

SAFETY DATA SHEET

SDS: A5599-0100_E002

Date Prepared: 2020/01/23

Date Revised: 2023/01/10

Product Name: **BTG-GE****1. Identification of the substance/mixture and of the company/undertaking**

Product name: BTG-GE
Identification of the supplier: Nippon Nyukazai Co., Ltd.
Address: No.4-1.Nihonbashi Kobuna-cho, Chuo-ku, Tokyo 103-0024, Japan
Charge section: Business Operation Department
(TEL:+81-3-5651-5640,FAX:+81-3-5651-5646)
Emergency telephone number: Business Operation Department
(TEL:+81-3-5651-5640,FAX:+81-3-5651-5646)
Recommend use: Intermediate raw materials
Restrictions on use: Seek expert judgment when using for purposes other than those recommended.

2. Hazards identification

Hazard category
Carcinogenicity Category 1B

Label elements

Hazard pictograms:



Signal word: Danger
Hazard statements: H350 May cause cancer.
Precautionary statements:

Prevention P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
Response P308+P313 IF exposed or concerned: Get medical advice/attention.
Storage P405 Store locked up.
Disposal P501 Dispose of contents/container in accordance with local/regional/national/international regulation.

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Product Name: **BTG-GE****3. Composition/information on ingredients****3.1. Substances**

Ingredients and Concentration

| Ingredient Name | Concentration wt. % | CAS RN® | Existing and New Chemical Substances (JAPAN) | Industrial Safety and Health Law Substances (JAPAN) | Industrial Safety and Health Law (JAPAN) | Pollutant Release Transfer Register Law (JAPAN) | Poisonous and Deleterious Substances Control Act (JAPAN) |
|------------------------------------------|------------------------|-------------|----------------------------------------------------------|-----------------------------------------------------------------|---------------------------------------------------|----------------------------------------------------------------|-------------------------------------------------------------------------|
| | | | Gazette notice reference number | Gazette notice reference number | Notifiable Substances | Specified Substances | Poisonous and Deleterious Substances |
| Polyethylene glycol butyl glycidyl ether | 99-100 | 126021-43-0 | 7-1281 | Public | Not applicable | Not applicable | Not applicable |
| (1,4-Dioxane) | (0.1-0.2) | 123-91-1 | 5-839 | Public | Applicable | Below regulated conc. | Not applicable |
| (Epichlorohydrin) | (0.2) | 106-89-8 | 2-275 | Public | Applicable | Below regulated conc. | Below regulated conc. |

3.2. Mixtures

Not Applicable

4. First aid measures

| | |
|----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Inhalation: | Remove victim to fresh air and keep at rest in a position comfortable for breathing. If breathing is stopped, lie on your back and perform cardiopulmonary respiration. Get medical advice/attention. |
| Skin contact: | Take off contaminated clothing and wash before reuse. Wash with plenty of soap and water. If skin irritation or a rash occurs: Get medical advice/attention. |
| Eye contact: | Immediately flush eye with plenty of clean water for at least 15 minutes. (If easy to do, remove contact lenses, if worn.) Get medical attention immediately. |
| Ingestion: | After having swallowed it, Drink a large quantity of water when consciousness becomes clear and receive treatment for the doctor immediately. A mouth must not give a person without the consciousness a thing. |
| Protection for first aid person: | The rescuer wears a tool for appropriate protection depending on the situation. |

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5. Firefighting measures

| | |
|-----------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Suitable extinguishing media: | Use water spray(fog), foam, dry chemical or CO2. |
| Extinguishing media to avoid: | Straight stream water. |
| Specific hazards arising from the chemical: | At the time of fire, hazardous gases (carbon monoxide and others) can be generated. |
| Fire fighting: | Keep upwind of fire. Eliminate all ignition sources if safe to do so. In case of fire in the surroundings, move the content/container to the safety place. If it is not possible to move, cool the content/container with water spray. |
| Special protective equipment and precautions for fire fighters: | Gloves, protection glasses, wear fire, flame resistant, retardant clothing, air respiratory organs wear a tool for appropriate protection. |

