

ARALDITE® CW 5625 US

Version 1.0 Revision Date: 12/26/2017 SDS Number: 400001012787 Date of last issue: -
Date of first issue: 12/26/2017

SECTION 1. IDENTIFICATION

Product name : ARALDITE® CW 5625 US

Manufacturer or supplier's details

Company name of supplier : Huntsman Advanced Materials Americas LLC
Address : P.O. Box 4980
The Woodlands,
TX 77387
United States of America (USA)
Telephone : Non-Emergency: (800) 257-5547
E-mail address of person responsible for the SDS : MSDS@huntsman.com
Emergency telephone number : Chemtrec: (800) 424-9300 or (703) 527-3887

Recommended use of the chemical and restrictions on use

Recommended use : Epoxy constituents
Epoxy constituents

SECTION 2. HAZARDS IDENTIFICATION**GHS classification in accordance with 29 CFR 1910.1200**

Skin sensitisation : Category 1
Reproductive toxicity : Category 2
Acute aquatic toxicity : Category 3
Chronic aquatic toxicity : Category 3

GHS label elements

Hazard pictograms : 

Signal word : Warning

Hazard statements : H317 May cause an allergic skin reaction.
H361f Suspected of damaging fertility.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements : **Prevention:**
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P272 Contaminated work clothing should not be allowed out of

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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 soap and water.
 P308 + P313 IF exposed or concerned: Get medical advice/ attention.
 P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
 P363 Wash contaminated clothing before reuse.
Storage:
 P405 Store locked up.
Disposal:
 P501 Dispose of contents/container to an approved facility in accordance with local, regional, national and international regulations.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

| Chemical name | CAS-No. | Concentration (% w/w) |
|--|------------|-----------------------|
| bis(2,3-epoxypropyl) cyclohexane-1,2-dicarboxylate | 5493-45-8 | 30 - 50 |
| octamethylcyclotetrasiloxane | 556-67-2 | 1 - 2.5 |
| titanium dioxide | 13463-67-7 | 1 - 5 |

The specific chemical identity and/or exact percentage (concentration) of composition may be withheld as a trade secret.

SECTION 4. FIRST AID MEASURES

General advice : Move out of dangerous area.
 Show this safety data sheet to the doctor in attendance.
 Treat symptomatically.
 Get medical attention if symptoms occur.

If inhaled : If inhaled, remove to fresh air.
 Get medical attention if symptoms occur.

In case of skin contact : If on skin, rinse well with water.

In case of eye contact : Flush eyes with water as a precaution.
 Remove contact lenses.
 Protect unharmed eye.
 Keep eye wide open while rinsing.
 If eye irritation persists, consult a specialist.

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- If swallowed : Keep respiratory tract clear.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.
Take victim immediately to hospital.
- Most important symptoms and effects, both acute and delayed : None known.
- Notes to physician : Treat symptomatically.

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Unsuitable extinguishing media : High volume water jet
- Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.
- Hazardous combustion products : Carbon oxides
Silicon oxides
Metal oxides
- Specific extinguishing methods : No data is available on the product itself.
- Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
- Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.
- Environmental precautions : Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform respective authorities.
- Methods and materials for containment and cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
Keep in suitable, closed containers for disposal.

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SECTION 7. HANDLING AND STORAGE

- Advice on protection against fire and explosion : Normal measures for preventive fire protection.
- Advice on safe handling : Do not breathe vapours/dust.
 Avoid exposure - obtain special instructions before use.
 Avoid contact with skin and eyes.
 For personal protection see section 8.
 Smoking, eating and drinking should be prohibited in the application area.
 Dispose of rinse water in accordance with local and national regulations.
 Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.
- Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated place.
 Containers which are opened must be carefully resealed and kept upright to prevent leakage.
 Observe label precautions.
 Keep in properly labelled containers.
- Recommended storage temperature : 2 - 40 °C
- Further information on storage stability : Stable under normal conditions.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Components with workplace control parameters**

| Components | CAS-No. | Value type (Form of exposure) | Control parameters / Permissible concentration | Basis |
|------------------|------------|-------------------------------|--|----------|
| titanium dioxide | 13463-67-7 | TWA (total dust) | 15 mg/m3 | OSHA Z-1 |
| | | TWA | 10 mg/m3 (Titanium dioxide) | ACGIH |

Personal protective equipment

- Respiratory protection : No personal respiratory protective equipment normally required.
- Hand protection
- Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves.
- Eye protection : Eye wash bottle with pure water
 Tightly fitting safety goggles
- Skin and body protection : Impervious clothing
 Choose body protection according to the amount and

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concentration of the dangerous substance at the work place.

