

acc. to OSHA HCS

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#### Product Identifier Trade Name: <u>EP1305 Black A</u> Application of the Substance or Mixture: Epoxy Resin

#### 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

GHS09 Environment

V

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.



Skin Irrit. 2	H315 Causes skin irritation	п.
Eye Irrit. 2A	H319 Causes serious eye	irritation.
Skin Sens. 1	H317 May cause an allerg	ic skin reaction.

Label Elements

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



<sup>•</sup> Signal Word Warning

- Hazard-determining Component(s)
- Bisphenol-A-(epichlorohydrin) epoxy resin

1, 2, 3-Propanetriyl ester of 12-(oxiranylmethoxy)-9-octadecanoic acid

#### <sup>•</sup> Hazard statements

Causes skin irritation. Causes serious eye irritation. May cause an allergic skin reaction. Toxic to aquatic life with long lasting effects.

#### Precautionary statements

Avoid breathing dust/fume/gas/mist/vapors/spray Wear protective gloves. Wear eye protection / face protection. Avoid release to the environment. Wash thoroughly after handling. 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. Specific treatment (see on this label). Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention.

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(Contd. of page 1) If eye irritation persists: Get medical advice/attention. If on skin: Wash with plenty of water. Collect spillage. Take off contaminated clothing and wash it before reuse. Dispose of contents/container in accordance with local/regional/national/international regulations. Prevention Avoid breathing dust/fume/gas/mist/vapors/spray Wear protective gloves/protective clothing/eye protection/face protection. Avoid release to the environment. Wash thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace. Disposal Dispose of contents/container in accordance with local/regional/national/international regulations. Hazard Rating System NFPA System NFPA Ratings (scale 0 - 4) Health = 2 Fire = 1 Reactivity = 0 NFPA special hazards (water reactivity and oxidizing property): None · HMIS System HMIS Ratings (scale 0 - 4) HEALTH 2 Health = 2 FIRE Fire = 1 1 Reactivity = 0 REACTIVITY 0 <sup>·</sup> Other hazards Results of PBT and vPvB assessment · **PBT:** Not applicable.

• **vPvB:** Not applicable.

#### 3 Composition/information on ingredients

#### Chemical Characterization: Mixtures

Composition/Infor	mation on Ingredients	
CAS: 25068-38-6 NLP: 500-033-5 Index Number: 603-074-00-8	Bisphenol-A-(epichlorohydrin) epoxy resin Aquatic Chronic 2, H411 Skin Irrit. 2, H315; Eye Irrit. 2A, H319; Skin Sens. 1, H317	70-80%
CAS: 74398-71-3 EC number: 616-085-8	1, 2, 3-Propanetriyl ester of 12-(oxiranylmethoxy)-9-octadecanoic acid Aquatic Chronic 2, H411 Skin Irrit. 2, H315; Eye Irrit. 2A, H319; Skin Sens. 1, H317; STOT SE 3, H335 Aquatic Acute 2, H401	10-20%
CAS: 67762-90-7 EC number: 614-122-2	Siloxanes and Silicones, di-Me, reaction products with silica	2.5-5%
CAS: 1333-86-4 EINECS: 215-609-9 RTECS: FF5800000	Carbon black	0.1-<1%
· Classification Syst	iom.	

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. Supply fresh air and to be sure call for a doctor. In case of unconsciousness place patient stably in side position for transportation. Supply fresh air; consult doctor in case of complaints.

#### After Skin Contact

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

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

#### <sup>•</sup> 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 ( $CO_2$ ).

Calibori dioxide  $(CO_2)$ .

Water spray or water fog.

• Unsuitable Extinguishing Agent(s) Water with full jet

#### Firefighting Procedures

Isolate fire and deny unnecessary entry.

Immediately withdraw all personnel from the area in case of rising sound from venting safety device.

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.

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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: Phenolic compounds Noxious fumes. Formaldehyde, a skin and lung sensitizer and a regulated carcinogen, may be formed during fires. Carbon dioxide (CO<sub>2</sub>) and Carbon monoxide (CO) Silicon oxide (SiO<sub>2</sub>)

#### 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** Be Caution! Finely dispersed substance may form explosive mixtures in air.

#### 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. Allow molten product to cool. Absorb residues with liquid-binding materials. Avoid confined spaces, such as sewers, because of the possibility of an explosion. 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

#### <sup>·</sup> 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. Wear respiratory protection when handling. 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.

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Dust can combine with air to form an explosive mixture.

#### <sup>·</sup> 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

67762-90-7 Siloxanes and Silicones, di-Me, reaction products with silica

OSHA PEL Short-term value: 15 mg/m<sup>3</sup>

US ACGIH Short-term value: 10 mg/m<sup>3</sup>

#### 1333-86-4 Carbon black

PEL	Long-term value: 3.5 mg/m³
REL	Long-term value: 3.5* mg/m³ *0.1 in presence of PAHs;See Pocket Guide Apps.A+C
TLV	Long-term value: 3* mg/m³ *inhalable fraction

#### 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.

Contaminated work clothing is not anowed 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

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• Eye Protection



Tightly sealed goggles

Body Protection No relevant information.

#### <sup>•</sup> 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.

Information on Basic Physical and Ch	emical Properties	
Appearance:		
· Form:	Paste	
Color:	Black	
Odor:	Mild epoxy odor	
Odor Threshold:	Not determined.	
PH-Value:	Not determined.	
Change in Condition:		
<sup>•</sup> Melting Point:	Not determined.	
Boiling Point:	>200 °C (>392 °F)	
· Flash Point:	>200 °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 at 25 °C (77 °F):	1.17 g/cm³ (9.764 lbs/gal)	
Solubility in or Miscibility with		
Water:	Not miscible or difficult to mix.	
Segregation coefficient LogPow (n	-octanol/	
water):	Not determined.	
Viscosity:		
Dynamic at 20 °C (68 °F):	140000 mPas	
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 Stable under normal conditions of use, storage and temperatures.

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#### Thermal Decomposition and Conditions to be Avoided

Keep away from incompatible material(s). Take precautionary measures to avoid static electricity/discharge. Metal parts of mixing equipment need grounding. 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)

Amines. Oxidizing agents Acids Bases (Alkalis)