6. Accidental release measures

| | |
|----------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Personal precautions, protective equipment and emergency procedures: | Promptly remove possible ignition sources from the vicinity. |
| Environmental precautions: | Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. |
| Methods and materials for containment and cleaning up: | To environment (area of the sea, the soil) must not release it. Absorb this product with inactive materials (example: dry sand, earth) and recover it into a waste material container. In the case of large amount, stop leakage with earth/sand to begin with, and, then, recover it. In the case of a small quantity, I adsorb it in the earth and sand, a waste and collect it in empty container which I can seal up after having removed it. |

7. Handling and storage

| | |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Handling | |
| Technical measures: | During handling, be sure to wear proper protective equipment (refer to the section 8). This product can be charged with static electricity. Take countermeasures for static electricity removal (grounding, others). Wear antistatic clothes and antistatic shoes to prevent human body electrification. Use explosion-proof electrical/ventilating/lighting equipment. |
| Ventilation requirements: | Use the ventilation equipment described in Section 8. |

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Precautions for safe handling: Not especially.

Storage

Storage conditions: Store the containers avoiding direct sunlight. Store in less than 40°C in a well-ventilated room.

Safety adequate container materials: Use the container specified by the Fire Service ACT and the United Nations Transport Regulations.

8. Exposure controls/personal protection

Appropriate engineering controls: Use local ventilation equipment.
Install eye and body washing facilities near the handling place.
Display the position of equipment clearly.

Control parameters

| Ingredient Name | Industrial Safety and Health Law (JAPAN) | Japan Society for Occupational Health | ACGIH-TLV | |
|------------------------------------------|------------------------------------------|-----------------------------------------------|---------------------------------------|-----------------|
| | Administrative Control Levels | Occupational Exposure Limits | TWA | STEL |
| Polyethylene glycol butyl glycidyl ether | Not established | Not established | Not established | Not established |
| 1,4-Dioxane | 10ppm -mg/m ³ | 1ppm Skin, 3.6mg/m ³ Skin | 20ppm Skin, -mg/m ³ | Not established |
| Epichlorohydrin | Not established | Not established | 0.5ppm Skin, -mg/m ³ | Not established |

Personal protective equipment

Respiratory protection: Use a gas mask for organic gases, air-supplied respirator, self-contained compressed air breathing apparatus on the situation.

Hand protection: Organic solvent impermeable protective gloves (Antistatic ones are desirable.)

Eye/face protection: Protective glasses, goggle, protective face shield.

Skin/body protection: Wear long-sleeved working clothes and protective shoes.(Antistatic ones are desirable.)
Use an oiliness apron-resistant, boots depending on the situation.

Hygiene measures: Wash with soap and water after handling.

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9. Physical and chemical properties

Product

| | |
|-----------------------------------------------|-------------------------------------------------|
| Form: | Liquid (20℃) |
| Color: | Light yellow |
| Odor: | Ether odor |
| Melting point/freezing point: | -20(℃) |
| Initial boiling point and boiling range: | No data |
| Flammability (solid, gas): | No data |
| Upper/lower flammability or explosive limits: | No data |
| Flash point: | 172(℃) (Cleveland Open Cup) |
| Auto-ignition temperature: | No data |
| Decomposition temperature: | No data |
| pH: | 6.0—8.5(JIS K 1557) |
| Kinematic viscosity: | 9.04(mm ² /sec)(25℃) |
| Solubility: | water : Soluble. organic solvents : Soluble. |
| Partition coefficient: n-octanol/water: | No data |
| Vapour pressure: | No data |
| Specific Gravity: | 1.045—1.052(25℃) |
| Vapour density: | No data |
| Particle characteristics: | No data |

10. Stability and reactivity

| | |
|-------------------------------------|----------------------------------------------------------|
| Chemical stability: | Stable under normal temperatures and pressures. |
| Possibility of hazardous reactions: | It may react with the oxidizing agent and generate heat. |
| Conditions to avoid: | Avoid heat, flames, sparks and ignition sources. |
| Incompatible materials: | Acid, Oxidizing agents. |
| Hazardous decomposition products: | No data available |

