivity/Incompatible materials:**
Reaction with strong oxidants.
**Chemical stability:**
Stable under recommended storage conditions.
**Conditions to avoid:**
No decomposition if used according to specifications.
**Hazardous decomposition products:**
None if used for intended purpose.
At higher temperatures toxic gases may be generated.
In case of fire toxic gases can be released.

## Section 11. Toxicological information

| | |
|---|---|
| **Oral toxicity:** | Acute toxicity estimate (ATE) : > 2,000 mg/kg<br>Method: Calculation method |
| **Inhalative toxicity:** | Acute toxicity estimate (ATE) : > 5 mg/l<br>Exposure time: 4 h<br>Test atmosphere: dust/mist<br>Method: Calculation method |
| **Dermal toxicity:** | Acute toxicity estimate (ATE) : > 2,000 mg/kg<br>Method: Calculation method |

Symptoms of Overexposure**:** None known.

**Acute oral toxicity:**

| | | |
|---|---|---|
| 2-(2-Butoxyethoxy)ethanol<br>112-34-5 | Value type | LD50 |
| | Value | > 2,000 mg/kg |
| | Species | rat |
| | Method | EU Method B.1 (Acute Toxicity (Oral)) |
| Alcohols, C11-15-secondary, ethoxylated, 9EO<br>68131-40-8 | Value type | LD50 |
| | Value | > 412 mg/kg |
| | Species | rat |
| | Method | not specified |
| Cyclohexane, 1,1'-methylenebis[4-isocyanato-, homopolymer, 1-(diethylamino)-2-propanol- and polyethylene glycol mono-Me ether-blocke<br>260057-94-1 | Value type | LD50 |
| | Value | > 2,000 mg/kg |
| | Species | rat |
| | Method | not specified |
| Silicon dioxide<br>7631-86-9 | Value type | LD50 |
| | Value | > 5,000 mg/kg |
| | Species | rat |
| | Method | OECD Guideline 401 (Acute Oral Toxicity) |
| Mixture of a-3-(3-(2H-Benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-w-hydroxypoly(oxyethylene) (CAS Reg. No. 104810-48-2 | Value type | LD50 |
| | Value | > 5,000 mg/kg |
| | Species | rat |
| | Method | OECD Guideline 401 (Acute Oral Toxicity) |
| Reaction mass of pentamethyl-4-piperidylsebacates<br>1065336-91-5 | Value type | LD50 |
| | Value | 3,230 mg/kg |
| | Species | rat |
| | Method | OECD Guideline 423 (Acute Oral toxicity) |
| P-tert-Butylphenyl 1-(2,3-epoxy)propyl ether<br>3101-60-8 | Value type | LD50 |
| | Value | > 2,000 mg/kg |
| | Species | rat |
| | Method | OECD Guideline 425 (Acute Oral Toxicity: Up-and-Down Procedure) |

**Acute inhalative toxicity:**

| | | |
|---|---|---|
| Alcohols, C11-15-secondary, ethoxylated, 9EO<br>68131-40-8 | Value type | LC50 |
| | Value | 1.06 mg/l |
| | Exposure time | 4 h |
| | Species | rat |
| | Method | not specified |
| Silicon dioxide<br>7631-86-9 | Value type | LC50 |
| | Value | > 58.8 mg/l |
| | Exposure time | 4 h |
| | Species | rat |
| | Method | OECD Guideline 403 (Acute Inhalation Toxicity) |
| Mixture of a-3-(3-(2H-Benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-w-hydroxypoly(oxyethylene) (CAS Reg. No. 104810-48-2 | Value type | LC50 |
| | Value | > 5.8 mg/l |
| | Exposure time | 4 h |
| | Species | rat |
| | Method | OECD Guideline 403 (Acute Inhalation Toxicity) |

