

Safety Data Sheet
acc. to OSHA HCS

Print Date 06/12/2015

Revision Date 06/12/2015

· **Product Identifier**

· **Trade Name:** TL5043

· **Application of the Substance or Mixture:** Anaerobic Adhesive

· **Details of the Supplier of the Safety Data Sheet (SDS)**

· **Manufacturer or Supplier:**

Resinlab, LLC
N109 W13300 Ellsworth Drive,
Germantown, WI 53022
1-800-388-8605
www.resinlab.com

· **Information Department:** Product Safety Department: msds@resinlab.com

· **Emergency Telephone Number:**

North America - Chemtrec: 1-800-424-9300 (24 hours)
International - Chemtrec: 01-703-527-3887 (24 hours)

2 Hazard(s) identification

· **Hazard Classification**



GHS07

Skin Irrit. 2 H315 Causes skin irritation.
Eye Irrit. 2A H319 Causes serious eye irritation.
Skin Sens. 1 H317 May cause an allergic skin reaction.
STOT SE 3 H335 May cause respiratory irritation.

· **Label Elements**

· **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

· **Pictogram(s)**



GHS07

· **Signal Word** Warning

· **Hazard-determining Component(s)**

silicon dioxide amorphous

· **Hazard statements**

Causes skin irritation.
Causes serious eye irritation.
May cause an allergic skin reaction.
May cause respiratory irritation.

· **Precautionary statements**

Avoid breathing dust/fume/gas/mist/vapors/spray
Wear protective gloves/protective clothing/eye protection/face protection.
Wash thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Contaminated work clothing must not be allowed out of the workplace.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Call a poison center/doctor if you feel unwell.
If skin irritation or rash occurs: Get medical advice/attention.
If eye irritation persists: Get medical advice/attention.
If on skin: Wash with plenty of water.
Take off contaminated clothing and wash it before reuse.
Store locked up.
Store in a well-ventilated place. Keep container tightly closed.
Dispose of contents/container in accordance with local/regional/national/international regulations.

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Hazard Rating System

NFPA System

NFPA Ratings (scale 0 - 4)



NFPA special hazards (water reactivity and oxidizing property): None

HMIS System

HMIS Ratings (scale 0 - 4)



Other hazards

Results of PBT and vPvB assessment

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition/information on ingredients

Chemical Characterization: Mixtures

Composition/Information on Ingredients

CAS: 9004-96-0	Polyglycol Oleate	⚠ Acute Tox. 4, H332; Skin Irrit. 2, H315 Eye Dam. 2B, H320	25-30%
CAS: 112945-52-5 EINECS: 231-545-4	silicon dioxide amorphous	⚠ STOT SE 3, H335	1-2.5%
CAS: 80-15-9 EINECS: 201-254-7 Index Number: 617-002-00-8 RTECS: MX 2450000	Cumene hydroperoxide	⚠ Self-react. CD, H242 ⚠ Acute Tox. 3, H331 ⚠ STOT RE 2, H373 ⚠ Skin Corr. 1A, H314 ⚠ Aquatic Chronic 2, H411 ⚠ Acute Tox. 4, H302; Acute Tox. 4, H312 ⚠ Flam. Liq. 4, H227; Aquatic Acute 2, H401	1-2.5%

Classification System:

The Classifications were based on the Toxicological and Ecological Data of the substances/mixtures in the Section 11 and 12.

4 First-aid measures

Description of First Aid Measures

General Information

Ensure medical personnel are aware of exposure and take precautions for their personal protection; see Section 8 for the information of personal protection.

After Inhalation

Remove victim from exposure to fresh air. Keep person at rest. Provide oxygen if person is not breathing.
In case of unconsciousness place patient stably in side position for transportation.
Seek immediate medical advice.

After Skin Contact

Remove all contaminated clothing and wash before reuse.
Wash contaminated skin with water and soap and rinse thoroughly.

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Seek immediate medical advice.

· **After Eye Contact**

Immediately bathe eyes for 15 minutes under running water.
Immediately remove contact lenses if present. Continue rinsing.
Seek immediate medical advice.

· **After Swallowing**

If victim is unconscious; never give anything by mouth.
If victim is conscious; rinse out mouth and give victim small amounts of water.
Seek medical treatment in case of complaints.

· **After Exposure** Seek medical treatment in case of complaints.

· **Information for Doctor** Have chemical containers, labels and/or (M)SDS ready when calling or visiting a medical center.

· **Indication of any Immediate Medical Attention and Special Treatment Needed**

After frequent or high intense exposure, the following medical tests are recommended:

eye tests
skin tests
respiratory system tests

Check section 11 Toxicological Information for further relevant information.

· **Additional Information**

For additional information, please consult the corresponding first aid measures in the most current version of Emergency Response Guidebook which is produced by the US Department of Transportation.