Hygiene measures : Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|--|---|
| Appearance | : paste |
| Colour | : grey |
| Odour | : mild |
| Odour Threshold | : No data is available on the product itself. |
| pH | : No data is available on the product itself. |
| Freezing point | : No data is available on the product itself. |
| Melting point | No data is available on the product itself. |
| Boiling point | No data is available on the product itself. |
| Flash point | : > 169 °C Method: estimated, closed cup |
| Evaporation rate | : No data is available on the product itself. |
| Flammability (solid, gas) | : No data is available on the product itself. |
| Flammability (liquids) | : No data is available on the product itself. |
| Upper explosion limit / Upper flammability limit | : No data is available on the product itself. |
| Lower explosion limit / Lower flammability limit | : No data is available on the product itself. |
| Vapour pressure | : No data is available on the product itself. |
| Relative vapour density | : No data is available on the product itself. |
| Relative density | : 1.71 - 1.77 |
| Density | : No data is available on the product itself. |
| Solubility(ies) | |
| Water solubility | : No data is available on the product itself. |
| Solubility in other solvents | : No data is available on the product itself. |
| Partition coefficient: n-octanol/water | : No data is available on the product itself. |
| Auto-ignition temperature | : No data is available on the product itself. |

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Thermal decomposition : No data is available on the product itself.

Self-Accelerating decomposition temperature (SADT) : No data is available on the product itself.

Viscosity : No data is available on the product itself.

Explosive properties : No data is available on the product itself.

Oxidizing properties : No data is available on the product itself.

Particle size : No data is available on the product itself.

SECTION 10. STABILITY AND REACTIVITY

Reactivity : No dangerous reaction known under conditions of normal use.

Chemical stability : Stable under normal conditions.

Possibility of hazardous reactions : No hazards to be specially mentioned.

Conditions to avoid : None known.

Incompatible materials : None known.

Hazardous decomposition products : Carbon oxides
Silicon oxides
Metal oxides

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : No data is available on the product itself.

Acute toxicity

Acute oral toxicity - Product : Acute toxicity estimate : > 5,000 mg/kg
Method: Calculation method

Components:

octamethylcyclotetrasiloxane:

Acute inhalation toxicity : LC50 (Rat, male and female): 36 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403

titanium dioxide:

Acute inhalation toxicity : LC50 (Rat, male and female): 3.43 - 5.09 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403
Assessment: The substance or mixture has no acute inhalation toxicity

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Components:

bis(2,3-epoxypropyl) cyclohexane-1,2-dicarboxylate:

Acute dermal toxicity : LD50 (Rat, male and female): > 2,000 mg/kg
Method: OECD Test Guideline 402
Assessment: The substance or mixture has no acute dermal toxicity

octamethylcyclotetrasiloxane:

Acute dermal toxicity : LD50 (Rat, male and female): > 2,400 mg/kg
Method: OECD Test Guideline 402
Assessment: The substance or mixture has no acute dermal toxicity

titanium dioxide:

Acute dermal toxicity : LD50 Dermal (Rabbit): > 10,000 mg/kg

Acute toxicity (other routes of administration) : No data available

Skin corrosion/irritation**Components:**

bis(2,3-epoxypropyl) cyclohexane-1,2-dicarboxylate:

Species: Rabbit
Method: OECD Test Guideline 404
Result: No skin irritation

octamethylcyclotetrasiloxane:

Species: Rabbit
Assessment: No skin irritation
Method: OECD Test Guideline 404
Result: No skin irritation

titanium dioxide:

Species: Rabbit
Assessment: No skin irritation
Method: OECD Test Guideline 404
Result: Normally reversible injuries

Serious eye damage/eye irritation**Components:**

bis(2,3-epoxypropyl) cyclohexane-1,2-dicarboxylate:

Species: Rabbit
Result: No eye irritation
Method: OECD Test Guideline 405

octamethylcyclotetrasiloxane:

Species: Rabbit
Result: No eye irritation

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Assessment: No eye irritation
Method: OECD Test Guideline 405

titanium dioxide:
Species: Rabbit
Result: Normally reversible injuries
Assessment: No eye irritation
Method: OECD Test Guideline 405

Respiratory or skin sensitisation**Components:**

bis(2,3-epoxypropyl) cyclohexane-1,2-dicarboxylate:
Exposure routes: Skin
Species: Guinea pig
Method: OECD Test Guideline 406
Result: May cause sensitisation by skin contact.

octamethylcyclotetrasiloxane:
Exposure routes: Skin
Species: Guinea pig
Method: OECD Test Guideline 406
Result: Does not cause skin sensitisation.

titanium dioxide:
Test Type: Local lymph node assay (LLNA)
Exposure routes: Skin
Species: Mouse
Assessment: Does not cause skin sensitisation.
Method: OECD Test Guideline 429
Result: Does not cause skin sensitisation.