#### 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

· (	Dral	
2506	8-38-6	Bisphenol-A-(epichlorohydrin) epoxy resin
Oral	LD50	11400 mg/kg (rat) 15600 mg/kg (mouse) Reference: NLM Toxnet (2010).
7439	8-71-3	1, 2, 3-Propanetriyl ester of 12-(oxiranylmethoxy)-9-octadecanoic acid
Oral	LD50	> 5000 mg/kg (rat) Reference: Hexion (M)SDS (2003).
6776	2-90-7	Siloxanes and Silicones, di-Me, reaction products with silica
Oral	LD50	>5000 mg/kg (rat) (test method not specified) Reference: Cabot (M)SDS (2012).
	' Pot	tential Health Effect(s): Not a classified acute oral hazard.
· [	Derma	1
2506	8-38-6	Bisphenol-A-(epichlorohydrin) epoxy resin
Derm	nal LDS	<ul> <li>20000 mg/kg (rabbit) (Test guideline not available)</li> <li>&gt; 1270 mg/kg (mouse)</li> <li>&gt; 2000 mg/kg (rat)</li> <li>&gt; 1600 mg/kg (rabbit); however, there was no fixed test result available; classification was not possible without further information.</li> <li>Reference: Royce (M)SDS (2011) and ChemID (2010).</li> </ul>
7439	8-71-3	1, 2, 3-Propanetriyl ester of 12-(oxiranylmethoxy)-9-octadecanoic acid
Derm	nal LD5	0 > 2000 mg/kg (rabbit) Reference: Hexion (M)SDS (2003).
6776	2-90-7	Siloxanes and Silicones, di-Me, reaction products with silica
Derm	nal LDS	0 (Test species: n/a) (Toxicity not expected based on acute oral data) 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. Thus, the substance was not classified as an acute dermal hazard as a wetted form.
	' Pot	tential Health Effect(s): Not a classified acute dermal hazard.
· I	nhala	tive
2506	8-38-6	Bisphenol-A-(epichlorohydrin) epoxy resin
Inhal	ative L	C50/4 h (Test species: n/a) (Toxicity not expected based on the acute oral data)
7439	8-71-3	1, 2, 3-Propanetriyl ester of 12-(oxiranylmethoxy)-9-octadecanoic acid
Inhal	ative L	C50/4 h (No data available)
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0//02-90-/ 3	Siloxanes	and Silicones, di-Me, reaction products with silica
Inholotivo I C	250/A h /7	and species: n(a) (Taxinity not expected based on south cral data)
	ו) 11 4/00	est species. In a) (Toxicity not expected based on actue on a data)
		the neutron of the substance, minimative effects from dust form can be seen as negligible, meanwrite, bas
	on	The acute of a toxicity test, it was expected that toxicity to maintais the animation of the substance was not
	SIG	ininicant concern and resulted in a similar fack of acute toxicity. Thus, the substance was not classified as an acu
<sup>·</sup> Pote	ential He	ealth Effect(s):
Not a	a classified	acute inhalative hazard.
No fu	<i>irther relev</i>	ant information; classification is not possible.
Skin C	orrosior	n or Irritation
25068-38-6 E	Bisphenol-	A-(epichlorohydrin) epoxy resin
Corrosion/Irri	itation irrita	ating (rabbit)
	Acu	te skin irritation was mild, through repeated and prolonged exposure may cause severe irritation.
	The	substance was classified as Category 2 by GHS-J.
	Ref	erence: HSNO CCID (2010) and GHS-J (2006).
74398-71-3 1	1. 2. 3-Proi	panetrivl ester of 12-(oxiranylmethoxy)-9-octadecanoic acid
Corrosion/Irri	itation slia	htty irri. (Test species: n/a)
	Bas	ed on manufacturer's test result, the substance was slightly irritating to skin (Category 3).
	Ref	erence: Hexion (M)SDS (2003).
67762-90-7 S	Siloxanes	and Silicones, di-Me, reaction products with silica
Corrosion/Irri	itation Nor	-irritating (Test species: n/a) (Primary irritation index=0)
	mila	lly irritating (rabbit) (Read across from CAS 63148-62-9)
	No	est detail available: for safety reasons, the substance was classified as mildly irritating (Category 3) to rabbit skin
	Ref	erence: HSNO CCID (2010).
· Pot	ential Ho	Palth Effect(s):
Caus	ses skin irri	ation.
IN COL	ntact with s	kin, may cause:
	ess and na	
redne	coo una pu	"
· Eye Se	erious Da	amage or Irritation
Eye Se 25068-38-6 E	erious Da Bisphenol-	amage or Irritation A-(epichlorohydrin) epoxy resin
• Eye Se • Eye Se 25068-38-6 E Damage/Irrita	erious Da Bisphenol- ation irritat	amage or Irritation A-(epichlorohydrin) epoxy resin ing (rabbit)
Eye Se 25068-38-6 E Damage/Irrita	erious Da Bisphenol- ation irritat The s	a <b>mage or Irritation</b> A-(epichlorohydrin) epoxy resin ing (rabbit) substance caused eye irritation (Category 2A) based on the dermal effect to rabbit skin.
Eye Se 25068-38-6 E Damage/Irrita 74398-71-3 1	erious Da Bisphenol- ation irritat The s 1, 2, 3-Prop	amage or Irritation A-(epichlorohydrin) epoxy resin ing (rabbit) substance caused eye irritation (Category 2A) based on the dermal effect to rabbit skin. panetriyl ester of 12-(oxiranylmethoxy)-9-octadecanoic acid
<b>Eye Se</b> 25068-38-6 E Damage/Irrita 74398-71-3 1 Damage/Irrita	erious Da Bisphenol- ation irritat The s 1, 2, 3-Prop ation (No	amage or Irritation A-(epichlorohydrin) epoxy resin ing (rabbit) substance caused eye irritation (Category 2A) based on the dermal effect to rabbit skin. panetriyl ester of 12-(oxiranylmethoxy)-9-octadecanoic acid data available)
74398-71-3 1 Damage/Irrita 74398-71-3 1 Damage/Irrita	arious Da Bisphenol- ation irritat The s 1, 2, 3-Prop ation (No Siloxanes	amage or Irritation A-(epichlorohydrin) epoxy resin ing (rabbit) substance caused eye irritation (Category 2A) based on the dermal effect to rabbit skin. banetriyl ester of 12-(oxiranylmethoxy)-9-octadecanoic acid data available) and Silicones, di-Me, reaction products with silica
Eye Se 25068-38-6 E Damage/Irrita 74398-71-3 1 Damage/Irrita 67762-90-7 S Damage/Irrita	erious Da Bisphenol- ation irritat The s 1, 2, 3-Prop ation (No Siloxanes ation sliahi	amage or Irritation A-(epichlorohydrin) epoxy resin ing (rabbit) substance caused eye irritation (Category 2A) based on the dermal effect to rabbit skin. banetriyl ester of 12-(oxiranylmethoxy)-9-octadecanoic acid data available) and Silicones, di-Me, reaction products with silica ilv irrit. (Human) (Read across from CAS 63148-62-9)
<b>Eye Se</b> <b>25068-38-6 E</b> Damage/Irrita <b>74398-71-3 1</b> Damage/Irrita <b>67762-90-7 S</b> Damage/Irrita	erious Da Bisphenol- ation irritat The s 1, 2, 3-Prop ation (No Siloxanes ation slight non-i	amage or Irritation A-(epichlorohydrin) epoxy resin ing (rabbit) substance caused eye irritation (Category 2A) based on the dermal effect to rabbit skin. banetriyl ester of 12-(oxiranylmethoxy)-9-octadecanoic acid data available) and Silicones, di-Me, reaction products with silica ily irrit. (Human) (Read across from CAS 63148-62-9) ritiating (Primarv irritation index=0)
Eye Se 25068-38-6 E Damage/Irrita 74398-71-3 1 Damage/Irrita 67762-90-7 S Damage/Irrita	erious Da Bisphenol- ation irritat The s 1, 2, 3-Prop ation (No Siloxanes ation slight non-i Tran	amage or Irritation A-(epichlorohydrin) epoxy resin ing (rabbit) substance caused eye irritation (Category 2A) based on the dermal effect to rabbit skin. banetriyl ester of 12-(oxiranylmethoxy)-9-octadecanoic acid data available) and Silicones, di-Me, reaction products with silica Hy irrit. (Human) (Read across from CAS 63148-62-9) rritating (Primary irritation index=0) sient ocular irritation was observed in humans, rabbits, doos, and monkeys after injection of the substance to the
<b>Eye Se</b> <b>25068-38-6 E</b> Damage/Irrita <b>74398-71-3 1</b> Damage/Irrita <b>67762-90-7 S</b> Damage/Irrita	erious Di Bisphenol- ation irritat The s 1, 2, 3-Prop ation (No Siloxanes ation slight non-i Trans eve f	amage or Irritation A-(epichlorohydrin) epoxy resin ing (rabbit) substance caused eye irritation (Category 2A) based on the dermal effect to rabbit skin. banetriyl ester of 12-(oxiranylmethoxy)-9-octadecanoic acid data available) and Silicones, di-Me, reaction products with silica ity irrit. (Human) (Read across from CAS 63148-62-9) rritating (Primary irritation index=0) sient ocular irritation was observed in humans, rabbits, dogs, and monkeys after injection of the substance to the oodies. However, those effects can be seen as negligible based on regular use of the substance. When applying
<b>Eye Se</b> <b>25068-38-6 E</b> Damage/Irrita <b>74398-71-3 1</b> Damage/Irrita <b>67762-90-7 S</b> Damage/Irrita	erious Di Bisphenol- ation irritat The s 1, 2, 3-Prop ation (No Siloxanes ation slight non-i Trans eye b lowe	amage or Irritation A-(epichlorohydrin) epoxy resin ing (rabbit) substance caused eye irritation (Category 2A) based on the dermal effect to rabbit skin. banetriyl ester of 12-(oxiranylmethoxy)-9-octadecanoic acid data available) and Silicones, di-Me, reaction products with silica ily irrit. (Human) (Read across from CAS 63148-62-9) rritating (Primary irritation index=0) sient ocular irritation was observed in humans, rabbits, dogs, and monkeys after injection of the substance to the oodies. However, those effects can be seen as negligible based on regular use of the substance. When applyin r viscosity substance-oil mixture to human and rabbit eves, there was no cornea injury, but a delay of healing of the rest of the substance. When applyin r viscosity substance-oil mixture to human and rabbit eves, there was no cornea injury, but a delay of healing of the rest of the substance. When applyin r viscosity substance-oil mixture to human and rabbit eves.