5 Fire-fighting measures

· **Extinguishing Media**

· **Suitable Extinguishing Agent(s)**

Use fire fighting measures and extinguishing agents that suit the environment.

In case of fire, suitable extinguishing agents are:

Alcohol resistant foam.
Dry chemical or fire-extinguishing powder.
Carbon dioxide (CO₂).
Water spray or water fog.

· **Unsuitable Extinguishing Agent(s)** No relevant information.

· **Firefighting Procedures**

Isolate fire and deny unnecessary entry.

Eliminate all ignition sources if safe to do so.

Do not extinguish fire unless flow can be stopped.

Fight fire remotely due to the risk of explosion.

Burning liquids may be moved by flushing with water; protect personnel and minimize property damage.

Fight fire from protected location or safe distance.

Contain fire water runoff if possible to prevent environmental pollution.

· **Special Hazards Arising in Fire**

Will not burn unless preheated.

In case of fire, following can be released:

Carbon dioxide (CO₂) and Carbon monoxide (CO)
Nitrogen oxides

· **Advice for Firefighters**

If employees are expected to fight fires, they must be trained and equipped as stated in the OSHA fire brigades standard (29 CFR 1910.156).

As with any fire, wear positive-pressure self-contained breathing apparatus and full protective gear that are NIOSH approved.

· **Additional Information** Ensure adequate and functional fire fighting facilities equipped in working area at all times.

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6 Accidental release measures

· **Personal Precautions**

Do not breathe gas, vapors, dusts or mists if their inhalable particles occur during use.
Ensure personnel take precautions for their personal protection during clean up; see Section 8 for the specific requirements.

· **Environmental Precautions** No further relevant information.

· **Cleaning Up Methods**

Ensure adequate ventilation.
Eliminate all ignition sources.
Keep unauthorized personnel away.
For large spills:
Shut off source of leak if safe to do so.
Dike and contain.
Remove with vacuum trucks or pump to storage/salvage vessels.
Absorb residues with liquid-binding materials.
For small spills:
Ventilate and wash area after clean-up is complete.
Collect spills in suitable and properly labeled containers.
Do not use solvents unless following safe handling practices and within the recommended exposure guidelines.
Dispose contaminated chemicals as waste according to Section 13.

· **Additional Information** No further relevant information.

7 Handling and storage

· **Handling**

· **Precautions for Safe Handling**

Obtain special instruction before use; do not handle until all safety precautions have been read and understood.
Do not breathe gas, vapors, dusts or mists if their inhalable particles occur during handling.
Ensure good ventilation and/or exhaustion at workplace.
Keep away from incompatible material(s).
Avoid any release into the environment.
Keep container tightly closed when not in use if product is volatile so as to generate hazardous atmosphere.
Observe all the personal protection requirements in Section 8.

· **Information about Protection Against Explosions and Fires**

Will not burn unless preheated.
Keep away from heat, sparks, open flame and other ignition sources during handling.

· **Storage**

· **Requirements to be Met by Storerooms and Receptacles**

Store in a well-ventilated place; provide ventilation for receptacles.
Keep stored in accordance with local, regional, national, and international regulations.

· **Information about Storage in One Common Storage Facility**

Store away from incompatible material(s).
Store away from foodstuffs.
Avoid release to the environment.

· **Additional Information** No further relevant information.

8 Exposure controls/personal protection

· **Engineering Measures or Controls**

· **Exposure Limit Values that Require Monitoring at the Workplace**

80-15-9 Cumene hydroperoxide

WEEL	Long-term value: 6 mg/m ³ , 1 ppm
	Skin

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· **Other Engineering Measures or Controls**

Ventilation rates should be matched to conditions.

If applicable, use process enclosure(s), local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits.

· **Personal Protective**

· **General Protective and Hygienic Measures**

Avoid any contact with eye.

Do not eat, drink or smoke during work.

Keep food, drink or feed away from working area.

Contaminated work clothing is not allowed out of workplace.

Clean hands and exposed skin thoroughly after work and before breaks.

· **Personal Protective Equipment (PPE)**

· **Breathing Equipment**

Caution! Improper use of respirators is dangerous.

In case of brief exposure or low pollution, use a respiratory filter device.

In case of intensive or longer exposure, use a positive-pressure respiratory protective device that is independent of circulating air.

· **Hand Protection**



Protective gloves

Selection of glove material should take into consideration the penetration times, rates of diffusion, and the degradation.

Suggested glove type(s):

Nitrile Gloves

Butyl Rubber Gloves

· **Eye Protection**



Tightly sealed goggles

· **Body Protection** No relevant information.

· **Additional Information**

All protective clothing (suits, gloves, footwear, headgear) should be clean, available every day, and put on before work.

The Engineering measures or controls, and PPE recommendations are only guidelines and may not apply to every situation. For additional information, please consult the corresponding requirements under OSHA 29 CFR 1910.94-95, and 29 CFR 1910.132-138.