Exposure routes: Skin
Species: Guinea pig
Assessment: Does not cause skin sensitisation.
Method: OECD Test Guideline 406
Result: Does not cause skin sensitisation.

Components:

titanium dioxide:
Assessment: No skin irritation, No eye irritation
Does not cause skin sensitisation., Does not cause respiratory sensitisation.

Germ cell mutagenicity**Components:**

titanium dioxide:
Genotoxicity in vitro : Test Type: Ames test
Concentration: 100 - 200 ug/plate
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative

Test Type: In vitro mammalian cell gene mutation test

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Concentration: 31 - 500 µg/L
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 476
Result: negative

Test Type: Chromosome aberration test in vitro
Concentration: 125 - 2500 µg/L
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 473
Result: negative

Components:

bis(2,3-epoxypropyl) cyclohexane-1,2-dicarboxylate:

Genotoxicity in vivo : Application Route: Oral
Method: OECD Test Guideline 474
Result: negative

titanium dioxide:

Genotoxicity in vivo : Test Type: Micronucleus test
Species: Mouse (males)
Application Route: Inhalation
Exposure time: 5 consecutive days
Dose: 0.8, 7.2, and 28.5 mg/m³
Method: OECD Test Guideline 474
Result: negative

Test Type: Micronucleus test
Species: Rat (male and female)
Application Route: Oral
Exposure time: once
Dose: 500, 1000, and 2000 mg/kg bw
Method: OECD Test Guideline 474
Result: negative

Components:

titanium dioxide:

Germ cell mutagenicity-
Assessment : Tests on bacterial or mammalian cell cultures did not show
mutagenic effects., Animal testing did not show any mutagenic
effects.

Germ cell mutagenicity-
Assessment : No data available

Carcinogenicity**Components:**

octamethylcyclotetrasiloxane:

Species: Rat, (male and female)
Application Route: Inhalation
Exposure time: 24 month(s)
Dose: 1820 mg/m³
Frequency of Treatment: 6 hour
Method: OECD Test Guideline 453

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Result: positive
Target Organs: Uterus (including cervix)

Species: Rat, (male and female)
Application Route: Inhalation
Exposure time: 24 month(s)
Dose: 150 ppm
Frequency of Treatment: 6 hour
Method: OECD Test Guideline 453
Result: positive
Target Organs: Uterus (including cervix)

titanium dioxide:
Species: Rat, (male and female)
Application Route: Oral
Exposure time: 103 weeks
Dose: 0, 25000, 50000 ppm
Frequency of Treatment: 7 days/week
NOAEL: > 50.000 ppm

Method: No information available.

Remarks: Titanium Dioxide: based on the results of chronic inhalation studies (with positive results only in a single species - rat), IARC has concluded that: "There is inadequate evidence in humans for the carcinogenicity of titanium dioxide. " but that : "There is sufficient evidence in experimental animals for carcinogenicity of titanium dioxide". IARCs overall evaluation was that "titanium dioxide is possibly carcinogenic to humans (Group 2B)."

Huntsman has examined all of the available animal carcinogenicity and mechanistic data together with workplace epidemiology data for titanium dioxide and concludes that the weight of scientific evidence indicates that there is no causative link between titanium dioxide exposure and cancer risk in humans and that workplace exposures in compliance with applicable exposure standards will not result in lung cancer or chronic respiratory diseases in humans.