redne Eye Se 25068-38-6 E Damage/Irrita 74398-71-3 1 Damage/Irrita 67762-90-7 S Damage/Irrita	erious Da Bisphenol- ation irritat The s 1, 2, 3-Prop ation (No Siloxanes ation slight non-i Tran eye t lowei evict	amage or Irritation A-(epichlorohydrin) epoxy resin ing (rabbit) substance caused eye irritation (Category 2A) based on the dermal effect to rabbit skin. banetriyl ester of 12-(oxiranylmethoxy)-9-octadecanoic acid data available) and Silicones, di-Me, reaction products with silica ity irrit. (Human) (Read across from CAS 63148-62-9) rritating (Primary irritation index=0) sient ocular irritation was observed in humans, rabbits, dogs, and monkeys after injection of the substance to the podies. However, those effects can be seen as negligible based on regular use of the substance. When applyin ' viscosity substance-oil mixture to human and rabbit eyes, there was no cornea injury, but a delay of healing of the ed corneal erosion observed. For safety reasons, the substance was classified as a slight eve irritant (Categories)
<b>Eye Se</b> <b>25068-38-6 E</b> Damage/Irrita <b>74398-71-3 1</b> Damage/Irrita <b>67762-90-7 S</b> Damage/Irrita	ation slight ation irritat The s <b>1, 2, 3-Prop</b> <b>ation</b> (No <b>Siloxanes</b> <b>ation</b> slight non-i Trans eye t lowel exist 28)	amage or Irritation A-(epichlorohydrin) epoxy resin ing (rabbit) substance caused eye irritation (Category 2A) based on the dermal effect to rabbit skin. banetriyl ester of 12-(oxiranylmethoxy)-9-octadecanoic acid data available) and Silicones, di-Me, reaction products with silica ily irrit. (Human) (Read across from CAS 63148-62-9) rritating (Primary irritation index=0) sient ocular irritation was observed in humans, rabbits, dogs, and monkeys after injection of the substance to the podies. However, those effects can be seen as negligible based on regular use of the substance. When applyin r viscosity substance-oil mixture to human and rabbit eyes, there was no cornea injury, but a delay of healing of the ed corneal erosion observed. For safety reasons, the substance was classified as a slight eye irritant (Categor)
<b>Eye Se</b> <b>25068-38-6 E</b> Damage/Irrita <b>74398-71-3 1</b> Damage/Irrita <b>67762-90-7 S</b> Damage/Irrita	erious Da Bisphenol- ation irritat The s 1, 2, 3-Prop ation (No Siloxanes ation slight non-i Trans eye t lowel exist 2B). Refe	amage or Irritation A-(epichlorohydrin) epoxy resin ing (rabbit) substance caused eye irritation (Category 2A) based on the dermal effect to rabbit skin. banetriyl ester of 12-(oxiranylmethoxy)-9-octadecanoic acid data available) and Silicones, di-Me, reaction products with silica ily irrit. (Human) (Read across from CAS 63148-62-9) rritating (Primary irritation index=0) sient ocular irritation was observed in humans, rabbits, dogs, and monkeys after injection of the substance to the oodies. However, those effects can be seen as negligible based on regular use of the substance. When applyin · viscosity substance-oil mixture to human and rabbit eyes, there was no cornea injury, but a delay of healing of the ed corneal erosion observed. For safety reasons, the substance was classified as a slight eye irritant (Categor rence: ACTOR (2011) and Cabot (M)SDS (2012).
Eye Se 25068-38-6 E Damage/Irrita 74398-71-3 1 Damage/Irrita 67762-90-7 S Damage/Irrita	erious Da Bisphenol- ation irritat The s 1, 2, 3-Prop ation (No Siloxanes ation slight non-i Trans eye b lowel exists 2B). Refer ential He	amage or Irritation A-(epichlorohydrin) epoxy resin ing (rabbit) substance caused eye irritation (Category 2A) based on the dermal effect to rabbit skin. banetriyl ester of 12-(oxiranylmethoxy)-9-octadecanoic acid data available) and Silicones, di-Me, reaction products with silica ily irrit. (Human) (Read across from CAS 63148-62-9) rritating (Primary irritation index=0) sient ocular irritation was observed in humans, rabbits, dogs, and monkeys after injection of the substance to the odies. However, those effects can be seen as negligible based on regular use of the substance. When applyin viscosity substance-oil mixture to human and rabbit eyes, there was no cornea injury, but a delay of healing of the ed corneal erosion observed. For safety reasons, the substance was classified as a slight eye irritant (Catego rence: ACToR (2011) and Cabot (M)SDS (2012). balth Effect(s):
Pote	erious Da Bisphenol- ation irritat The s 1, 2, 3-Prop ation (No Siloxanes ation slight non-i Trans eye t lowel exist 2B). Refer ential He	amage or Irritation A-(epichlorohydrin) epoxy resin ing (rabbit) substance caused eye irritation (Category 2A) based on the dermal effect to rabbit skin. banetriyl ester of 12-(oxiranylmethoxy)-9-octadecanoic acid data available) and Silicones, di-Me, reaction products with silica ily irrit. (Human) (Read across from CAS 63148-62-9) rritating (Primary irritation index=0) sient ocular irritation was observed in humans, rabbits, dogs, and monkeys after injection of the substance to the bodies. However, those effects can be seen as negligible based on regular use of the substance. When applyin ' viscosity substance-oil mixture to human and rabbit eyes, there was no cornea injury, but a delay of healing of the ed corneal erosion observed. For safety reasons, the substance was classified as a slight eye irritant (Categor rence: ACToR (2011) and Cabot (M)SDS (2012). Palth Effect(s): eve irritation
Pedre Eye Se 25068-38-6 E Damage/Irrita 74398-71-3 1 Damage/Irrita 67762-90-7 S Damage/Irrita Pamage/Irrita	erious Da Bisphenol- ation irritat The s 1, 2, 3-Prop ation (No Siloxanes ation slight non-i Trans eye b lowe exist 2B). Refer eential He ses serious	A-(epichlorohydrin) epoxy resin ing (rabbit) substance caused eye irritation (Category 2A) based on the dermal effect to rabbit skin. banetriyl ester of 12-(oxiranylmethoxy)-9-octadecanoic acid data available) and Silicones, di-Me, reaction products with silica Ily irrit. (Human) (Read across from CAS 63148-62-9) rritating (Primary irritation index=0) sient ocular irritation was observed in humans, rabbits, dogs, and monkeys after injection of the substance to the bodies. However, those effects can be seen as negligible based on regular use of the substance. When applyin ' viscosity substance-oil mixture to human and rabbit eyes, there was no cornea injury, but a delay of healing of the ed corneal erosion observed. For safety reasons, the substance was classified as a slight eye irritant (Categor rence: ACToR (2011) and Cabot (M)SDS (2012). Palth Effect(s): eye irritation. eye may cause:
Pote Causs C	erious Da Bisphenol- ation irritat The s 1, 2, 3-Prop ation (No Siloxanes ation slight non-i Trans eye b lowe exist 2B). Refer ential He ses serious ntact with e ess and pa	Ar-(epichlorohydrin) epoxy resin ing (rabbit) substance caused eye irritation (Category 2A) based on the dermal effect to rabbit skin. banetriyl ester of 12-(oxiranylmethoxy)-9-octadecanoic acid data available) and Silicones, di-Me, reaction products with silica ily irrit. (Human) (Read across from CAS 63148-62-9) rritating (Primary irritation index=0) sient ocular irritation was observed in humans, rabbits, dogs, and monkeys after injection of the substance to the oodies. However, those effects can be seen as negligible based on regular use of the substance. When applyin r viscosity substance-oil mixture to human and rabbit eyes, there was no cornea injury, but a delay of healing of the ed corneal erosion observed. For safety reasons, the substance was classified as a slight eye irritant (Categor rence: ACToR (2011) and Cabot (M)SDS (2012). ealth Effect(s): eye irritation. eye, may cause: in
Pote Caus Caus Caus Caus Caus Caus Caus Caus	erious Da Bisphenol- ation irritat The s 1, 2, 3-Prop ation (No Siloxanes ation slight non-i Trans eye k lowe sist 2B). Refer ential He ess serious ntact with a	Are a construction and the second sec
Pedre Eye Se 25068-38-6 E Damage/Irrita 74398-71-3 1 Damage/Irrita 67762-90-7 S Damage/Irrita 67762-90-7 S Damage/Irrita 67762-90-7 S Causs In con redne Respire	erious Da Bisphenol- ation irritat The s 1, 2, 3-Prop ation (No Siloxanes ation slight non-i Trans eye t lowel exist 2B). Refer ential He ess serious ntact with e ess and pa	Ar-(epichlorohydrin) epoxy resin ing (rabbit) substance caused eye irritation (Category 2A) based on the dermal effect to rabbit skin. banetriyl ester of 12-(oxiranyImethoxy)-9-octadecanoic acid data available) and Silicones, di-Me, reaction products with silica Ily irrit. (Human) (Read across from CAS 63148-62-9) rritating (Primary irritation index=0) sient ocular irritation was observed in humans, rabbits, dogs, and monkeys after injection of the substance to the podies. However, those effects can be seen as negligible based on regular use of the substance. When applyi viscosity substance-oil mixture to human and rabbit eyes, there was no cornea injury, but a delay of healing of t ed corneal erosion observed. For safety reasons, the substance was classified as a slight eye irritant (Categor rence: ACTOR (2011) and Cabot (M)SDS (2012). <b>balth Effect(s):</b> eye irritation. eye, may cause: in <b>Skin Sensitization</b>
Pote Eye Se 25068-38-6 E Damage/Irrita 74398-71-3 1 Damage/Irrita 67762-90-7 S Damage/Irrita 67762-90-7 S Causs In con redme 25068-38-6 E	erious Da Bisphenol- ation irritat The s 1, 2, 3-Prop ation (No Siloxanes ation slight non-i Trans eye t lowel exist 2B). Refe ential He ess serious entact with e ess and pa fatory or Bisphenol-	amage or Irritation         A-(epichlorohydrin) epoxy resin         ing (rabbit)         substance caused eye irritation (Category 2A) based on the dermal effect to rabbit skin.         banetriyl ester of 12-(oxiranylmethoxy)-9-octadecanoic acid         data available)         and Silicones, di-Me, reaction products with silica         i/y irrit. (Human) (Read across from CAS 63148-62-9)         rittating (Primary irritation index=0)         sient ocular irritation was observed in humans, rabbits, dogs, and monkeys after injection of the substance to the odies. However, those effects can be seen as negligible based on regular use of the substance. When applyin viscosity substance-oil mixture to human and rabbit eyes, there was no cornea injury, but a delay of healing of the edit corneal erosion observed. For safety reasons, the substance was classified as a slight eye irritant (Categor rence: ACToR (2011) and Cabot (M)SDS (2012).         ealth Effect(s):         eye irritation.         eye, may cause:         in         Skin Sensitization         A-(epichlorohydrin) epoxy resin