9 Physical and chemical properties

· **Information on Basic Physical and Chemical Properties**

· **Appearance:**

· **Form:** Liquid

· **Color:** Blue

· **Odor:** Mild

· **Odor Threshold:** Not determined.

· **PH-Value:** Not determined.

· **Change in Condition:**

· **Melting Point:** Not determined.

· **Boiling Point:** >149 °C (>300 °F)

· **Flash Point:** >93 °C (>199 °F)

· **Decomposition Temperature:** Not determined.

· **Flammability:** Not determined.

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| · Explosion: | Not determined. |
| · Explosion Limits: | |
| · Lower: | Not determined. |
| · Upper: | Not determined. |
| · Vapor Pressure: | Not determined. |
| · Vapor Density: | not determined |
| · Density at 20 °C (68 °F): | 1.08 g/cm ³ (9.013 lbs/gal) |
| · Solubility in or Miscibility with | |
| · Water: | Not miscible or difficult to mix. |
| · Viscosity: | |
| · Dynamic at 20 °C (68 °F): | 5000 cps |
| · Kinematic: | Not determined. |
| · Additional Information | No further relevant information. |

10 Stability and reactivity

- **Physical Hazard(s)** Not a regulated reactive or physical hazard under GHS.
- **Hazardous Reactivity and Chemical Stability**
 Product may react if exposed to amines, inert gases, metallic salts, heat sources or oxidizers. May decompose, condense, or self-react under conditions of high temperature and/or pressure; but there is little or no potential for heat generation or explosion, or readily undergo hazardous polymerization in the absence of inhibitors.
- **Thermal Decomposition and Conditions to be Avoided**
 Keep away from incompatible material(s).
 Thermally decomposes during fire or high heat; keep away from heat, sparks, open flame and other ignition sources.
- **Possibility of Other Hazardous Reaction(s)** No further relevant information available.
- **Incompatible Material(s)**
 Oxidizing agents
 Strong acids
 Strong bases
 Reducing agents
 Copper and copper alloys
 Cobalt
 Sodium iodide
 Lead or Lead alloys
 Potassium hydroxide
- **Hazardous Decomposition Product(s)**
 Thermally decomposes during fire or very high heat. See Section 5 for fire hazards evolved during thermal decomposition.
- **Hazardous Polymerization Product(s)** No relevant information.
- **Additional Information** No further relevant information.

11 Toxicological information

- **Acute Toxicity**

- **Oral**

25852-47-5 Polyethylene glycol dimethacrylate

Oral LD50 (No data available)

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81-07-2 Saccharin

Oral	LD50	14200 mg/kg (rat) 17500 mg/kg (mouse) Reference: NLM Toxnet (2012).
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112945-52-5 silicon dioxide amorphous

Oral	LD50	> 3160 mg/kg (mouse) Reference: OECD SIDS (2004) and IUCLID Dataset (2004). > 5000 mg/kg (rat) (OECD TG 401 A) Reference: OECD SIDS (2004) and IUCLID Dataset (2004).
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80-15-9 Cumene hydroperoxide

Oral	LD50	382 mg/kg (rat) (Test guideline not available) Reference: Aldrich (M)SDS (2012).
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· Potential Health Effect(s):

abnormal pain
shock or collapse
See acute inhalative effect(s) for further information

· Dermal**25852-47-5 Polyethylene glycol dimethacrylate**

Dermal	LD50	(No data available)
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81-07-2 Saccharin

Dermal	LD50	(No data available) Based on the acute oral toxicity test, it was expected that toxicity to mammals via dermal application of the substance was not a significant concern, and resulted in a similar lack of acute toxicity.
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112945-52-5 silicon dioxide amorphous

Dermal	LD50	> 2000 mg/kg (rabbit) Reference: OECD SIDS (2004) and IUCLID Dataset (2004).
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80-15-9 Cumene hydroperoxide

Dermal	LD50	(rat) 1190-1515 mg/kg (non-occluded; calculated from LD50 of 1.13-1.43 ml/kg) 530-1060 mg/kg (occluded; calculated from LD50 of 0.5-1.0 ml/kg) 500 mg/kg (From vendor's MSDS; test detail not available) The substance was classified as Category 4 for acute dermal toxicity by ECHA. Reference: Aldrich (M)SDS (2012), ECHA (2012) and NIOSH (2012).
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· Potential Health Effect(s):

No further relevant information available; classification is not possible.
See acute inhalative effect(s) for further information.