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Product Name: **BTG-GE****11. Toxicological information****Product**

| | |
|--------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| Acute toxicity (oral): | Classification not possible |
| Acute toxicity (dermal): | Classification not possible |
| Acute toxicity (inhalation): | Classification not possible (Gas) Classification not possible (Vapour) Classification not possible (Dust/Mist) |
| Skin corrosion/irritation: | Classification not possible |
| Serious eye damage/irritation: | Classification not possible |
| Respiratory sensitization: | Classification not possible |
| Skin sensitization: | Classification not possible |
| Mutagenicity: | Classification not possible |
| Carcinogenicity: | Category 1B |
| Reproductive toxicity: | Classification not possible |
| Target organ effect/Single exposure: | Classification not possible |
| Target organ effect/Multi exposure: | Classification not possible |
| Respiratory toxic: | Classification not possible |

Ingredient

Polyethylene glycol butyl glycidyl ether

No Data

1,4-Dioxane

| | |
|------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Acute toxicity (oral): | No Classification LD50: 4200-7339 mg/kg[rat] |
| Acute toxicity (dermal): | No Classification LD50: 2100 mg/kg[rat] |
| Acute toxicity (inhalation): | Exempt classification (Gas) Category 4 (Vapour) LC50: 9158-14236 ppm[rat] Classification not possible (Dust/Mist) |
| Skin corrosion/irritation: | Category 2 Effect on animals : Based on results of "moderately irritating" in a rabbit skin irritation test (open Draize test) (Hazard Assessment Report (CERI, NITE) (2006)) and "slightly irritating" in a rabbit, rat and mouse skin irritation tests (EU-RAR No. 21 (2002)), the substance was classified into Category 2. |

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Serious eye damage/irritation:

Category 2A

Effect on person : not entered, Although obvious positive reactions are reported for exposed humans, there is no report of corrosive (Hazard Assessment Report (CERI, NITE) (2006), EU-RAR No. 21 (2002)).

Effect on animals : In a rabbit eye irritation test, "severe chemosis, slight corneal opacity and conjunctival redness (conjunctival redness persisted to day 8 in one animal)" were observed (EU-RAR No. 21 (2002)).

Based on the data, the substance was classified into Category 2A.

Respiratory sensitization:

Classification not possible

Effect on person : No data available

Skin sensitization:

Classification not possible

Effect on person : in human patch tests , positive results are reported (EU-RAR No. 21 (2002), NICNASPEC No. 7 (1998)).

Effect on animals : In a guinea pig skin sensitizing test (Directive 84/449/EEC, B.6) (GLP), a negative result is reported (EU-RAR No. 21 (2002), original literature BASF (1993)).

Based on the above reports, classification was not possible.

Mutagenicity:

No Classification

Although there are positive and negative results in micronucleus test by oral gavage to mice (ATSDR (2007), Hazard Assessment Report (CERI, NITE) (2006), NICNAS No. 7 (1998)), the substance was classified as "Not classified" based on expert's decision for reliability of the test. There are reports of positive rat hepatic cell DNA damage test, DNA synthesis test and DNA repair test (Hazard Assessment Report (CERI, NITE) (2006), NICNAS No. 7 (1998), PATTY (5th, 2001)) and negative Ames test, mouse lymphoma test and chromosomal aberration test (Hazard Assessment Report (CERI, NITE) (2006)).

Carcinogenicity:

Category 1B

ACGIH:A3,

EPA:Likely to be carcinogenic to humans,

EU:Carc. 1B,

IARC:2B,

NTP:R,

Japan Society for Occupational Health:2B

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Reproductive toxicity:

Classification not possible

In developmental toxicity tests in rats by oral administration (Hazard Assessment Report (CERI, NITE) (2006)) or inhalation exposure (Initial Environmental Risk Assessment of Chemicals (Ministry of the Environment) vol. 2 (2003)) during the organogenesis period, no adverse effects on fetal development were seen while decreased fetal weight and delayed ossification were observed in some tests. However, classification was not possible due to lack of data for sexual function and fertility.

Target organ effect/Single exposure:

Category 1(central nerve system)

Category 3(anesthetic action,respiratory tract irritation)

Based on findings of dizziness, sleepiness and unconsciousness in humans following inhalation exposure (Initial Environmental Risk Assessment of Chemicals (Ministry of the Environment) vol. 2 (2003)), the substance was classified into Category 1 (central nervous system). Narcotic effects are reported in rats following inhalation at 155 mg/L (EU-RAR 21 (2002)) and rabbits following oral exposure at 6600 mg/kg (ATSDR (2007)). The substance was classified into Category 3 (narcotic effects). The substance is irritating to the nose and throat in humans (EU-RAR 21 (2002), ATSDR (2007)). In an inhalation test in rats, irritation of mucous membranes of the respiratory tract was observed (EU-RAR 21 (2002)). Based on these results, the substance was classified into Category 3 (respiratory tract irritation).