Pote Eye Se 25068-38-6 E Damage/Irrita 74398-71-3 1 Damage/Irrita 67762-90-7 S Damage/Irrita 0762-90-7 S Damage/Irrita 0762-90-7 S Damage/Irrita 0762-90-7 S Damage/Irrita 0762-90-7 S Damage/Irrita 0762-90-7 S Damage/Irrita 0762-90-7 S 0762-90-7 S 07762-90-7 S 0762-90-7	erious Da Bisphenol- ation irritat The s 1, 2, 3-Prop ation (No Siloxanes ation slight non-i Trans eye b lowe siste 2B). Refer exist 2B). Refer exist 2B). Refer exist ation slight non-i Trans eye b lowe exist 2B). Refer exist ation slight non-i Trans eye b lowe exist ation slight non-i Bisphenol- Skin	A-(epichlorohydrin) epoxy resin ing (rabbit) substance caused eye irritation (Category 2A) based on the dermal effect to rabbit skin. banetriyl ester of 12-(oxiranylmethoxy)-9-octadecanoic acid data available) and Silicones, di-Me, reaction products with silica ily irrit. (Human) (Read across from CAS 63148-62-9) rritating (Primary irritation index=0) sient ocular irritation was observed in humans, rabbits, dogs, and monkeys after injection of the substance to the bodies. However, those effects can be seen as negligible based on regular use of the substance. When applyin viscosity substance-oil mixture to human and rabbit eyes, there was no cornea injury, but a delay of healing of the ed corneal erosion observed. For safety reasons, the substance was classified as a slight eye irritant (Catego rence: ACToR (2011) and Cabot (M)SDS (2012). Palth Effect(s): eye irritation. eye, may cause: in Skin Sensitization A-(epichlorohydrin) epoxy resin sensitizing (Human)
Pedre Eye Se 25068-38-6 E Damage/Irrita 74398-71-3 1 Damage/Irrita 67762-90-7 S Damage/Irrita Damage/Irrita Caus In courced Respire 25068-38-6 E Sensitization	science of the parent of the p	A-(epichlorohydrin) epoxy resin ing (rabbit) substance caused eye irritation (Category 2A) based on the dermal effect to rabbit skin. banetriyl ester of 12-(oxiranylmethoxy)-9-octadecanoic acid data available) and Silicones, di-Me, reaction products with silica ily irrit. (Human) (Read across from CAS 63148-62-9) ritritating (Primary irritation index=0) sient ocular irritation was observed in humans, rabbits, dogs, and monkeys after injection of the substance to the rot ocular irritation was observed in humans, rabbits, dogs, and monkeys after injection of the substance. When applyin viscosity substance-oil mixture to human and rabbit eyes, there was no cornea injury, but a delay of healing of the ed corneal erosion observed. For safety reasons, the substance was classified as a slight eye irritant (Categor rence: ACToR (2011) and Cabot (M)SDS (2012). bealth Effect(s): eye irritation. eye, may cause: in Skin Sensitization A-(epichlorohydrin) epoxy resin sensitizing (Human) Based on positive results from skin sensitization tests on human volunteers and guinea pigs, GHS-J classified
Pote Sensitization	erious Da Bisphenol- ation irritat The s 1, 2, 3-Prop ation (No Siloxanes ation slight non-i Tran eye k lowei exist 2B). Refei ential He ses serious ntact with a ess and pa ratory or Bisphenol- Skin	amage or Irritation         A-(epichlorohydrin) epoxy resin         ing (rabbit)         substance caused eye irritation (Category 2A) based on the dermal effect to rabbit skin.         sanetriyl ester of 12-(oxiranylmethoxy)-9-octadecanoic acid         data available)         and Silicones, di-Me, reaction products with silica         riv irrit. (Human) (Read across from CAS 63148-62-9)         rritation (Primary irritation index=0)         sient ocular irritation was observed in humans, rabbits, dogs, and monkeys after injection of the substance to the ordies. However, those effects can be seen as negligible based on regular use of the substance. When applyin viscosity substance-oil mixture to human and rabbit eyes, there was no cornea injury, but a delay of healing of the decorneal erosion observed. For safety reasons, the substance was classified as a slight eye irritant (Categor rence: ACToR (2011) and Cabot (M)SDS (2012).         explicit Effect(s):         eye irritation.         aye, may cause:         in         Stin Sensitization         A-(epichlorohydrin) epoxy resin         sensitizing (Human)         Based on positive results from skin sensitization tests on human volunteers and guinea pigs, GHS-J classific the substance as a dermal sensitizer.
Pote Eye Se 25068-38-6 E Damage/Irrita 74398-71-3 1 Damage/Irrita 67762-90-7 S Damage/Irrita 67762-90-7 S Damage/Irrita 77762-90-7 S Damage/Irrita 77	erious Da Bisphenol- ation irritat The s 1, 2, 3-Prop ation (No Siloxanes ation slight non-i Tran- eye t lowei exista 2B). Refea ential He ess serious ntact with o ess and pa fatory or Bisphenol- Skin	A-(epichlorohydrin) epoxy resin ing (rabbit) substance caused eye irritation (Category 2A) based on the dermal effect to rabbit skin. banetriyl ester of 12-(oxiranyImethoxy)-9-octadecanoic acid data available) and Silicones, di-Me, reaction products with silica ty irrit. (Human) (Read across from CAS 63148-62-9) rritating (Primary irritation index=0) sient ocular irritation was observed in humans, rabbits, dogs, and monkeys after injection of the substance to the bodies. However, those effects can be seen as negligible based on regular use of the substance. When applyin viscosity substance-oil mixture to human and rabbit eyes, there was no cornea injury, but a delay of healing of th ed corneal erosion observed. For safety reasons, the substance was classified as a slight eye irritant (Catego rence: ACToR (2011) and Cabot (M)SDS (2012). <b>ealth Effect(s):</b> eye irritation. aye, may cause: in <b>Skin Sensitization</b> <b>A-(epichlorohydrin) epoxy resin</b> sensitizing (Human) Based on positive results from skin sensitization tests on human volunteers and guinea pigs, GHS-J classified the substance cale shift exist. (2006).
Pote Eye Se 25068-38-6 E Damage/Irrita 74398-71-3 1 Damage/Irrita 67762-90-7 S Damage/Irrita 67762-90-7 S Damage/Irrita 77762-90-7 S Damage/Irrita 77	erious Da Bisphenol- ation irritat The s 1, 2, 3-Prop ation (No Siloxanes ation slight non-i Tran- eye t lowei exista 2B). Refe ential He ess serious ntact with e ess and pa atory or Bisphenol- Skin Respirato	anage or Irritation A-(epichlorohydrin) epoxy resin ing (rabbit) substance caused eye irritation (Category 2A) based on the dermal effect to rabbit skin. banetriyl ester of 12-(oxiranylmethoxy)-9-octadecanoic acid data available) and Silicones, di-Me, reaction products with silica I/y irrit. (Human) (Read across from CAS 63148-62-9) rritating (Primary irritation index=0) sient ocular irritation was observed in humans, rabbits, dogs, and monkeys after injection of the substance to the bodies. However, those effects can be seen as negligible based on regular use of the substance. When applyin viscosity substance-oil mixture to human and rabbit eyes, there was no cornea injury, but a delay of healing of th ed corneal erosion observed. For safety reasons, the substance was classified as a slight eye irritant (Catego rence: ACToR (2011) and Cabot (M)SDS (2012). balth Effect(s): eye irritation. eye, may cause: in Skin Sensitization A-(epichlorohydrin) epoxy resin sensitizing (Human) Based on positive results from skin sensitization tests on human volunteers and guinea pigs, GHS-J classified the substance as a dermal sensitizer. Reference: GHS-J (2006). ry (No data available)
Pote Eye Se 25068-38-6 E Damage/Irrita 74398-71-3 1 Damage/Irrita 67762-90-7 S Damage/Irrita Damage/Irrita Example Caus In con reduce Respira 25068-38-6 E Sensitization	erious Da Bisphenol- ation irritat The s 1, 2, 3-Prop ation (No Siloxanes ation slight non-i Trans eye t lower exist 2B). Refer ential He ses serious ntact with e ess and pa atory or Bisphenol- Skin Respirato	anage or Irritation A-(epichlorohydrin) epoxy resin ing (rabbit) substance caused eye irritation (Category 2A) based on the dermal effect to rabbit skin. banetriyl ester of 12-(oxiranylmethoxy)-9-octadecanoic acid data available) and Silicones, di-Me, reaction products with silica ity irrit. (Human) (Read across from CAS 63148-62-9) ritating (Primary irritation index=0) sient ocular irritation was observed in humans, rabbits, dogs, and monkeys after injection of the substance to the ordies. However, those effects can be seen as negligible based on regular use of the substance. When applyi viscosity substance-oil mixture to human and rabbit eyes, there was no cornea injury, but a delay of healing of ti ed corneal erosion observed. For safety reasons, the substance was classified as a slight eye irritatin (Categor rence: ACToR (2011) and Cabot (M)SDS (2012). balth Effect(s): eye, irritation. eye, may cause: in Skin Sensitization A-(epichlorohydrin) epoxy resin sensitizing (Human) Based on positive results from skin sensitization tests on human volunteers and guinea pigs, GHS-J classifie the substance as a dermal sensitizer. Reference: GHS-J (2006). ry (No data available)