· Inhalative**25852-47-5 Polyethylene glycol dimethacrylate**

Inhalative	LC50/4 h	(No data available)
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81-07-2 Saccharin

Inhalative	LC50/4 h	(No data available) Due to wetted form of the substance, inhalative effects from dust form can be seen as negligible. Meanwhile, based on the acute oral toxicity test, it was expected that toxicity to mammals via inhalation of the substance was not a significant concern and resulted in a similar lack of acute toxicity. Thus, the substance was not classified as an acute inhalative hazard.
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112945-52-5 silicon dioxide amorphous

Inhalative	LC50/4 h	> 2.08 mg/l (rat) No animals died. Nasal discharge during exposure, crusty eyes, crusty nose and alopecia at days post-exposure. Reference: OECD SIDS (2004) and IUCLID Dataset (2004).
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80-15-9 Cumene hydroperoxide

Inhalative	LC50/4 h	1.37 mg/l (rat) (mists; estimated from LC50/4h of 220ppm) 1.24 mg/l (mouse) (estimated from LC50/4hr of 200 ppm) The LC50 of 1.37 mg/L (220 ppm) was higher than the saturated vapor concentration (4 ppm) under a saturated vapour pressure of 4.36E-3 hPa (25 °C), the substance was therefore considered as "mist". The substance was therefore classified as an Category 4 (mist) for acute inhalation hazard. Reference: Aldrich (M)SDS (2012), ECHA (2011) and HDSB (2011).
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· Potential Health Effect(s):

While not possible to classify the acute inhalative hazard due to missing data, the product may cause the following symptom(s):

- chest tightness or chest pain
- cough
- dizziness or lightheadedness
- headache
- hoarseness
- loss of consciousness
- nausea
- shortness of breath
- sore throat
- vomiting
- anorexia, diarrhea and gastric hyperacidity
- Intensive or long term exposure: lung edema

· Skin Corrosion or Irritation**25852-47-5 Polyethylene glycol dimethacrylate**

Corrosion/Irritation (No data available)

81-07-2 Saccharin

Corrosion/Irritation (No data available)

112945-52-5 silicon dioxide amorphousCorrosion/Irritation not Irritating (rabbit) (OECD TG 404)
Reference: OECD SIDS (2004) and IUCLID Dataset (2004).**80-15-9 Cumene hydroperoxide**Corrosion/Irritation corrosive (rabbit) (shaved skin)
Neat substance: marked necrosis was observed on 4 out of 6 rabbits;
10% solution: moderate erythema was observed on 3 out of 6 rabbits.
The substance was therefore classified as corrosive (Category 1B) to rabbit skin.
Reference: ECHA (2011).**· Potential Health Effect(s):**

Causes skin irritation.
In contact with skin, may cause:
blister formation
redness and pain

· Eye Serious Damage or Irritation**25852-47-5 Polyethylene glycol dimethacrylate**

Damage/Irritation (No data available)

81-07-2 Saccharin

Damage/Irritation (No data available)

112945-52-5 silicon dioxide amorphousDamage/Irritation slightly irrit. (Human)
Studies have shown this substance to be slightly irritating.
Reference: OECD SIDS (2004).

not irritating (rabbit) (OECD TG 405)
Reference: OECD SIDS (2004) and IUCLID Dataset (2004).

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80-15-9 Cumene hydroperoxide

Damage/Irritation serious (rabbit)
 0.005 ml undiluted substance: severe corneal injury with iritis and necrosis of eyelids were observed.
 0.005 ml 5% solution: moderate corneal injury with iritis was observed.
 Overall evaluation: Grade 9; the substance was therefore classified as a serious eye irritant (Category 1).
 Reference: ECHA (2011).

· Potential Health Effect(s):

Causes serious eye irritation.
 In contact with eye, may cause:
 redness and pain

· Respiratory or Skin Sensitization**25852-47-5 Polyethylene glycol dimethacrylate**

Sensitization	Skin	(No data available)
	Respiratory	(No data available)

81-07-2 Saccharin

Sensitization	Skin	(No data available)
	Respiratory	(No data available)

112945-52-5 silicon dioxide amorphous

Sensitization	Skin	not sensitizing (guinea pig) There was a case of allergic dermatitis developing after a contact exposure of the skin to the substance. A violated intactness of the skin integument that may be responsible for the allergic reaction. In general, this substance is not sensitizing. Reference: OECD SIDS (2004).
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80-15-9 Cumene hydroperoxide

Sensitization	Skin	(No data available)
	Respiratory	(No data available)

· Potential Health Effect(s):

May cause an allergic skin reaction.
 No relevant information for respiratory sensitization; classification is not possible.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

· Germ Cell Mutagenicity**25852-47-5 Polyethylene glycol dimethacrylate**

Mutagenicity	(No data available)
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81-07-2 Saccharin

Mutagenicity	negative (Test species listed below) In Vitro (AME tests; S. typhimurium strains TA1535, TA1537, TA97, TA98, and TA100) – Negative with and without metabolic activation In Vivo (Mammal chromosome aberrations; male mice; ip with up to 4000 mg/kg bw/day) – Negative Reference: NLM Toxnet (2012).
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112945-52-5 silicon dioxide amorphous