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|-------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Target organ effect/Multi exposure: | <p>Category 1(kidney,liver,central nerve system) Category 2(respiratory apparatus) In a case report of 5 workers who died following exposure to the substance, hemorrhage and necrosis in the kidney and necrosis in the liver are reported (Hazard Assessment Report (CERI, NITE) (2006)). There is a case report that a worker who had been exposed for one week in a closed, non ventilated room without respiratory equipment showed hypertonia, neurological symptoms, kidney failure, renal cortex necrosis, severe centrilobular necrosis in the liver and demyelination and partial loss of nerve fibre tissue in the brain (EU-RAR No. 21 (2002)). Based on the data, the substance was classified into Category 1 (kidney, liver, central nervous system). In a 2-year oral test in rats, degeneration of airway epithelium was observed at 16 mg/kg/day (corresponds to Category 2) (Initial Environmental Risk Assessment of Chemicals (Ministry of the Environment) vol. 2 (2003)). Based on this data, the substance was classified into Category 2 (respiratory</p> |
| Respiratory toxic: | <p>Classification not possible Effect on person : No data available.</p> |
| Epichlorohydrin | |
| Acute toxicity (oral): | <p>Category 3 LD50: 90-260 mg/kg[rat]</p> |
| Acute toxicity (dermal): | <p>Category 3 LD50: 591.5 mg/kg[rat], LD50: 754-1300 mg/kg[rabbit]</p> |
| Acute toxicity (inhalation): | <p>Exempt classification (Gas) Category 2 (Vapour) LC50: 251.1-634.2 ppm[rat] Classification not possible (Dust/Mist)</p> |
| Skin corrosion/irritation: | <p>Category 1 Effect on person : In accidental cases of occupational exposure, effects such as skin ulcer, erosion and burns are reported (Hazard Assessment Report (CERI, NITE) No. 74 (2004), ACGIH (7th, 2001)). Effect on animals : In a rabbit skin irritation test, in which a stock solution of the substance was applied for 2 - 24-hour, severe irritation and necrosis were observed (Hazard Assessment Report (CERI, NITE) No. 74 (2004)). The substance is classified into C; R34 in EU classification. Based on these information, the substance was classified into Category 1.</p> |

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Serious eye damage/irritation:

Category 1

Effect on animals : In a rabbit eye irritation test (cottonseed oil was used as vehicle), severe irritation accompanied by corneal disorder was observed following application of a 80% solution, and mild irritation was observed following application of a 10% solution (Hazard Assessment Report (CERI, NITE) No. 74 (2008)). Although this data corresponds to Category 2A, the substance is classified into Category 1 for skin irritation, not skin corrosive. Therefore, the substance was classified into Category 1.

Respiratory sensitization:

Classification not possible

Effect on person : In a case report of an accidental massive exposure in humans, chronic asthmatic bronchitis is reported (Initial Environmental Risk Assessment of Chemicals (Ministry of the Environment) vol. 1 (2002)). Since this information is not sufficient as evidence for classification, classification was not possible due to lack of other data.

Skin sensitization:

Category 1

Japan Society for Occupational Health Skin Sensitization Group 1

Effect on person : There is a report of allergic contact dermatitis in 6 workers who showed dermatitis following occupational exposure (Hazard Assessment Report (CERI, NITE) No. 74 (2008)). In a patch test of epoxy resin factory workers who showed dermatitis, positive response to this substance was observed in 8 of 19 participants (Hazard Assessment Report (CERI, NITE) No. 74 (2008)). In a patch test of contact dermatitis for epoxy resin workers, positive reaction to this substance was observed in 5 workers (duration engaged in work: 1 - 5 years) (ACGIH (7th, 2001)). There is additional information reporting skin sensitizing property of this substance (EHC 33 (1984)). The substance was classified into Category 1.

Effect on animals : Positive results are also reported in a guinea pig maximization test (Hazard Assessment Report (CERI, NITE) No. 74 (2008)).