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74398-71-3 1	. 2. 3-Propa	Contd. of page (Contd. of page
Sensitization	, <u>_</u> , <u>o</u> r ropa Skin	sensitizing (Test species: n/a)
Certonization	Chan	Based on manufacturer's test result, the substance was a skin sensitizer, and the sensitization can be severe
		susceptible individuals.
		Reference: Hexion (M)SDS (2003).
	Respiratorv	(No data available)
67762-90-7 S	Siloxanes an	d Silicones, di-Me, reaction products with silica
Sensitization	Skin	(No data available)
		Primary irritation index=0 Non-irritating. Cabot MSDS (2012)
	Respiratory	(No data available)
·Pot	ential Hea	Ith Effect(s):
Mav	cause an alle	raic skin reaction
No re	elevant inform	ation for respiratory sensitization: classification is not possible.
0.5/	IA-Ca (Oc	cupational Safety & Health Administration)
None of the i	naredients is	listed
Germ	Jell Mutag	<i>lenicity</i>
25068-38-6 E	Bisphenol-A-	(epichlorohydrin) epoxy resin
Mutagenicity	positive (Ch	inese hamster lung fibroblast cells) (In Vitro (Chromosomal Aberration))
	In Vitro (Ch	romosomal Aberration; Chinese hamster lung fibroblast cells) - Positive without metabolic activation; nega
	with metabo	lic activation. Increase in the interview of the Viter (American activity) Due to the character from the Viter to the it was not no characteristic to me
	Positive (sai	monella typnimullum) (in vitro (Ames assay)). Due to the absence from in vivo tests, it was not possible to ma of mutaganisity of the substances
	a conclusion Reference	I of indiagenicity of the substance.
74398-71-3 1	2 3-Prona	netrivl ester of 12-(oxiranylmethoxy)-9-octadecanoic acid
Mutagenicity	(No data av	railable)
67762-90-7 5	iloxanes an	d Silicones, di-Me, reaction products with silica
Mutagenicity	negative (Cl	ninese Hamster) (// Vitro (AMES Test))
watagementy	negative (Cl	inices Hamster) (In Vino (Chronosomal aberration in ovary cells))
	Reference:	Cabot (M)SDS (2012).
·Pot	ential Hea	Ith Effect(s): No further relevant information: classification is not possible.
Carcin	oaenicitv	
25068-38-6 F	Bisnhenol-A.	(enichlorohydrin) epoxy resin
Carcinogenic	ity negative	(Test species: n/a) (Not listed by ACGIH_IARC_NTP_or OSHA)
Carcinogenie	(Mouse)	
	1 out of	4 cases with female mice showed positive carcinogenic results after a repeated dermal application with 1
	concentra	ation of the substance for two years. When considering all of the evidence, the substance was not classified a
	carcinoge	en.
	Referenc	e: Dow (M)SDS (2010).
74398-71-3 1	, 2, 3-Propa	netriyl ester of 12-(oxiranylmethoxy)-9-octadecanoic acid
Carcinogenic	ity negative	(Test species: n/a) (not listed as a Carcinogen by NTP, IARC or OSHA)
67762-90-7 S	Siloxanes an	d Silicones, di-Me, reaction products with silica
Carcinogenic	ity (Test spe	ecies: n/a) (Not listed by IARC, NTP, OSHA or ACGIH)
· Pot	ential Hea	Ith Effect(s): Not a known Carcinogen.
Reproc	ductive To	xicity
25068-38-6 E	Bisphenol-A-	(epichlorohydrin) epoxy resin
Reproductive	Toxi. negat	ive (Test species: n/a) (no reproductive or developmental effect observed)
- <b>,</b>	There Refer	was no reproductive or developmental effect observed at dosing levels that were toxic to parental animals. ence: GHS-J (2006).
74200 74 2 4	, 2, 3-Propa	netriyl ester of 12-(oxiranylmethoxy)-9-octadecanoic acid
14390-11-3 1	Toxi. (No a	lata available)
Reproductive		
Reproductive	Siloxanes an	d Silicones, di-Me, reaction products with silica
Reproductive	Siloxanes an	d Silicones, di-Me, reaction products with silica lata available)



