

Safety Data Sheet
acc. to OSHA HCS

Print Date 05/14/2015

Revision Date 05/14/2015

Product Identifier

Trade Name: EP962

Application of the Substance or Mixture: One part, heat cured epoxy adhesive

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

Manufacturer or Supplier:

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

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

Emergency Telephone Number:

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

2 Hazard(s) identification

Hazard Classification



GHS09 Environment

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



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.

Label Elements

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

Pictogram(s)



GHS07 GHS09

Signal Word Warning

Hazard-determining Component(s)

Bisphenol-A-(epichlorohydrin) epoxy resin

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.
If eye irritation persists: Get medical advice/attention.

(Contd. on page 2)

Safety Data Sheet

acc. to OSHA HCS

Print Date 05/14/2015

Revision Date 05/14/2015

Trade Name: EP962

(Contd. of page 1)

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)



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

HMIS System

HMIS Ratings (scale 0 - 4)



Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

3 Composition/information on ingredients

Chemical Characterization: Mixtures

Composition/Information on Ingredients

CAS: 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	50-60%
CAS: 67762-90-7 EC number: 614-122-2	Siloxanes and Silicones, di-Me, reaction products with silica	2.5-5%
CAS: 101-42-8 EINECS: 202-941-4	Fenuron ⚠ Aquatic Chronic 2, H411 ⚠ Aquatic Acute 2, H401	1-2.5%
CAS: 14808-60-7 EINECS: 238-878-4 RTECS: VV 7330000	Quartz ⚠ Carc. 2, H351	0-<0.1%
CAS: 1333-86-4 EINECS: 215-609-9 RTECS: FF5800000	Carbon black	0-<0.1%

Classification System:

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

US
(Contd. on page 3)

Safety Data Sheet acc. to OSHA HCS

Print Date 05/14/2015

Revision Date 05/14/2015

Trade Name: EP962

(Contd. of page 2)

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

Extinguishing Media

Suitable Extinguishing Agent(s)

Use fire fighting measures and extinguishing agents that suit the environment.
In case of fire, suitable extinguishing agents are:
Alcohol resistant foam.
Dry chemical or fire-extinguishing powder.
Carbon dioxide (CO₂).
Water spray or water fog.

Unsuitable Extinguishing Agent(s) 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.

(Contd. on page 4)

Safety Data Sheet acc. to OSHA HCS

Print Date 05/14/2015

Revision Date 05/14/2015

Trade Name: EP962

(Contd. of page 3)

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:

Formaldehyde, a skin and lung sensitizer and a regulated carcinogen, may be formed during fires.

Carbon dioxide (CO₂) and Carbon monoxide (CO)

Nitrogen oxides

Titanium oxides

Aluminum oxide (Al₂O₃) dust, a serious respiratory irritant, may be formed during fires.

Iron oxides

Silicon oxide (SiO₂)

Advice for Firefighters

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

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

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

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.

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.

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.

(Contd. on page 5)

Safety Data Sheet

acc. to OSHA HCS

Print Date 05/14/2015

Revision Date 05/14/2015

Trade Name: EP962

(Contd. of page 4)

Keep away from heat, sparks, open flame and other ignition sources during handling.

Storage
Requirements to be Met by Storerooms and Receptacles

Store in a well-ventilated place; provide ventilation for receptacles.

Keep stored in accordance with local, regional, national, and international regulations.

Information about Storage in One Common Storage Facility

Store away from incompatible material(s).

Store away from foodstuffs.

Avoid release to the environment.

Additional Information No further relevant information.

8 Exposure controls/personal protection

Engineering Measures or Controls
Exposure Limit Values that Require Monitoring at the Workplace
67762-90-7 Siloxanes and Silicones, di-Me, reaction products with silica

OSHA PEL Short-term value: 15 mg/m³

US ACGIH Short-term value: 10 mg/m³

101-42-8 Fenuron

ACGIH Short-term value: 10 mg/m³
10mg/m³ inhalable and 3mg/m³ respirable

14808-60-7 Quartz

PEL see Quartz listing

REL Long-term value: 0.05* mg/m³
*respirable dust; See Pocket Guide App. A

TLV Long-term value: 0.025* mg/m³
*as respirable fraction

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.

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.

(Contd. on page 6)

US

Safety Data Sheet

acc. to OSHA HCS

Print Date 05/14/2015

Revision Date 05/14/2015

Trade Name: EP962

(Contd. of page 5)

Hand Protection


Protective gloves

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

Suggested glove type(s):

Nitrile Gloves

Butyl Rubber Gloves

Eye Protection


Tightly sealed goggles

Body Protection No relevant information.

Additional Information

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

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

9 Physical and chemical properties

Information on Basic Physical and Chemical Properties
Appearance:

- **Form:** Paste
- **Color:** Brown
- **Odor:** Mild epoxy odor
- **Odor Threshold:** Not determined.