Mutagenicity	negative (-) Inhalation studies show positive results in mice with low incidence of benign tumors and negative result in rat. The substance is not listed as a carcinogen by NTP, OSHA, or ACGIH. Classified as a Group 3 Carcinogen by IARC. Reference: OECD SIDS (2004) and IUCLID Dataset (2004).
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80-15-9 Cumene hydroperoxide

Mutagenicity	negative (Test species listed below) In Vitro (Bacterial reverse mutation assay; OECD TG 471; S. typhimurium TA97, TA98, TA100, TA102, TA1537, TA1538) - positive without metabolic activation. In Vivo (Micronucleus assay; Standard NTP toxicity studies; mouse; dermal with up to 12 mg/kg for 13 weeks) - negative; it did not induce micronuclei in peripheral blood of the test animals. Due to the negative results from In Vivo tests, the substance was not classified as a mutagen. Reference: ECHA (2011).
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Potential Health Effect(s): No further relevant information; classification is not possible.

Carcinogenicity

25852-47-5 Polyethylene glycol dimethacrylate

Carcinogenicity *negative (No data available)*
Not listed as a carcinogen according to ACGIH, IARC, NTP, or OSHA.

81-07-2 Saccharin

Carcinogenicity *negative (Test species: n/a)*
Not listed as a carcinogen by ACGIH, NTP, or OSHA; and listed as a Group 3 carcinogen by IARC, which was not classifiable as to its carcinogenicity to humans.
Reference: NLM Toxnet (2012).
not classified (Human)
IARC Group 3: Not classifiable as to its carcinogenicity to humans.
ACGIH;NTP;OSHA no component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen.

112945-52-5 silicon dioxide amorphous

Carcinogenicity *negative (salmonella typhimurium)*
In Vitro (Ames Test) - Negative with and without metabolic activation.
Reference: OECD SIDS (2004) and IUCLID Dataset (2004).

negative (Chinese Hamster)
In Vitro (HGPRT Assay in CHO cells) - Negative with and without metabolic activation.
In Vitro (Chromosomal abberation in CHO cells) - Negative with and without metabolic activation.
Reference: OECD SIDS (2004) and IUCLID Dataset (2004).

negative (Escherichia coli)
In Vitro (Reverse Mutation Assay) - Negative with and without metabolic activation.
Reference: OECD SIDS (2004) and IUCLID Dataset (2004).

negative (Human)
In Vitro (Cytogenetic Assay in human embryonic lung cells) - negative without metabolic activation.
Reference: OECD SIDS (2004) and IUCLID Dataset (2004).

negative (rat)
In Vitro (Unscheduled DNA synthesis in rat hepatocytes) - Negative with and without metabolic activation.
In Vivo (Cytogenic Assay) - Negative
In Vivo (Dominant Lethal) - Negative
In Vivo (Host Mediated Assay) - Negative
Reference: OECD SIDS (2004) and IUCLID Dataset (2004).

negative (Saccharomyces cerevisiae)
In Vitro (Gene mutation) - negative without metabolic activation.
Reference: OECD SIDS (2004) and IUCLID Dataset (2004).

80-15-9 Cumene hydroperoxide

Carcinogenicity *negative (Test species: n/a)*
Not listed as a carcinogen by IARC, NTP or ACGIH.

Potential Health Effect(s): Not a known Carcinogen.

Reproductive Toxicity

25852-47-5 Polyethylene glycol dimethacrylate

Reproductive Toxi. *(No data available)*

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Reproductive Toxi.	<p><i>negative (mouse)</i> NOAEL (Reproductive Toxicity; mouse; oral with 194 mg/kg bw/day for 180 days) = 194 mg/kg bw/day; no effects on reproduction were observed. NOAEL (Developmental Toxicity; 25 mg/kg bw/day during the pregnancy) = 25 mg/kg bw/day; no evidence of teratogenicity was exhibited in tested pregnant mice. <i>negative (Test species: mice, rats, rabbits)</i> No malformations or other embryotoxic effects were observed in treated animals (mice, rats, and rabbits) after repeated oral doses with up to 600 mg/ bw/day of the substance or its sodium salt. Reference: NLM Toxnet (2012).</p>
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112945-52-5 silicon dioxide amorphous

Reproductive Toxi.	<p>(Hamster) NOAEL (Maternal toxicity, 14 days) ≥ 1600 mg/kg/day NOAEL (Teratogenicity, 14 days) ≥ 1600 mg/kg/day No clearly discernible effect on nidation or on maternal or fetal survival. Reference: OECD SIDS (2004) and IUCLID Dataset (2004).</p> <p>(mouse) NOAEL (Maternal toxicity, 20 days) = 1340 mg/kg/day NOAEL (Teratogenicity, 20 days) = 1340 mg/kg/day No clearly discernible effect on nidation or on maternal or fetal survival. Reference: OECD SIDS (2004) and IUCLID Dataset (2004).</p> <p>(rat) NOAEL (Maternal toxicity, 20 days) = 1350 mg/kg/day NOAEL (Teratogenicity, 20 days) = 1350 mg/kg/day No clearly discernible effect on nidation or on maternal or fetal survival. Reference: OECD SIDS (2004) and IUCLID Dataset (2004).</p> <p>(rabbit) NOAEL (Maternal toxicity, 29 days) = 1600 mg/kg/day NOAEL (Teratogenicity, 29 days) = 1600 mg/kg/day No clearly discernible effect on nidation or on maternal or fetal survival. Reference: OECD SIDS (2004) and IUCLID Dataset (2004).</p>
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80-15-9 Cumene hydroperoxide