Components:

titanium dioxide:
Carcinogenicity - Assessment : Not classifiable as a human carcinogen.
IARC Group 2B: Possibly carcinogenic to humans

titanium dioxide

ACGIH No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

OSHA No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

NTP No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

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Reproductive toxicity**Components:**

octamethylcyclotetrasiloxane:
Effects on fertility

: Species: Rat, male and female
Application Route: Inhalation
Method: OECD Test Guideline 416

Components:

octamethylcyclotetrasiloxane:
Effects on foetal
development

: Species: Rabbit, female
Application Route: Inhalation
General Toxicity Maternal: No observed adverse effect level:
3,640 mg/m³
Method: OECD Test Guideline 414
Result: No teratogenic effects

Species: Rabbit, female
Application Route: Inhalation
General Toxicity Maternal: No observed adverse effect level:
300 ppm
Method: OECD Test Guideline 414
Result: No teratogenic effects

titanium dioxide:

Species: Rat, male and female
Application Route: Oral
Dose: 100, 300, and 1000 mg/kg bw/
Duration of Single Treatment: 20 d
Frequency of Treatment: 7 days/week
General Toxicity Maternal: No observed adverse effect level:
1,000 mg/kg body weight
Developmental Toxicity: No observed adverse effect level:
1,000 mg/kg body weight
Method: OECD Test Guideline 414
Result: No adverse effects

Components:

octamethylcyclotetrasiloxane:
Reproductive toxicity -
Assessment

: Some evidence of adverse effects on sexual function and
fertility, based on animal experiments.

titanium dioxide:
Reproductive toxicity -
Assessment

: No evidence of adverse effects on sexual function and fertility,
or on development, based on animal experiments.

STOT - single exposure

No data available

STOT - repeated exposure

No data available

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Repeated dose toxicity**Components:**

octamethylcyclotetrasiloxane:
Species: Rabbit, male and female
NOAEL: ≥ 1 ml/kg
Application Route: Skin contact
Exposure time: 3 Weeks
Number of exposures: 5 d
Method: Subacute toxicity

Species: Rat, male and female
NOEC: 150 ppm
Application Route: inhalation (vapour)
Test atmosphere: vapour
Exposure time: 104 Weeks
Number of exposures: 6 h
Method: OECD Test Guideline 453

titanium dioxide:
Species: Rat, male and female
NOEC: 3500 mg/m³
Application Route: Ingestion
Test atmosphere: dust/mist
Exposure time: 2 yr
Number of exposures: 5 d
Method: Chronic toxicity

Species: Rat, male and female
NOEC: 10 - 50 mg/m³
Application Route: Inhalation
Exposure time: 2 yr
Number of exposures: 6 hours/day, 5 days/week
Method: Chronic toxicity

Components:

titanium dioxide:
Repeated dose toxicity - Assessment : No skin irritation, No eye irritation
No adverse effect has been observed in chronic toxicity tests.

Aspiration toxicity

No data available

Experience with human exposure

General Information: No data available

Inhalation: No data available

Skin contact: No data available

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Eye contact: No data available

Ingestion: No data available

Toxicology, Metabolism, Distribution

No data available

Neurological effects

No data available

Further information

Ingestion: No data available

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity****Components:**

bis(2,3-epoxypropyl) cyclohexane-1,2-dicarboxylate:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 17 mg/l
Exposure time: 96 h
Test Type: static test
Test substance: Fresh water
Method: OECD Test Guideline 203

octamethylcyclotetrasiloxane:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 22 ug/l
Exposure time: 96 h
Test Type: flow-through test
Method: Fish Acute Toxicity Test

titanium dioxide:

Toxicity to fish : LC50 (Cyprinodon variegatus (sheepshead minnow)): > 10,000 mg/l
Exposure time: 96 h
Test Type: semi-static test
Test substance: Marine water
Method: OECD Test Guideline 203

Components:

bis(2,3-epoxypropyl) cyclohexane-1,2-dicarboxylate:

Toxicity to daphnia and other aquatic invertebrates : LC50 (Daphnia magna (Water flea)): 71.6 mg/l
Exposure time: 48 h
Test Type: static test
Test substance: Fresh water
Method: OECD Test Guideline 202

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octamethylcyclotetrasiloxane:
Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 15 ug/l
Exposure time: 48 h
Test Type: flow-through test

Components:

bis(2,3-epoxypropyl) cyclohexane-1,2-dicarboxylate:
Toxicity to algae : EC50 (Selenastrum capricornutum (green algae)): > 56 mg/l
Exposure time: 72 h
Test Type: static test
Test substance: Fresh water
Method: OECD Test Guideline 201

octamethylcyclotetrasiloxane:
Toxicity to algae : EC50 (Selenastrum capricornutum (green algae)): > 22 ug/l
Exposure time: 96 h
Test Type: static test
Test substance: Fresh water