 · **PH-Value:** Not determined.

Change in Condition:

- **Melting Point:** Not determined.
- **Boiling Point:** Not determined.
- **Flash Point:** > 154 °C (> 309 °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):** 1.4 g/cm³ (11.683 lbs/gal)

Solubility in or Miscibility with

- **Water:** Not miscible or difficult to mix.
- **Viscosity:**
 - **Dynamic:** Not determined.
 - **Kinematic:** Not determined.

(Contd. on page 7)

Safety Data Sheet

acc. to OSHA HCS

Print Date 05/14/2015

Revision Date 05/14/2015

Trade Name: EP962

(Contd. of page 6)

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.
- **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)**
May cause fire and explosion when mixed with ammonium nitrate; may produce toxic gases including hydrogen cyanide when reacts with acids.
- **Incompatible Material(s)** Oxidizing agents, Acids, Bases
- **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

For detailed Toxicological Information please email the Product Safety Department.

Acute Toxicity

Oral

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

Oral	LD50	11400 mg/kg (rat) 15600 mg/kg (mouse) Reference: NLM Toxnet (2010).
------	------	---

92704-41-1 Calcined Kaolin

Oral	LD50	> 5000 mg/kg (rat) (EPA OPP81-1; Read-across from supporting substance (structural analogue or surrogate; no identification available)) All animals survived, and appeared active and healthy after a single oral administration of 5000 mg/kg bw of the substance. Reference: ECHA (2011).
------	------	--

26142-30-3 Polymer of epichlorohydrin-polyglycol

Oral	LD50	> 4000 mg/kg (rat) (males; no test guideline available) Reference: Dow (M)SDS (2002).
------	------	--

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

Oral	LD50	>5000 mg/kg (rat) (test method not specified) Reference: Cabot (M)SDS (2012).
------	------	--

461-58-5 Cyanoguanidine

Oral	LD50	> 30000 mg/kg (rat) (LD0; no death observed) Reference: OECD SIDS (2004).
------	------	--

101-42-8 Fenuron

Oral	LD50	4000 - 5700 mg/kg (rat) 3200 mg/kg (pig) 4700 mg/kg (mouse) 4700 mg/kg (rabbit) Reference: ACToR (2011) and ChemID Full Record (2011).
------	------	--

· **Potential Health Effect(s):** Not a classified acute oral hazard.

(Contd. on page 8)

Safety Data Sheet

acc. to OSHA HCS

Print Date 05/14/2015

Revision Date 05/14/2015

Trade Name: EP962

(Contd. of page 7)

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

Dermal	LD50	20000 mg/kg (rabbit) (Test guideline not available) > 1270 mg/kg (mouse) > 2000 mg/kg (rat) > 1600 mg/kg (rabbit); however, there was no fixed test result available; classification was not possible without further information. Reference: Royce (M)SDS (2011) and ChemID (2010).
--------	------	--

92704-41-1 Calcined Kaolin

Dermal	LD50	> 5000 mg/kg (rat) (EPA OPP81-2; semioclusive; Read-across from supporting substance (structural analogue or surrogate; no identification available)) All animals survived, gained weight, and appeared active and healthy after a single dermal administration with 5000 mg/kg bw of the test substance. Reference: ECHA (2011).
--------	------	--

26142-30-3 Polymer of epichlorohydrin-polyglycol

Dermal	LD50	> 2000 mg/kg (rat) (no test guideline available) Reference: Dow (M)SDS (2002).
--------	------	---

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

Dermal	LD50	(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.
--------	------	--

461-58-5 Cyanoguanidine

Dermal	LD50	(rabbit) (LD0 (OECD TG 402) > 2000 mg/kg; no death occurred) At 2000 mg/kg, no mortality or any clinical signs appeared. Reference: ECHA (2011).
--------	------	--

101-42-8 Fenuron

Dermal	LD50	>8000 mg/kg (rat) Reference: Vendor SDS 2014
--------	------	---

Potential Health Effect(s): Not a classified acute dermal hazard.

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

Inhalative	LC50/4 h	(Test species: n/a) (Toxicity not expected based on the acute oral data)
------------	----------	--

92704-41-1 Calcined Kaolin

Inhalative	LC50/4 h	(Test species: n/a) Due to the wetted form, inhalative effects of the substance can be seen as negligible
------------	----------	--

26142-30-3 Polymer of epichlorohydrin-polyglycol

Inhalative	LC50/4 h	(No data available)
------------	----------	---------------------

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

Inhalative	LC50/4 h	(Test species: n/a) (Toxicity not expected based on acute oral data) 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 inhalation hazard.
------------	----------	--

461-58-5 Cyanoguanidine

Inhalative	LC50/4 h	(rat) (OECD TG 403) The substance did not cause mortality or any noticeable deleterious effects after a four-hour exposure with a saturated dispersion of 259 mg/m ³ to rats; the substance dust therefore had a very low acute inhalation toxicity potential. Reference: ECHA (2011).
------------	----------	---

101-42-8 Fenuron

Inhalative	LC50/4 h	(No data available)
------------	----------	---------------------

Potential Health Effect(s):

Not a classified acute inhalative hazard.