Reproductive Toxi.	(No data available)
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· **Potential Health Effect(s):** No further relevant information; classification is not possible.

· Specific Target Organ Toxicity - Single Exposure

25852-47-5 Polyethylene glycol dimethacrylate

STOT-Single	(No data available)
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81-07-2 Saccharin

STOT-Single	(No data available)
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80-15-9 Cumene hydroperoxide

STOT-Single	Target: N/a (rat) Porphyrin deposition in nostrils and irregular breathing exhibited in treated rats after a single 4hr inhalation with 1.37 mg/l concentrated mists of the substance; however, ECHA concluded it as conclusive but not sufficient for the classification. Reference: ECHA (2011).
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· **Potential Health Effect(s):** May cause respiratory irritation.

· Specific Target Organ Toxicity - Repeated Exposure

25852-47-5 Polyethylene glycol dimethacrylate

STOT-Repeated	(No data available)
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81-07-2 Saccharin

STOT-Repeated	(No data available)
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80-15-9 Cumene hydroperoxide

STOT-Repeated

Target: N/a (rat)

NOAEC (Inhalation with up to 124 mg/m³; aerosol; 3 months) = 31 mg/m³; target organ related toxicological effects following inhalation with 124 mg/m³ aerosol of the substance for 3 months included thymic atrophy, depletion of lymphoid tissue in germinal centers of some lymph nodes and spleen, decreased lipid content of liver, and decreased circulating white blood cells. However, our vendor or NIOSH didn't list it as a chronic target organ hazard.
 Reference: ECHA (2011) and Aldrich (M)SDS (2012).

· **Potential Health Effect(s):** No further relevant information; classification is not possible.

· **Aspiration Hazard****25852-47-5 Polyethylene glycol dimethacrylate**

Aspiration Hazard (No data available)

81-07-2 Saccharin

Aspiration Hazard (No data available)

80-15-9 Cumene hydroperoxide

Aspiration Hazard (No data available)

· **Potential Health Effect(s):** No relevant information; classification is not possible.

· **Additional Information** No further relevant information.

12 Ecological information

· **Aquatic Environmental Toxicity****25852-47-5 Polyethylene glycol dimethacrylate**

Algae Toxicity

(No data available)

Crustacean Toxicity

(No data available)

Fish Toxicity

(No data available)

81-07-2 Saccharin

Algae Toxicity

(No data available)

Crustacean Toxicity

(No data available)

Fish Toxicity

18300 mg/l (*Pimephales promelas* (fathead minnow)) (LC50 (96 hrs))
 The substance is therefore not expected to pose an environmental hazard.
 Reference: NLM Toxnet (2012).

112945-52-5 silicon dioxide amorphous

Algae Toxicity (static)

10000 mg/l (*Brachydanio rerio* (Zebra fish)) (LC0 (96 hrs), OECD TG 203)
 Reference: OECD SIDS (2004) and IUCLID Dataset (2004).

Crustacean Toxicity (static)

>10000 mg/l (*Daphnia magna* (water flea)) (EC50 (24 hrs), OECD TG 202)
 Reference: OECD SIDS (2004) and IUCLID Dataset (2004).

Fish Toxicity

10000 mg/l (*Scenedesmus subspicatus*) (NOEC)
 Reference: OECD SIDS (2004) and IUCLID Dataset (2004).

80-15-9 Cumene hydroperoxide

Algae Toxicity

1.2 mg/l (*Microcystis aeruginosa* (Blue-green algae)) (toxicity threshold corresponds to EC3; 7 days)

Crustacean Toxicity

18.84 mg/l (*Daphnia magna* (water flea)) (EC50 (48 hrs); OECD TG 202)

Fish Toxicity

3.9 mg/l (*Oncorhynchus mykiss* (Rainbow trout)) (LC50 (96 hrs); OECD TG 203)
 Based on the acute LC50 < 10 mg/l and the non-rapid degradability, the substance is classified as a chronic-2 environmental hazard.
 Reference: ECHA (2011).

· **Aquatic Environmental Toxicity Assessment:** No further relevant information; classification is not possible.