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Mutagenicity:

Category 2

Based on a positive result in a mouse bone marrow chromosomal aberration test (in vivo somatic cell mutagenicity test) (Hazard Assessment Report (CERI, NITE) ver. 1.1 No. 74 (2008), PATTY (5th, 2001)), the substance was classified into Category 2. There is a report of a positive spermatogonium chromosomal aberration test by inhalation exposure to mice (in vivo germ cell mutagenicity test) (Hazard Assessment Report (CERI, NITE) ver. 1.1 No. 74 (2008)), however, the reliability of the data is questionable. A negative result is reported in a mouse dominant lethal test (in vivo heritable germ cell mutagenicity test) (Hazard Assessment Report (CERI, NITE) ver. 1.1 No. 74 (2008)). From in vitro mutagenicity tests, there are reports of a positive Ames test and a positive chromosomal aberration test (Hazard Assessment Report (CERI, NITE) ver. 1.1 No. 74 (2008), NTP DB (2009)).

Carcinogenicity:

Category 1B

ACGIH:A3,
EPA:B2,
EU:Carc. 1B,
IARC:2A,
NTP:R,

Japan Society for Occupational Health:2A

Reproductive toxicity:

Category 2

Male rats received oral or inhalation exposure to the substance. When the exposed males were mated with untreated females, male infertility was evident. The infertility effect was permanent at higher dose levels (Hazard Assessment Report (CERI, NITE) No. 74 (2008), ACGIH (2001)). Additionally, reduced sperm motility and decreases in the number of fertilized ovum and implantations in mated females were observed (Hazard Assessment Report (CERI, NITE) No. 74 (2008)). When treated females mated with untreated males, no reproductive effects were observed (Hazard Assessment Report (CERI, NITE) No. 74 (2008)). The parental toxicity was not described. Based on male infertility and the decreased number of implantations, the substance was classified into Category 2.

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Target organ effect/Single exposure: Category 1(respiratory system,liver,kidney)

In inhalation tests, necrosis and ulceration in the respiratory tract and olfactory epithelium were observed following 6-hour exposure (vapour) of 697 ppm (4-hour equivalent: 3.957 mg/L) in mice (Hazard Assessment Report (CERI, NITE) No. 74 (2008)). Pulmonary edema and hemorrhage were observed following 6-hour exposure (vapour) of 283 - 445 ppm (4-hour equivalent: 1.608 - 1.684 mg/L) in rats (IRIS (2008)). Based on the data, the substance was classified into Category 1 (respiratory system). In oral tests in rats, polyuria, increased kidney weight and changes in urine component were observed at 7 - 350 mg/kg, and renal failure was noted in approximately 80% of animals at 125 mg/kg (Hazard Assessment Report (CERI, NITE) No. 74 (2008)). Nephropathy accompanied by vacuolization is reported at 325 - 500 mg/kg following oral exposure in rats and mice (Hazard Assessment Report (CERI, NITE) No. 74 (2008)). Since adverse effects were noted at dose levels within the guidance value range for Category 1 with the inhalation and oral routes, the substance was classified into Category 1 (kidney). In the oral tests in rats and mice (325 - 500 mg/kg) reported above, fatty degeneration in the liver was also observed (Hazard Assessment Report (CERI, NITE) No. 74 (2008)). There is a case report of an accidental massive systemic exposure, where an enlarged liver with jaundice is reported, and fatty degeneration together with functional disturbances of the liver persisted for more than two years (ACGIH (2001)). Based on the data, the substance was classified into Category 1 (liver).

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Target organ effect/Multi exposure: Category 1(respiratory system,kidney)