**Acute dermal toxicity:**

| | | |
|---|---|---|
| 2-(2-Butoxyethoxy)ethanol<br>112-34-5 | Value type | LD50 |
| | Value | 2,764 mg/kg |
| | Species | rabbit |
| | Method | OECD Guideline 402 (Acute Dermal Toxicity) |
| Alcohols, C11-15-secondary, ethoxylated, 9EO<br>68131-40-8 | Value type | LD50 |
| | Value | > 14,000 mg/kg |
| | Species | rat |
| | Method | not specified |
| Silicon dioxide<br>7631-86-9 | Value type | LD50 |
| | Value | > 5,000 mg/kg |
| | Species | rabbit |
| | Method | not specified |
| Mixture of a-3-(3-(2H-Benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-w-hydroxypoly(oxyethylene) (CAS Reg. No. 104810-48-2 | Value type | LD50 |
| | Value | > 2,000 mg/kg |
| | Species | rat |
| | Method | OECD Guideline 402 (Acute Dermal Toxicity) |
| Reaction mass of pentamethyl-4-piperidylsebacates<br>1065336-91-5 | Value type | LD50 |
| | Value | > 3,170 mg/kg |
| | Species | rat |
| | Method | OECD Guideline 402 (Acute Dermal Toxicity) |
| P-tert-Butylphenyl 1-(2,3-epoxy)propylether<br>3101-60-8 | Value type | LD50 |
| | Value | > 2,000 mg/kg |
| | Species | rat |
| | Method | OECD Guideline 402 (Acute Dermal Toxicity) |

**Skin corrosion/irritation:**

| | | |
|---|---|---|
| 2-(2-Butoxyethoxy)ethanol<br>112-34-5 | Result | not irritating |
| | Exposure time | |
| | Species | rabbit |
| | Method | Draize Test |
| Silicon dioxide<br>7631-86-9 | Result | not irritating |
| | Exposure time | |
| | Species | rabbit |
| | Method | OECD Guideline 404 (Acute Dermal Irritation / Corrosion) |
| P-tert-Butylphenyl 1-(2,3-epoxy)propyl ether<br>3101-60-8 | Result | not irritating |
| | Exposure time | 24 h |
| | Species | rat |
| | Method | other guideline: |

**Serious eye damage/irritation:**

| | | |
|---|---|---|
| 2-(2-Butoxyethoxy)ethanol<br>112-34-5 | Result | moderately irritating |
| | Exposure time | |
| | Species | rabbit |
| | Method | not specified |
| Silicon dioxide<br>7631-86-9 | Result | not irritating |
| | Exposure time | |
| | Species | rabbit |
| | Method | OECD Guideline 405 (Acute Eye Irritation / Corrosion) |
| P-tert-Butylphenyl 1-(2,3-epoxy)propyl ether<br>3101-60-8 | Result | not irritating |
| | Exposure time | 72 h |
| | Species | rabbit |
| | Method | OECD Guideline 405 (Acute Eye Irritation / Corrosion) |

**Respiratory or skin sensitization:**

| | | |
|---|---|---|
| 2-(2-Butoxyethoxy)ethanol<br>112-34-5 | Result | not sensitising |
| | Test type | Guinea pig maximisation test |
| | Species | guinea pig |
| | Method | Magnusson and Kligman Method |
| Reaction mass of pentamethyl-4-piperidylsebacates<br>1065336-91-5 | Result | sensitising |
| | Test type | Guinea pig maximisation test |
| | Species | guinea pig |
| | Method | OECD Guideline 406 (Skin Sensitisation) |
| P-tert-Butylphenyl 1-(2,3-epoxy)propylether<br>3101-60-8 | Result | sensitising |
| | Test type | Mouse local lymphnode assay (LLNA) |
| | Species | mouse |
| | Method | OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay) |