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	(Conta of page
· Specific T	arget Organ Toxicity - Single Exposure
25068-38-6 Bisp	henol-A-(epichlorohydrin) epoxy resin
STOT-Single	Target: None (Rats and Mice) (No effect after single oral doses) Somnolence (general depressed activity) and dyspnea were observed after a single oral application with 114 mg/kg to rats, or 15600 mg/kg to mice of the substance. However, the dose levels were both outside of to guidance value ranges. Reference: NLM Toxnet (2010).
74398-71-3 1, 2,	3-Propanetriyl ester of 12-(oxiranylmethoxy)-9-octadecanoic acid
STOT-Single	(No data available)
67762-90-7 Silox	anes and Silicones, di-Me, reaction products with silica
STOT-Single (dyr	namic) (No data available)
Potenti	al Health Effect(s): Not a known hazard to organs upon single exposure.
Specific T	arget Organ Toxicity - Repeated Exposure
25068-38-6 Bisp	henol-A-(epichlorohydrin) epoxy resin
	dehydrogenase (LDH), and decreased leucylnaphthylamidase (LNA) were observed in the test animals. Meanwhile, ti substance caused a toxic effect on blood components of female guinea-pigs with greater effects on pregnant anima However, there was no detail available regarding the dose level or test guideline, classification was thus not possible. Reference: HSNO CCID (2010).
74398-71-3 1, 2,	3-Propanetriyl ester of 12-(oxiranylmethoxy)-9-octadecanoic acid
STOT-Repeated	(No data available)
67762-90-7 Silox	anes and Silicones, di-Me, reaction products with silica
STOT-Repeated	(No data available)
<sup>•</sup> Potenti	al Health Effect(s): No further relevant information; classification is not possible.
Aspiration	Hazard
25068-38-6 Bisp	henol-A-(epichlorohydrin) epoxy resin
Aspiration Hazard	(No data available)
74398-71-3 1, 2,	3-Propanetriyl ester of 12-(oxiranylmethoxy)-9-octadecanoic acid
Aspiration Hazard	(No data available)
	anes and Silicones, di-Me, reaction products with silica
67762-90-7 Silox	
Aspiration Hazard	(No data available)