In rats, dilation of the renal tubules was observed at 50 ppm (vapour; 0.189 mg/L) following a 13-week inhalation exposure period (Hazard Assessment Report (CERI, NITE) No. 74 (2008)). Focal degeneration of the renal tubules was observed at 50 ppm (0.189 mg/L) following a 10-week inhalation exposure period (Hazard Assessment Report (CERI, NITE) No. 74 (2008)). Degeneration and dilation of the renal tubules were observed at 30 ppm (0.114 mg/L) following a life-time inhalation exposure (IRIS (2008)). Since these findings were noted at dose levels within the guidance value range for Category 1, the substance was classified into Category 1 (kidney). Inflammation, focal erosion, hyperplasia and squamous metaplasia in the turbinate airway epithelium were observed at 25 ppm (0.095 mg/L) and higher concentrations following a 13-week inhalation exposure period in rats and mice (Hazard Assessment Report (CERI, NITE) No. 74 (2008)). Lung disorders, mainly edema, congestion and pneumonia were observed at a dose of 100 ppm (0.378 mg/L, 90-day equivalence: 0126 mg/L) following a 30-day inhalation exposure period in rats (ACGIH (7th, 2001)). Purulent rhinitis, sinusitis and pneumonia were observed at 25 ppm (0.095 mg/L) and higher concentrations following a 10-week inhalation exposure period in rabbits (Hazard Assessment Report (CERI, NITE) No. 74 (2008)). Since these findings were noted at dose levels within the guidance value range for Category 1, the substance was classified into Category 1 (respiratory system).

Respiratory toxic:

Classification not possible

Effect on person : No data available.

12. Ecological information

Product

Ecotoxicity

Acute toxicity:

Classification not possible

Chronic toxicity:

Classification not possible

Persistence and degradability :

No information.

Bioaccumulative potential :

No information.

Mobility in soil:

No information.

Hazardous to the ozone layer:

Classification not possible

Other impact :

No information.

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Ingredient

Polyethylene glycol butyl glycidyl ether

Ecotoxicity

Acute toxicity: No data

Chronic toxicity: No data

1,4-Dioxane

Ecotoxicity

Acute toxicity: No Classification

Fish: 96hrLC50:> 100 mg/L[Oryzias latipes]

Daphnia: 48hrEC50:> 1000 mg/L[Daphnia magna]

Algae: 72hrErC50:> 1000 mg/L[Pseudokirchneriella subcapitata]

Chronic toxicity: No Classification

Fish: No data

Daphnia: No data

Algae: No data

Persistence and degradability : Not biodegradable

Bioaccumulative potential : Low bioconcentration

Hazardous to the ozone layer: Classification not possible

Epichlorohydrin

Ecotoxicity

Acute toxicity: Category 3

Fish: 96hrLC50: 10.6 mg/L[Pimephales promelas]

Daphnia: No data

Algae: No data

Chronic toxicity: No Classification

Fish: No data

Daphnia: No data

Algae: 72hrNOEC: 1.7 mg/L[Pseudokirchneriella subcapitata]

Persistence and degradability : Rapidly biodegradable

Bioaccumulative potential : Low bioaccumulation

Hazardous to the ozone layer: Classification not possible

13. Disposal considerations

Disposal methods: When waste materials and waste water are to be treated, collect them into specified containers and entrust the disposal to a disposal contractor having an industrial waste disposal contractor permit.

Do not use the used containers for other purposes like filling other substances. Be sure to dispose of them after treating the content according to the above description. In case of recycling the container, return the container as it is after fitting a stopper without filling anything into it.

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14. Transport information

| | | |
|---------------------------------------------------------------|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| International regulations | UN classification : | Not applicable |
| | UN number : | Not applicable |
| | Proper shipping name : | Not applicable |
| | Packing group : | Not applicable |
| Domestic restriction: | | Transport the material in accordance with the regulations in your country or region. |
| Specific security precaution and condition of transportation: | | Load the containers in such a way as not to wet with water, fall down, tumble, or being damaged. Cover the loaded cargo to prevent direct sunlight. |
| Emergency Response Guide (ERG) Numbers: | 171 | |

15. Regulatory information

Regulatory information with regard to this substance in your country or region should be examined by your own responsibility.

16. Other information

| | |
|------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Reference | Information obtained in NITE (National Institute of Technology and Evaluation) and other literature surveys. |
| Disclaimer | <p>About the description: This SDS was created in accordance with JIS Z 7253 based on the materials and data available at the time of creation.</p> <p>Detailed information such as composition and ingredients corresponding to overseas legal regulation registration confirmation etc. may not be described, so please contact our sales staff separately if necessary.</p> <p>Precautions are for normal handling. In case of special handling, it is the responsibility of the user to take safety measures suitable for the intended use and usage.</p> <p>We have paid close attention to the contents, but we do not guarantee the contents.</p> <p>This product can only be used for industrial purposes. If you want to use it for other purposes, please contact us in advance.</p> |