**Germ cell mutagenicity:**

| | | |
|---|---|---|
| 2-(2-Butoxyethoxy)ethanol<br>112-34-5 | Result | negative |
| | Type of study / Route of administration | bacterial reverse mutation assay (e.g Ames test) |
| | Metabolic activation / Exposure time | with and without |
| | Method | OECD Guideline 471 (Bacterial Reverse Mutation Assay) |
| Silicon dioxide<br>7631-86-9 | Result | negative |
| | Type of study / Route of administration | bacterial reverse mutation assay (e.g Ames test) |
| | Metabolic activation / Exposure time | with and without |
| | Method | OECD Guideline 471 (Bacterial Reverse Mutation Assay) |
| Silicon dioxide<br>7631-86-9 | Result | negative |
| | Type of study / Route of administration | mammalian cell gene mutation assay |
| | Metabolic activation / Exposure time | with and without |
| | Method | OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test) |
| Silicon dioxide<br>7631-86-9 | Result | negative |
| | Type of study / Route of administration | in vitro mammalian chromosome aberration test |
| | Metabolic activation / Exposure time | with and without |
| | Method | OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test) |
| 2-(2-Methoxyethoxy)ethanol<br>111-77-3 | Result | negative |
| | Type of study / Route of administration | bacterial reverse mutation assay (e.g Ames test) |
| | Metabolic activation / Exposure time | with and without |
| | Method | OECD Guideline 471 (Bacterial Reverse Mutation Assay) |

**Repeated dose toxicity:**

| | | |
|---|---|---|
| 2-(2-Butoxyethoxy)ethanol 112-34-5 | Result | NOAEL=< 50 mg/kg |
| | Route of application | oral: gavage |
| | Exposure time / Frequency of treatment | 90 days5 days/week |
| | Species | rat |
| | Method | not specified |
| 2-(2-Butoxyethoxy)ethanol 112-34-5 | Result | NOAEL=2 - 6 ppm |
| | Route of application | inhalation |
| | Exposure time / Frequency of treatment | 90 days |
| | Species | rat |
| | Method | not specified |
| 2-(2-Butoxyethoxy)ethanol 112-34-5 | Result | NOAEL=> 2,000 mg/kg |
| | Route of application | dermal |
| | Exposure time / Frequency of treatment | 13 weeks6 hours/day, 5 days/week |
| | Species | rat |
| | Method | not specified |
| Silicon dioxide 7631-86-9 | Result | NOAEL=< 0.046 mg/l |
| | Route of application | inhalation |
| | Exposure time / Frequency of treatment | 14 days6 hours/day, 5 days/week |
| | Species | rat |
| | Method | not specified |
| Silicon dioxide 7631-86-9 | Result | NOAEL=> 4,500 mg/kg |
| | Route of application | oral: feed |
| | Exposure time / Frequency of treatment | 13 weeksdaily, continous |
| | Species | rat |
| | Method | |

## Section 12. Ecological information

**General ecological information:** Do not empty into drains, soil or bodies of water.

**Ecotoxicity:** Harmful to aquatic life with long lasting effects.

**Toxicity:**

| | | |
|---|---|---|
| 2-(2-Butoxyethoxy)ethanol 112-34-5 | Value type | LC50 |
| | Value | 1,300 mg/l |
| | Acute Toxicity Study | Fish |
| | Exposure time | 96 h |
| | Species | Lepomis macrochirus |
| | Method | OECD Guideline 203 (Fish, Acute Toxicity Test) |
| 2-(2-Butoxyethoxy)ethanol 112-34-5 | Value type | EC50 |
| | Value | 3,300 mg/l |
| | Acute Toxicity Study | Daphnia |
| | Exposure time | 24 h |
| | Species | Daphnia magna |
| | Method | OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test) |
| 2-(2-Butoxyethoxy)ethanol 112-34-5 | Value type | NOEC |
| | Value | > 100 mg/l |
| | Acute Toxicity Study | Algae |
| | Exposure time | 96 h |
| | Species | Scenedesmus subspicatus (new name: Desmodesmus subspicatus) |
| | Method | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| | Value type | EC50 |
| | Value | > 100 mg/l |
| | Acute Toxicity Study | Algae |
| | Exposure time | 96 h |
| | Species | Scenedesmus subspicatus (new name: Desmodesmus subspicatus) |
| | Method | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| 2-(2-Butoxyethoxy)ethanol 112-34-5 | Value type | EC10 |
| | Value | > 1,995 mg/l |
| | Acute Toxicity Study | Bacteria |
| | Exposure time | 30 min |
| | Species | activated sludge, industrial |

