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· **Product Identifier**
· **Trade Name: TL5041**
· **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)

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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)**

Health = 2
Fire = 1
Reactivity = 1

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

· **HMIS System**
· **HMIS Ratings (scale 0 - 4)**

Health = 2
Fire = 1
Reactivity = 1

· **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.

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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 rinse opened eyes for at least 15 minutes under running water.
Immediately remove contact lenses if present. Continue rinsing.
Do not put any ointments, oils or medication in eyes without specific instructions.
IMMEDIATELY transport victim to a hospital even if no symptoms develop.

· **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**
Move to fresh air at once.
Get medical advice/attention at once.

· **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
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.

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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 (CO_2).
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.
Contain fire water runoff if possible to prevent environmental pollution.
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 (CO_2) 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.

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

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**
Keep away from sewage system or other water courses; do not penetrate ground/soil.
Inform respective authorities in case of any seepage to the environment.

· **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.
Avoid any body contact of containers or contents unless wearing appropriate personal protective equipment.
Keep away from incompatible material(s).
Avoid any release into the environment.
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.

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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/m³, 1 ppm Skin

· **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 skin or 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**

Brief or short term use: Tightly sealed goggles

Intensive or long term use: Tightly sealed goggles and Face Shields

· **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.

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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 (> 392 °F)

· **Decomposition Temperature:** Not determined.

· **Flammability:** Not determined.

· **Explosion:** Not determined.

· **Explosion Limits:**

· **Lower:** Not determined.

· **Upper:** Not determined.

· **Vapor Pressure:** Not determined.

· **Vapor Density:** not determined

· **Density:** 1.08

· **Solubility in or Miscibility with**

· **Water:** Not miscible or difficult to mix.

· **Viscosity:**

· **Dynamic at 20 °C (68 °F):** 200 cps

· **Kinematic:** Not determined.

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

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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

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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.

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11 Toxicological information

· **Acute Toxicity**

· Oral		
25852-47-5 Polyethylene glycol dimethacrylate		
Oral	LD50	(No data available)
81-07-2 Saccharin		
Oral	LD50	14200 mg/kg (rat) 17500 mg/kg (mouse) Reference: NLM Toxnet (2012).
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).
80-15-9 Cumene hydroperoxide		
Oral	LD50	382 mg/kg (rat) (Test guideline not available) Reference: Aldrich (M)SDS (2012).

· **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)
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.
112945-52-5 silicon dioxide amorphous		
Dermal	LD50	> 2000 mg/kg (rabbit) Reference: OECD SIDS (2004) and IUCLID Dataset (2004).
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).

· **Potential Health Effect(s):**
No further relevant information available; classification is not possible.
See acute inhalative effect(s) for further information.

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· Inhalative

25852-47-5 Polyethylene glycol dimethacrylate		
Inhalative	LC50/4 h	(No data available)
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.
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).
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).

· Potential Health Effect(s):

May be harmful if inhaled.
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 amorphous	
Corrosion/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 formulation
redness and pain

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· 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 amorphous	
Damage/Irritation	slightly irrit. (Human) Studies have shown this substance to be slighlty irritating. Reference: OECD SIDS (2004). not irritating (rabbit) (OECD TG 405) Reference: OECD SIDS (2004) and IUCLID Dataset (2004).
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 damage.
In contact with eye, may cause:
decrease or loss of vision
redness, pain and severe deep burns

· 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).
80-15-9 Cumene hydroperoxide		
Sensitization	Skin	(No data available)
	Respiratory	(No data available)

· Potential Health Effect(s): 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)
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 stuides 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).
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).

· **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 metabolc activation. Reference: OECD SIDS (2004) and IUCLID Dataset (2004). negative (Escherichia coli) In Vitro (Reverse Mutation Assay) - Negative with and withou 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).

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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)

81-07-2 Saccharin	
Reproductive Toxi.	negative (mouse) 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. negative (Test species: mice, rats, rabbits) 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).

112945-52-5 silicon dioxide amorphous	
Reproductive Toxi.	(Hamster) NOAEL (Matenal 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). (mouse) NOAEL (Matenal 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). (rat) NOAEL (Matenal 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). (rabbit) NOAEL (Matenal 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).

80-15-9 Cumene hydroperoxide	
Reproductive Toxi.	(No data available)

· **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)

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

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).

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

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· **Specific Target Organ Toxicity - Repeated Exposure**

25852-47-5 Polyethylene glycol dimethacrylate	
STOT-Repeated	(No data available)
81-07-2 Saccharin	
STOT-Repeated	(No data available)
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.

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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).

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· **Aquatic Environmental Toxicity Assessment:** Harmful to aquatic life with long lasting effects.

· 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 cm³/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 determinated not biodegradable. Reference: OECD SIDS (2004) and Canada DSL (2007).
Photodegradation	positive cm³/molecule-sec (-) The substance is persistent. Reference: Canada DSL (2007).
Stability in water	negative (-) Being an inorganic substance, it is determinated 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 cm³/molecule-sec (OH radical) (25 °C; 24 hour day) Half-life (5E5 OH/cm³) = 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).

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LogPow	0.91 (Test species: n/a) Reference: NLM Toxnet (2012).
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 enviromental 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.

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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.

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14 Transport information

· **UN-Number**	Not regulated for transport; not applicable.
· **Transport hazard class(es)**	Not regulated for transport; not applicable.
· **Packing group**	Not regulated for transport; not applicable.
· **Environmental Hazards:**	Not applicable.
· **Special Precautions:**	Not applicable.
· **Transport in Bulk according to Annex II of MARPOL73/78 and the IBC Code**	Not applicable.
· **UN "Model Regulation":**	-

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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%

· **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**

98-82-8	Isopropylbenzene

· **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.

· **International Regulation Lists**

· **Canadian Domestic Substance Listings:**

All ingredients are listed.

· **Canadian Ingredient Disclosure list (limit 0.1%)**

None of the ingredients is listed.

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· **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
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

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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

· **Date of preparation / last revision** *06/12/2015 / 1*