M-Factor (Acute aquatic toxicity) : No data available

Toxicity to fish (Chronic toxicity) : No data available

Components:

octamethylcyclotetrasiloxane:
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 7.9 ug/l
Exposure time: 21 d
Test Type: flow-through test
Test substance: Fresh water

EC50 (Daphnia magna (Water flea)): > 15 ug/l
Exposure time: 21 d
Test Type: flow-through test
Test substance: Fresh water

M-Factor (Chronic aquatic toxicity) : No data available

Components:

bis(2,3-epoxypropyl) cyclohexane-1,2-dicarboxylate:
Toxicity to microorganisms : EC50 (Pseudomonas putida): > 10,000 mg/l
Exposure time: 18 h
Test Type: static test
Test substance: Fresh water
Method: DIN 38 412 Part 8

Toxicity to soil dwelling organisms : No data available

Components:

titanium dioxide:

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Plant toxicity : NOEC: 100,000 mg/kg
Exposure time: 480 h

Components:

octamethylcyclotetrasiloxane:

Sediment toxicity : (Chironomus riparius (Midge larvae)): 44 mg/kg sediment dw
Study: Chronic
Test Type: semi-static test
Water: Fresh water
Sediment: Synthetic
Exposure duration: 28 d
Method: Sediment-Water Chironomid Toxicity Test Using Spiked Sediment

titanium dioxide:

Sediment toxicity : (Gammarus pulex (Amphipod)): > 100000 mg/kg sediment dw
Study: Acute
Test Type: semi-static test
Water: Fresh water
Exposure duration: 28 d
Method: ASTM Method, other

(Gammarus pulex (Amphipod)): 100000 mg/kg sediment dw
Study: Chronic
Test Type: semi-static test
Water: Fresh water
Exposure duration: 28 d
Method: ASTM Method, other

(Gammarus pulex (Amphipod)): 14989 mg/kg sediment dw
Study: Acute
Test Type: semi-static test
Water: Marine water
Exposure duration: 10 d

Components:

titanium dioxide:

Toxicity to terrestrial organisms : NOEC: 10,000 mg/kg
Exposure time: 672 h

Ecotoxicology Assessment

Components:

bis(2,3-epoxypropyl) cyclohexane-1,2-dicarboxylate:

Acute aquatic toxicity : Harmful to aquatic life.

Components:

bis(2,3-epoxypropyl) cyclohexane-1,2-dicarboxylate:

Chronic aquatic toxicity : Harmful to aquatic life with long lasting effects.

octamethylcyclotetrasiloxane:

Chronic aquatic toxicity : May cause long lasting harmful effects to aquatic life.

Toxicity Data on Soil : No data available

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Other organisms relevant to the environment : No data available

Persistence and degradability**Components:**

bis(2,3-epoxypropyl) cyclohexane-1,2-dicarboxylate:

Biodegradability : Inoculum: activated sludge
Result: Not readily biodegradable.
Biodegradation: 58 %
Exposure time: 28 d
Method: OECD Test Guideline 301F

octamethylcyclotetrasiloxane:

Biodegradability : Inoculum: activated sludge
Concentration: 10 mg/l
Result: Not readily biodegradable.
Biodegradation: 3.7 %
Exposure time: 29 d
Method: OECD Test Guideline 310

Biochemical Oxygen Demand (BOD) : No data available

Components:

bis(2,3-epoxypropyl) cyclohexane-1,2-dicarboxylate:

Chemical Oxygen Demand (COD) : 1.3 mgO₂/g

BOD/COD : No data available

ThOD : No data available

BOD/ThOD : No data available

Dissolved organic carbon (DOC) : No data available

Physico-chemical removability : No data available

Stability in water : No data available

Photodegradation : No data available

Impact on Sewage Treatment : No data available

Bioaccumulative potential**Components:**

titanium dioxide:

Bioaccumulation : Species: *Oncorhynchus mykiss* (rainbow trout)
Bioconcentration factor (BCF): 19 - 352

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Exposure time: 14 d
 Test substance: Fresh water
 Method: semi-static test
 Remarks: Does not bioaccumulate.