| | | |
|---|---|---|
| | Method | OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test) |
| Alcohols, C11-15-secondary, ethoxylated, 9EO 68131-40-8 | Value type | LC50 |
| | Value | 3.2 - 3.6 mg/l |
| | Acute Toxicity Study | Fish |
| | Exposure time | 96 h |
| | Species | Pimephales promelas |
| | Method | OECD Guideline 203 (Fish, Acute Toxicity Test) |
| Alcohols, C11-15-secondary, ethoxylated, 9EO 68131-40-8 | Value type | EC50 |
| | Value | 7.3 mg/l |
| | Acute Toxicity Study | Daphnia |
| | Exposure time | 48 h |
| | Species | Daphnia magna |
| | Method | not specified |
| Alcohols, C11-15-secondary, ethoxylated, 9EO 68131-40-8 | Value type | EC50 |
| | Value | > 1,000 mg/l |
| | Acute Toxicity Study | Bacteria |
| | Exposure time | 16 h |
| | Species | not specified |
| | Method | not specified |
| Silicon dioxide 7631-86-9 | Value type | LC50 |
| | Value | > 10,000 mg/l |
| | Acute Toxicity Study | Fish |
| | Exposure time | 96 h |
| | Species | Brachydanio rerio (new name: Danio rerio) |
| | Method | OECD Guideline 203 (Fish, Acute Toxicity Test) |
| Silicon dioxide 7631-86-9 | Value type | EL50 |
| | Value | > 1,000 mg/l |
| | Acute Toxicity Study | Daphnia |
| | Exposure time | 24 h |
| | Species | Daphnia magna |
| | Method | OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test) |
| Silicon dioxide 7631-86-9 | Value type | NOELR |
| | Value | 10,000 mg/l |
| | Acute Toxicity Study | Algae |
| | Exposure time | 72 h |
| | Species | Desmodesmus subspicatus |
| | Method | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| | Value type | EL50 |
| | Value | > 10,000 mg/l |
| | Acute Toxicity Study | Algae |
| | Exposure time | 72 h |
| | Species | Desmodesmus subspicatus |
| | Method | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| Silicon dioxide 7631-86-9 | Value type | EC0 |
| | Value | 10,000 mg/l |
| | Acute Toxicity Study | Bacteria |
| | Exposure time | 30 min |
| | Species | Pseudomonas putida |
| | Method | DIN 38412, part 27 (Bacterial oxygen consumption test) |
| Mixture of a-3-(3-(2H-Benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-w-hydroxypoly(oxyethylene) (CAS Reg. No. 104810-48-2 | Value type | LC50 |
| | Value | 2.8 mg/l |
| | Acute Toxicity Study | Fish |
| | Exposure time | 96 h |
| | Species | Oncorhynchus mykiss |
| | Method | OECD Guideline 203 (Fish, Acute Toxicity Test) |
| Mixture of a-3-(3-(2H-Benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-w-hydroxypoly(oxyethylene) (CAS Reg. No. 104810-48-2 | Value type | EC50 |
| | Value | 4 mg/l |
| | Acute Toxicity Study | Daphnia |
| | Exposure time | 48 h |
| | Species | Daphnia magna |
| | Method | OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test) |
| Reaction mass of pentamethyl-4-piperidylsebacates 1065336-91-5 | Value type | LC50 |
| | Value | 0.9 mg/l |
| | Acute Toxicity Study | Fish |
| | Exposure time | 96 h |
| | Species | Danio rerio |
| | Method | OECD Guideline 203 (Fish, Acute Toxicity Test) |