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· Degradability and Stability

25852-47-5 Polyethylene glycol dimethacrylate

Biodegradation	(No data available)
Persistence	(Test species: n/a) The substance is not persistent. Reference: Canada DSL (2007).
Photodegradation	(No data available)
Stability in water	(No data available)

81-07-2 Saccharin

Biodegradation	(No data available)
Persistence	(Test species: n/a) The substance is not persistent. Reference: Canada DSL (2007).
Photodegradation	5.88E-12 cm ³ /molecule-sec (Test species: n/a) (at 25 °C) Reference: NLM Toxnet (2012).
Stability in water	(No data available)

112945-52-5 silicon dioxide amorphous

Biodegradation	negative (-) Being an inorganic substance, it is determined not biodegradable. Reference: OECD SIDS (2004) and Canada DSL (2007).
Photodegradation	positive cm ³ /molecule-sec (-) The substance is persistent. Reference: Canada DSL (2007).
Stability in water	negative (-) Being an inorganic substance, it is determined not bioconcentrated. Reference: OECD SIDS (2004) and Canada DSL (2007).

80-15-9 Cumene hydroperoxide

Biodegradation	non-biodegrad. (Test species: n/a) (OECD TG 301C; Chemical conc. 100 mg/l; 4 weeks) Biodegradation (Indirect analysis from BOD) = 0% Biodegradation (Direct analysis from TOC and GC) = 0% and 27% respectively. The substance is not biodegradable. Reference: CHRIP (2011).
Persistence	(Test species: n/a) The substance is not persistent. Reference: Canada DSL (2007).
Photodegradation	8.63E-12 cm ³ /molecule-sec (OH radical) (25 °C; 24 hour day) Half-life (5E5 OH/cm ³) = 44.6 hours. Reference: ECHA (2011).
Stability in water	(No data available)

· Bioaccumulation and Distribution

25852-47-5 Polyethylene glycol dimethacrylate

BCF	(No data available) The substance is not bioaccumulative. Reference: Canada DSL (2007).
Koc	(No data available)
LogPow	(No data available)

81-07-2 Saccharin

BCF	(No data available) The substance is not bioaccumulative. Reference: Canada DSL (2007).
Koc	20 L/kg (Test species: n/a) (Calculated) Reference: NLM Toxnet (2012).
LogPow	0.91 (Test species: n/a) Reference: NLM Toxnet (2012).

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112945-52-5 silicon dioxide amorphous**Environment fate** negative (-)

Based on the chemical nature of the substance, which is inorganic and has highly stable Si-O bond, there are no transformation expected under environmental conditions.
 Reference: OECD SIDS (2004) and IUCLID Dataset (2004).

80-15-9 Cumene hydroperoxide**BCF** (Test species: n/a)

The substance is not bioaccumulative.
 Reference: ECHA (2011) and Canada DSL (2007).

Koc

2346 L/kg (Test species: n/a) (calculated from PCKOCWIN v1.66)
 A high sorption potential onto soil organic matter of the substance is expected.
 Reference: ECHA (2011).

LogPow

1.82 (Test species: n/a) (OECD TG 107)
 Reference: ECHA (2011).

· **Degradability and Bioaccumulation Assessment:** Non-rapidly degradable, and low bioaccumulative.

· **Additional Information** No further relevant information.

13 Disposal considerations

· **Hazardous Waste List**

· **Description:** It may be necessary to contain and dispose of the substance/mixture as a hazardous waste.

· **RCRA Waste:**

81-07-2	Saccharin	U202	2.5-5%
80-15-9	Cumene hydroperoxide	U096	1-<2.5%

· **Waste Treatment Recommendation:**

Generation of waste should be avoided or minimized wherever possible.

Chemical waste, even small quantities, is neither allowed to be poured down drains, sewage system or waterways; nor disposed with household garbage.

Dispose of contents/containers in accordance with local, regional, national, and international regulations.

· **Unused and Uncontaminated Packagings**

· **Recommendation** Dispose of according to your local waste regulations.

14 Transport information

· **UN-Number**

Not regulated for transport; not applicable.

· **DOT, ADR, ADN, IMDG, IATA**

Void

· **UN Proper Shipping Name**

· **DOT, ADR, IMDG, IATA**

Void

· **Transport hazard class(es)**

Not regulated for transport; not applicable.

· **DOT, ADR, ADN, IMDG, IATA**

· **Class**

Void

· **Packing group**

Not regulated for transport; not applicable.

· **DOT, ADR, IMDG, IATA**

Void

· **Environmental Hazards:**

Not applicable.

· **Special Precautions:**

Not applicable.

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- **Transport in Bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.
- **UN "Model Regulation":** -

15 Regulatory information

- **USA Regulation Lists**

- **SARA (Superfund Amendments and Reauthorization Act of 1986)**

- **Section 302 (Extremely Hazardous Substances)**

None of the ingredients is listed.