Components:

bis(2,3-epoxypropyl) cyclohexane-1,2-dicarboxylate:
 Partition coefficient: n-octanol/water : log Pow: 1.7 (25 °C)
 Method: OECD Test Guideline 117

octamethylcyclotetrasiloxane:
 Partition coefficient: n-octanol/water : log Pow: 6.49 (25 °C)
 Method: OECD Test Guideline 123

Mobility in soil

Mobility : No data available

Components:

bis(2,3-epoxypropyl) cyclohexane-1,2-dicarboxylate:
 Distribution among environmental compartments : Koc: 1.79
 Method: OECD Test Guideline 121

Stability in soil : No data available

Other adverse effects

Environmental fate and pathways : No data available

Results of PBT and vPvB assessment : No data available

Endocrine disrupting potential : No data available

Adsorbed organic bound halogens (AOX) : No data available

Hazardous to the ozone layer

Ozone-Depletion Potential : Regulation: 40 CFR Protection of Environment; Part 82
 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances
 Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

Additional ecological information - Product : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
 Harmful to aquatic life with long lasting effects.

Global warming potential (GWP) : No data available

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SECTION 13. DISPOSAL CONSIDERATIONS**Disposal methods**

- Waste from residues : The product should not be allowed to enter drains, water courses or the soil.
Do not contaminate ponds, waterways or ditches with chemical or used container.
Send to a licensed waste management company.
- Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION**International Regulations****IATA**

Not regulated as dangerous goods

IMDG

Not regulated as dangerous goods

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

National Regulations**DOT Classification**

Not regulated as dangerous goods

SECTION 15. REGULATORY INFORMATION**EPCRA - Emergency Planning and Community Right-to-Know Act****CERCLA Reportable Quantity**

| Components | CAS-No. | Component RQ (lbs) | Calculated product RQ (lbs) |
|---------------------|----------|--------------------|-----------------------------|
| benzene | 71-43-2 | 10 | * |
| toluene | 108-88-3 | 1000 | * |
| methyl methacrylate | 80-62-6 | 1000 | * |

*: Calculated RQ exceeds reasonably attainable upper limit.

SARA 311/312 Hazards

- : Respiratory or skin sensitisation
Reproductive toxicity

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SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

California Prop. 65

WARNING: This product can expose you to chemicals including titanium dioxide, carbon black, benzene, which is/are known to the State of California to cause cancer, and 1-methyl-2-pyrrolidone, toluene, benzene, which is/are known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

The components of this product are reported in the following inventories:

| | |
|--------|--|
| CH INV | : On the inventory, or in compliance with the inventory |
| DSL | : All components of this product are on the Canadian DSL |
| AICS | : On the inventory, or in compliance with the inventory |
| NZIoC | : Not in compliance with the inventory |
| ENCS | : Not in compliance with the inventory |
| KECI | : On the inventory, or in compliance with the inventory |
| PICCS | : Not in compliance with the inventory |
| IECSC | : On the inventory, or in compliance with the inventory |
| TCSI | : Not in compliance with the inventory |
| TSCA | : On the inventory, or in compliance with the inventory |

Inventories

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TCSI (Taiwan), TSCA (USA)

TSCA - 5(a) Significant New Use Rule List of Chemicals

No substances are subject to a Significant New Use Rule.

US. Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707, Subpt D)

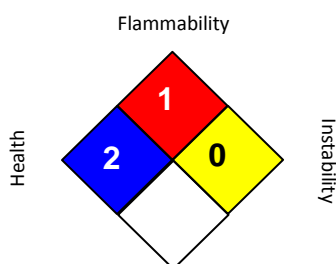
US. Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707, Subpt D)

octamethylcyclotetrasiloxane

556-67-2

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SECTION 16. OTHER INFORMATION**Further information****NFPA:****HMIS® IV:**

| | | |
|------------------------|---|----------|
| HEALTH | * | 2 |
| FLAMMABILITY | | 1 |
| PHYSICAL HAZARD | | 0 |

HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

Revision Date : 12/26/2017

ACGIH : USA. ACGIH Threshold Limit Values (TLV)
 OSHA Z-1 : USA. Occupational Exposure Limits (OSHA) - Table Z-1
 Limits for Air Contaminants
 ACGIH / TWA : 8-hour, time-weighted average
 OSHA Z-1 / TWA : 8-hour time weighted average

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THE PRODUCT MAY PRESENT HAZARDS AND SHOULD BE USED WITH CAUTION. WHILE CERTAIN HAZARDS ARE DESCRIBED IN THIS PUBLICATION, NO GUARANTEE IS MADE THAT THESE ARE THE ONLY HAZARDS THAT EXIST.

Hazards, toxicity and behaviour of the products may differ when used with other materials and are dependent upon the manufacturing circumstances or other processes. Such hazards, toxicity and behaviour should be determined by the user and made known to handlers, processors and end users.

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