#### **12 Ecological information** Aquatic Environmental Toxicity 25068-38-6 Bisphenol-A-(epichlorohydrin) epoxy resin Algae Toxicity (No data available) Crustacean Toxicity 1.4 - 1.7 mg/l (Daphnia magna (water flea)) (EC50 (48 hrs)) Fish Toxicity 1.41 mg/l (Oryzias latipes (Rice fish)) (LC50 (96 hrs)) 3.1 mg/l (Pimephales promelas (fathead minnow)) (LC50 (96 hrs)) Based on the non-rapid degradability and the acute LC50 < 10 mg/L, the substance is classified as a Chronic-2 environmental hazard. Reference: Dow (M)SDS (2010) and CHRIP (2010). 74398-71-3 1, 2, 3-Propanetriyl ester of 12-(oxiranylmethoxy)-9-octadecanoic acid Algae Toxicity (No data available) Crustacean Toxicity (No data available) Fish Toxicity (No data available) 67762-90-7 Siloxanes and Silicones, di-Me, reaction products with silica Algae Toxicity > 10000 mg/l (Scenedesmus subspicatus) (ErC50 (24 hrs), OECD 201) (Contd. on page 11) US



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Crustace	an Tovicit	V > 1000 ma/l (Dephnia magna (water flea)) (EC50 (24 hrs) OECD 202) (Contd. of page
Eich Tox		$\gamma = 1000$ mg// Eaphning magna (watch near) (ECO) (2 mg, CEO) 202)
	icity	2 Force (Captor (MSDS (2012)) Reference: Captor (MSDS (2012))
· Aau	uatic En	vironmontal Taxiaity Assassment: Taxia ta anyatia life with lang lasting affecta
Ayu		
Degrad	dability	and Stability
25068-38	8-6 Bisphe	enol-A-(epichlorohydrin) epoxy resin
Biodegra	adation	non-biodegrad. (Test species: n/a) (Biodegradation (OECD TG 302B; 28 days) = 12%) (Activated Sludge) (OECD TG 301C; 4 weeks; Conc. 100 mg/L) Biodegradation (Indirect Analysis from BOD) = 0% Biodegradation (Direct Analysis from HPLC) = 0% The substance is non-biodegradable
Darsistar	nce	Reference: Dow (M)SDS (2010) and CHRIP (2010). (Test species: n(a) (This substance is persistent)
Plastada		Reference: Canada DSL (2007) and CHRIP (2010).
Photodeg	gradation	6.69E-11 cm²/molecule-sec (OH radical) (Hair-life (11/2) = 1.92 hrs) However, photolysis in water is negligible. Reference: Dow (M)SDS (2010).
Stability i	in water	(No data available)
74398-7	1-3 1, 2, 3	Propanetriyl ester of 12-(oxiranylmethoxy)-9-octadecanoic acid
Biodegra	adation	non-biodegrad. (Test species: n/a) (Non-biodegradable due to persistent property) Based on the persistent assessment according to Canada DSL, the substance is expected to be non-degradable in t environment.
Persister	nce	(Test species: n/a) (The substance is persistent) Reference: Canada DSL (2007).
Photodeg	gradation	(No data available)
Stability i	in water	(No data available)
67762-90	0-7 Siloxa	nes and Silicones, di-Me, reaction products with silica
Biodegra	adation	(No data available)
Persister	nce	(Test species: n/a) (The substance is not persistent) Reference: Canada DSL (2007).
Photodeg	gradation	(No data available)
Stability i	in water	(No data available)
Rinaco	rumulat	ion and Distribution
25069 20		
20000-30	o-o Bisprie	mora-(epicinoronyanii) epoxy resin Oreinerenenii (CTte or kereneni kereneni kina energia kina)
BCF	0.56-42 (0 BCF (28 0 BCF (28 0 Reference	_yprinus carpio) (The substance is low-bioaccumulative) days; Concentration: 10 μg/L) = 0.56 - 0.67, 3.3 - 4.2 days; Concentration: 1 μg/L) = 5.6 - 6.8, 33 - 42 e: CHRIP (2010).
Кос	1800 - 44 Potential Reference	00 L/kg (soil) for mobility in soil is moderate. e: Dow (M)SDS (2010).
LogPow	3.7 - 3.9 ( Reference	'Test species: n/a) e: Dow (M)SDS (2010).
74398-7	1-3 1, 2, 3	Propanetriyl ester of 12-(oxiranylmethoxy)-9-octadecanoic acid
BCF	(Test spe Reference	cies: n/a) (The substance is not bioaccumulative) e: Canada DSL (2007).
	(No data	available)
Кос	(No data	available)
Koc LogPow	(110 uala	noo and Cilicanaa di Ma waatian nyaduuta with ailian
Koc LogPow <b>67762-9</b> 0	0-7 Siloxa	nes and Silicones, di-we, reaction products with silica
Koc LogPow 67762-90 BCF	(No data 0-7 Siloxa (No data Reference	available) (The substance is not bioaccumulative) 3: Canada DSL CCR (2011).
Koc LogPow <b>67762-90</b> BCF Koc	(No data 0-7 Siloxa (No data Reference (No data	available) (The substance is not bioaccumulative) e: Canada DSL CCR (2011). available)
Koc LogPow <b>67762-90</b> BCF Koc LogPow	(No data 0-7 Siloxa (No data Reference (No data (No data	available) (The substance is not bioaccumulative) e: Canada DSL CCR (2011). available) available)



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\* Additional Information No further relevant information.