| | | |
|---|---|---|
| Reaction mass of pentamethyl-4-piperidylsebacates 1065336-91-5 | Value type | NOEC |
| | Value | 0.22 mg/l |
| | Acute Toxicity Study | Algae |
| | Exposure time | 72 h |
| | Species | Desmodesmus subspicatus |
| | Method | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| | Value type | EC50 |
| | Value | 1.68 mg/l |
| | Acute Toxicity Study | Algae |
| | Exposure time | 72 h |
| | Species | Desmodesmus subspicatus |
| | Method | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| P-tert-Butylphenyl 1-(2,3-epoxy)propylether 3101-60-8 | Value type | LC50 |
| | Value | 7.5 mg/l |
| | Acute Toxicity Study | Fish |
| | Exposure time | 96 h |
| | Species | Oncorhynchus mykiss |
| | Method | OECD Guideline 203 (Fish, Acute Toxicity Test) |
| P-tert-Butylphenyl 1-(2,3-epoxy)propylether 3101-60-8 | Value type | EC50 |
| | Value | 67.9 mg/l |
| | Acute Toxicity Study | Daphnia |
| | Exposure time | 48 h |
| | Species | Daphnia magna |
| | Method | OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test) |
| P-tert-Butylphenyl 1-(2,3-epoxy)propylether 3101-60-8 | Value type | EC50 |
| | Value | 9 mg/l |
| | Acute Toxicity Study | Algae |
| | Exposure time | 72 h |
| | Species | Pseudokirchneriella subcapitata |
| | Method | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| P-tert-Butylphenyl 1-(2,3-epoxy)propylether 3101-60-8 | Value type | EC50 |
| | Value | > 1,000 mg/l |
| | Acute Toxicity Study | Bacteria |
| | Exposure time | 3 h |
| | Species | activated sludge of a predominantly domestic sewage |
| | Method | OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test) |
| 2-(2-Methoxyethoxy)ethanol 111-77-3 | Value type | LC50 |
| | Value | 1,000 mg/l |
| | Acute Toxicity Study | Fish |
| | Exposure time | 96 h |
| | Species | Salmo gairdneri (new name: Oncorhynchus mykiss) |
| | Method | OECD Guideline 203 (Fish, Acute Toxicity Test) |
| 2-(2-Methoxyethoxy)ethanol 111-77-3 | Value type | EC50 |
| | Value | > 500 mg/l |
| | Acute Toxicity Study | Daphnia |
| | Exposure time | 48 h |
| | Species | Daphnia magna |
| | Method | EU Method C.2 (Acute Toxicity for Daphnia) |
| 2-(2-Methoxyethoxy)ethanol 111-77-3 | Value type | EC50 |
| | Value | > 500 mg/l |
| | Acute Toxicity Study | Algae |
| | Exposure time | 72 h |
| | Species | Scenedesmus subspicatus (new name: Desmodesmus subspicatus) |
| | Method | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| 2-(2-Methoxyethoxy)ethanol 111-77-3 | Value type | EC10 |
| | Value | > 10,000 mg/l |
| | Acute Toxicity Study | Bacteria |
| | Exposure time | 17 h |
| | Species | |
| | Method | not specified |