- **Section 313 (Toxics Release Inventory (TRI) reporting)**

81-07-2	Saccharin	2.5-5%
80-15-9	Cumene hydroperoxide	1-<2.5%

- **Section 311/312 (Hazardous Chemical Inventory Reporting)**

80-15-9	Cumene hydroperoxide	A, C, F, R	1-<2.5%
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- **Hazard Abbreviations for SARA 311/312**

- A - Acute Health Hazard
- C - Chronic Health Hazard
- F - Fire Hazard
- R - Reactive Hazard
- S - Sudden Release of Pressure Hazard

- **TSCA (Toxic Substances Control Act)**

All ingredients are listed.

- **Proposition 65**

- **Chemicals Known to Cause Cancer**

None of the ingredients is listed.

- **Chemicals Known to Cause Reproductive Toxicity for Females**

None of the ingredients is listed.

- **Chemicals Known to Cause Reproductive Toxicity for Males**

None of the ingredients is listed.

- **Chemicals Known to Cause Developmental Toxicity**

None of the ingredients is listed.

- **Carcinogenic Categories**

- **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

- **IARC (International Agency for Research on Cancer)**

81-07-2	Saccharin	3
112945-52-5	silicon dioxide amorphous	3

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

- **TLV (Threshold Limit Value Established by ACGIH)**

None of the ingredients is listed.

- **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

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International Regulation Lists
Canadian Domestic Substance Listings:

All ingredients are listed.

Canadian Ingredient Disclosure list (limit 0.1%)

None of the ingredients is listed.

Canadian Ingredient Disclosure list (limit 1%)

112945-52-5 silicon dioxide amorphous

80-15-9 Cumene hydroperoxide

Chinese Chemical Inventory of Existing Chemical Substances:

All ingredients are listed.

Japanese Existing and New Chemical Substance List:

All ingredients are listed.

Korean Existing Chemical Inventory:

All ingredients are listed.

European Pre-registered substances:

All ingredients are listed.

REACH - Substances of Very High Concern (SVHC) List:

None of the ingredients is listed.

Restriction of Hazardous Substances Directive (RoHS) list:

None of the ingredients is listed.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

• **Department Issuing (M)SDS:** Product Safety Department

• **Contact:** msds@resinlab.com

Abbreviations and acronyms:

ACGIH: American Conference of Governmental Industrial Hygienists

ADR: European Agreement Concerning the International Carriage of Dangerous Goods by Road

CAS: Chemical Abstracts Service (division of the American Chemical Society)

DOT: US Department of Transportation

HMIS: US National Paint & Coatings Association (NPCA) Hazardous Materials Identification System

IARC: International Agency for Research on Cancer developed by United Nations World Health Organisation (WHO)

ICAO-TI: Technical Instructions (TI) by the International Civil Aviation Organization (ICAO)

IMDG: International Maritime Dangerous Goods; the principal international rules for International Carriage of Dangerous Goods by SEA under the Recommendations on the Transport of Dangerous Goods by United Nations (RTDG)

LC50/LD50: Lethal Concentration/Dose, 50 percent

N/a: Not available or Not applicable

NFPA: US National Fire Protection Association

NIOSH: US National Institute of Occupational Safety and Health

OSHA: US Occupational Safety and Health Administration

P: Marine Pollutant

RCRA: Resource Conservation and Recovery Act (USA)

REACH: EU Registry, Evaluation and Authorisation of Chemicals

SARA: US Superfund Amendments and Reauthorization Act

TEEL: Temporary Emergency Exposure Limit developed by US Subcommittee on Consequence Assessment and Protective Actions (SCAPA) of US Department of Energy (DOE)

TSCA: US Toxic Substance Control Act

ACToR: US EPA Aggregated Computational Toxicology Resource

BCF: Bioconcentration Factor

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CCRIS: US NLM TOXNET Chemical Carcinogenesis Research Information System

CHRIP: Japan NITE Information on Biodegradation and Bioconcentration of the Existing Chemical Substances in the Chemical Risk Information Platform

DSL: Canada Domestic Substance List

ESIS: European Chemical Substances Information System

HSDB: US NLM TOXNET Hazardous Substances Databank

HSNO CCID: New Zealand Hazardous Substances and New Organisms Chemical Classification Information Database

IATA-DGR: Dangerous Goods Regulations (DGR) by the International Air Transport Association (IATA)

ICSC: International Chemical Safety Cards

Koc: Partition coefficient, soil Organic Carbon to water

NITE: National Institute of Technology and Evaluation, Japan

OECD: Organisation for Economic Co-operation and Development

RID: the Regulations Concerning the International Carriage of Dangerous Goods by Rail; published by the Central Office for International Carriage by Rail (OTIF)

RTDG: the Recommendations on the Transport of Dangerous Goods by United Nations (UN)

RTECS: US Registry of Toxic Effects of Chemical Substances

SIDS: OECD existing chemicals Screening Information Data Sets

SVHC: EU ECHA Substance of Very High Concern

TOXLINE: US NLM bibliographic database search system

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