### **13 Disposal considerations**

#### <sup>•</sup> Hazardous Waste List

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

#### 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.

#### <sup>•</sup> Unused and Uncontaminated Packagings

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

4 Transport information	
UN-Number	11/12082
DOT, ADR, IMDG, IATA	UN3082
UN Proper Shipping Name DOT, ADR, IMDG, IATA	Environmentally hazardous substances, liquid, n.o.s. (Bisphenol-A (epichlorohydrin) epoxy resin)
Transport hazard class(es)	
DOT, IMDG, IATA	
<sup>·</sup> Class · Label	9 Miscellaneous dangerous substances and articles 9
ADR	
Class	9 (M6) Miscellaneous dangerous substances and articles
<sup>-</sup> Label	9
Packing group	
DOŤ, ĂDR, IMDG, IATA	III
Environmental Hazards:	
Marine Pollutant:	Yes Symbol (fish and tree)
<sup>·</sup> Special Marking (ADR):	Symbol (fish and tree)
Special Marking (IATÁ):	Symbol (fish and tree)
Special Precautions:	Warning: Miscellaneous dangerous substances and articles
Danger Code (Kemler):	90



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EMS Number:	F-A,S-F
<ul> <li>Transport in Bulk according to Annex MARPOL73/78 and the IBC Code</li> </ul>	<i>II of</i> Not applicable.
Transport/Additional Information:	
DOT	
<sup>•</sup> Quantity limitations	On passenger aircraft/rail: No limit On cargo aircraft only: No limit
Remarks:	Special marking with the symbol (fish and tree).
ADR	
• Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· IMDG	
<ul> <li>Limited quantities (LQ)</li> </ul>	5L
Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
UN "Model Regulation":	UN3082, Environmentally hazardous substances, liquid, n.o.s. (Bisphenol- (epichlorohydrin) epoxy resin), 9, III

Section 302 (Extremely Hazardous Substances)	
None of the ingredients is listed.	
Section 313 (Toxics Release Inventory (TRI) reporting)	
None of the ingredients is listed.	
Section 311/312 (Hazardous Chemical Inventory Reporting)	
25068-38-6 Bisphenol-A-(epichlorohydrin) epoxy resin	A, C 70-80
74398-71-3 1, 2, 3-Propanetriyl ester of 12-(oxiranylmethoxy)-9-octadecanoic acid	A, C 10-20
1333-86-4 Carbon black	A, C 0.1-<1
2530-83-8 Glycidyloxypropyltrimethoxysilane	A, C 0.1-<1
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)	
TSCA (Toxic Substances Control Act) 25068-38-6 Bisphenol-A-(epichlorohydrin) epoxy resin	
TSCA (Toxic Substances Control Act)         25068-38-6       Bisphenol-A-(epichlorohydrin) epoxy resin         74398-71-3       1, 2, 3-Propanetriyl ester of 12-(oxiranylmethoxy)-9-octadecanoic acid	
TSCA (Toxic Substances Control Act)         25068-38-6       Bisphenol-A-(epichlorohydrin) epoxy resin         74398-71-3       1, 2, 3-Propanetriyl ester of 12-(oxiranylmethoxy)-9-octadecanoic acid         67762-90-7       Siloxanes and Silicones, di-Me, reaction products with silica	
TSCA (Toxic Substances Control Act)         25068-38-6       Bisphenol-A-(epichlorohydrin) epoxy resin         74398-71-3       1, 2, 3-Propanetriyl ester of 12-(oxiranylmethoxy)-9-octadecanoic acid         67762-90-7       Siloxanes and Silicones, di-Me, reaction products with silica         1333-86-4       Carbon black	



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· Pro	oposition 65
	Chemicals Known to Cause Cancer
1333-86-4	Carbon black
•	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	
67-56-1 Me	thanol
Carcinogenic Categories	
•	EPA (Environmental Protection Agency)
None of the	ingredients is listed.
IARC (International Agency for Research on Cancer)	
None of the	ingredients is listed.
	NTP (National Toxicology Program)
None of the	ingredients is listed.
	TLV (Threshold Limit Value Established by ACGIH)
1333-86-4	Carbon black
	NIOSH-Ca (National Institute for Occupational Safety and Health)
None of the	ingredients is listed.
International Regulation Lists	
Canadian Domestic Substance Listings	
25068-38-6	Bisphenol-A-(epichlorohydrin) epoxy resin
74398-71-3	1, 2, 3-Propanetriyl ester of 12-(oxiranylmethoxy)-9-octadecanoic acid
67762-90-7	Siloxanes and Silicones, di-Me, reaction products with silica
1333-86-4	Carbon black
2530-83-8	Glycidyloxypropyltrimethoxysilane
Canadian Ingredient Disclosure list (limit 0.1%)	
None of the ingredients is listed.	
· Ca	nadian Ingredient Disclosure list (limit 1%)
67762-90-7	Siloxanes and Silicones, di-Me, reaction products with silica
	Chinese Chemical Inventory of Existing Chemical Substances:
25068-38-6	Bisphenol-A-(epichlorohydrin) epoxy resin
74398-71-3	1, 2, 3-Propanetriyl ester of 12-(oxiranylmethoxy)-9-octadecanoic acid
67762-90-7	Siloxanes and Silicones, di-Me, reaction products with silica
1333-86-4	Carbon black
2530-83-8	Glycidyloxypropyltrimethoxysilane
Japanese Existing and New Chemical Substance List:	
25068-38-6	Bisphenol-A-(epichlorohydrin) epoxy resin
67762-90-7	Siloxanes and Silicones, di-Me, reaction products with silica
1333-86-4 2530_83_8	Carbon Diack
25069 29 6	NOTEAN EXISTING CHEMICAL INVENTORY:
20000-30-0 74398-71-3	1.2.3-Propagetrivlester of 12-(oxiranylmethoxy)-9-octadecanoic acid
67762-90-7	Siloxanes and Silicones, di-Me, reaction products with silica
1333-86-4	Carbon black



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25068-38-6 Bisphenol-A-(epichlorohydrin) epoxy resin

- 74398-71-3 1, 2, 3-Propanetriyl ester of 12-(oxiranylmethoxy)-9-octadecanoic acid
- 67762-90-7 Siloxanes and Silicones, di-Me, reaction products with silica
- 1333-86-4 Carbon black
- 2530-83-8 Glycidyloxypropyltrimethoxysilane

#### 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 ACTOR: US EPA Aggregated Computational Toxicology Resource ADR: European Agreement Concerning the International Carriage of Dangerous Goods by Road BCF: Bioconcentration Factor CAS: Chemical Abstracts Service (division of the American Chemical Society) 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 DOT: US Department of Transportation DSL: Canada Domestic Substance List ESIS: European Chemical Substances Information System HMIS: US National Paint & Coatings Association (NPCA) Hazardous Materials Identification System HSDB: US NLM TOXNET Hazardous Substances Databank HSNO CCID: New Zealand Hazardous Substances and New Organisms Chemical Classification Information Database IARC: International Agency for Research on Cancer developed by United Nations World Health Organisation (WHO) IATA-DGR: Dangerous Goods Regulations (DGR) by the International Air Transport Association (IATA) ICAO-TI: Technical Instructions (TI) by the International Civil Aviation Organization (ICAO) ICSC: International Chemical Safety Cards 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) Koc: Partition coefficient, soil Organic Carbon to water 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 NITE: National Institute of Technology and Evaluation, Japan OECD: Organisation for Economic Co-operation and Development 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 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 SARA: US Superfund Amendments and Reauthorization Act SIDS: OECD existing chemicals Screening Information Data Sets (Contd. on page 16)

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SVHC: EU ECHA Substance of Very High Concern

TEEL: Temporary Emergency Exposure Limit developed by US Subcommittee on Consequence Assessment and Protective Actions (SCAPA) of US Department of Energy (DOE) TOXLINE: US NLM bibliographic database search system TSCA: US Toxic Substance Control Act

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