**Persistence and degradability:**

| | | |
|---|---|---|
| 2-(2-Butoxyethoxy)ethanol 112-34-5 | Result | inherently biodegradable |
| | Route of application | aerobic |
| | Degradability | 100 % |

| | | |
|---|---|---|
| | Method | OECD Guideline 302 B (Inherent biodegradability: Zahn-Wellens/EMPA Test) |
| | Result | readily biodegradable |
| | Route of application | aerobic |
| | Degradability | > 60 % |
| | Method | OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I)) |
| Alcohols, C11-15-secondary, ethoxylated, 9EO 68131-40-8 | Result | readily biodegradable |
| | Route of application | aerobic |
| | Degradability | > 60 % |
| | Method | OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test) |
| Mixture of a-3-(3-(2H-Benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-w-hydroxypoly(oxyethylene) (CAS Reg. No. 104810-48-2 | Result | |
| | Route of application | aerobic |
| | Degradability | 24 % |
| | Method | OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test) |
| Reaction mass of pentamethyl-4-piperidylsebacates 1065336-91-5 | Result | |
| | Route of application | aerobic |
| | Degradability | 38 % |
| | Method | OECD Guideline 301 E (Ready biodegradability: Modified OECD Screening Test) |
| P-tert-Butylphenyl 1-(2,3-epoxy)propylether 3101-60-8 | Result | not readily biodegradable. |
| | Route of application | aerobic |
| | Degradability | 1.1 % |
| | Method | OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test) |
| 2-(2-Methoxyethoxy)ethanol 111-77-3 | Result | |
| | Route of application | aerobic |
| | Degradability | 100 % |
| | Method | OECD Guideline 302 B (Inherent biodegradability: Zahn-Wellens/EMPA Test) |

**Bioaccumulative potential / Mobility in soil:**

| | | |
|---|---|---|
| 2-(2-Butoxyethoxy)ethanol 112-34-5 | LogPow | 1 |
| | Temperature | 20 °C |
| | Method | OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC Method) |
| Alcohols, C11-15-secondary, ethoxylated, 9EO 68131-40-8 | Bioconcentration factor (BCF) | 29 |
| | Exposure time | |
| | Species | calculation |
| | Temperature | |
| | Method | OECD Guideline 305 (Bioconcentration: Flow-through Fish Test) |
| Alcohols, C11-15-secondary, ethoxylated, 9EO 68131-40-8 | LogPow | 2.72 |
| | Temperature | |
| | Method | OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method) |
| Silicon dioxide 7631-86-9 | LogPow | 0.53 |
| | Temperature | 25 °C |
| | Method | QSAR (Quantitative Structure Activity Relationship) |
| Reaction mass of pentamethyl-4-piperidylsebacates 1065336-91-5 | LogPow | 2.37 - 2.77 |
| | Temperature | 25 °C |
| | Method | OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method) |
| P-tert-Butylphenyl 1-(2,3-epoxy)propylether 3101-60-8 | LogPow | 3.59 |
| | Temperature | 20 °C |
| | Method | OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method) |
| 2-(2-Methoxyethoxy)ethanol 111-77-3 | LogPow | -0.682 |
| | Temperature | |
| | Method | not specified |

## Section 13. Disposal considerations

**Product**

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

**Packaging**

**Disposal of uncleaned packages:**
Packaging that cannot be cleaned are to be disposed of in the same manner as the product.

## Section 14. Transport information

**Road transport ADR:**
Not dangerous goods

**Railroad transport RID:**
Not dangerous goods

**Inland water transport ADN:**
Not dangerous goods

**Marine transport IMDG:**
Not dangerous goods

**Air transport IATA:**
Not dangerous goods

## Section 15. Regulatory information

**Regulatory Information:**
Ministry of Industry Notice. The system to classify and communicate the hazard of hazardous material, BE. 2555

**Global inventory status:**

| Regulatory list | Notification |
|---|---|
| TSCA | yes |
| IECSC | yes |

## Section 16. Other information

**Disclaimer:**
This Safety Data Sheet has been generated based on Ministry of Industry Notice. The system to classify and communicate the hazard of hazardous material, BE. 2555 only. 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.This information is based on our current level of knowledge and relates to the product in the state in which it is delivered. It is intended to describe our products from the point of view of safety requirements and is not intended to guarantee any particular properties.