No further relevant information; classification is not possible.

(Contd. on page 9)

Safety Data Sheet

acc. to OSHA HCS

Print Date 05/14/2015

Revision Date 05/14/2015

Trade Name: EP962

(Contd. of page 8)

Skin Corrosion or Irritation**25068-38-6 Bisphenol-A-(epichlorohydrin) epoxy resin**

Corrosion/Irritation irritating (rabbit)
 Acute skin irritation was mild, through repeated and prolonged exposure may cause severe irritation.
 The substance was classified as Category 2 by GHS-J.
 Reference: HSNO CCID (2010) and GHS-J (2006).

92704-41-1 Calcined Kaolin

Corrosion/Irritation (rabbit)
 (OECD TG 404; semioclusive; Read-across from supporting substance (structural analogue or surrogate; no identification available))
 Erythema and edema: 0 (Time-point: 24, 48 hrs and 72hrs; mean score of all treated animals)
 Thus, the substance was not irritating to rabbit skin.
 Reference: ECHA (2011).

26142-30-3 Polymer of epichlorohydrin-polyglycol

Corrosion/Irritation (No data available)

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

Corrosion/Irritation Non-irritating (Test species: n/a) (Primary irritation index=0)
 mildly irritating (rabbit) (Read across from CAS 63148-62-9)
 No test detail available; for safety reasons, the substance was classified as mildly irritating (Category 3) to rabbit skin.
 Reference: HSNO CCID (2010).

461-58-5 Cyanoguanidine

Corrosion/Irritation mildly irrit. (rabbit) (Patch test and Draize test)
 Erythema (intact skin): 0.2 (Max. 1; mean score of all treated animals; time point: 24 hrs); fully reversible within 72 hrs.
 Erythema (abraded skin): 0.3 (Max. 1; mean score of all treated animals; time point: 24 hrs); fully reversible within 72 hrs.
 Edema (both intact and abraded skin): 0 (Max. 1; mean score of all treated animals; time point: 24 hrs); the substance was not irritating to rabbit skin based on the criteria.
 (guinea pig)
 Slight irritation was found in pigs at 24 hours after application; the substance was therefore classified as a mild dermal (Category 3).
 Reference: ECHA (2011) and OECD SIDS (2004).

101-42-8 Fenuron

Corrosion/Irritation (guinea pig)
 There were practically non-irritating effects to intact skin, but only moderate irritation to abraded skin observed in guinea pigs.
 Reference: ACToR (2011).

Potential Health Effect(s):

Causes skin irritation.

In contact with skin, may cause:
 redness and pain

Eye Serious Damage or Irritation**25068-38-6 Bisphenol-A-(epichlorohydrin) epoxy resin**

Damage/Irritation irritating (rabbit)
 The substance caused eye irritation (Category 2A) based on the dermal effect to rabbit skin.

92704-41-1 Calcined Kaolin

Damage/Irritation (rabbit)
 (EPA OPPTS 870.2400; 0.1 mL neat substance; Read-across from supporting substance (structural analogue or surrogate; no identification available))
 Cornea, iris, and chemosis: 0 (Time point: 24+48+72hrs; mean score of 3 rabbits)
 Conjunctiva: 0.33/3 (Max. 3; 1 out of 3 rabbits; Time point: 24 hrs); fully reversible in 48hrs
 Conjunctiva: 0 (Max. 3; 2 out of 3 rabbits; Time point: 24+48+72hrs)
 Thus, the substance was not irritating to rabbit eyes based on the classification criteria.
 Reference: ECHA (2011).

26142-30-3 Polymer of epichlorohydrin-polyglycol

Damage/Irritation (No data available)

(Contd. on page 10)

Safety Data Sheet

acc. to OSHA HCS

Print Date 05/14/2015

Revision Date 05/14/2015

Trade Name: EP962

(Contd. of page 9)

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

Damage/Irritation slightly irrit. (Human) (Read across from CAS 63148-62-9)
 non-irritating (Primary irritation index=0)
 Transient ocular irritation was observed in humans, rabbits, dogs, and monkeys after injection of the substance to their eye bodies. However, those effects can be seen as negligible based on regular use of the substance. When applying lower viscosity substance-oil mixture to human and rabbit eyes, there was no cornea injury, but a delay of healing of the existed corneal erosion observed. For safety reasons, the substance was classified as a slight eye irritant (Category 2B).
 Reference: ACToR (2011) and Cabot (M)SDS (2012).

461-58-5 Cyanoguanidine

Damage/Irritation slightly irrit. (rabbit) (Draize and Kelley tests)
 Cornea and Iris score: 1 (1 out of 6 rabbits; Max. 1); fully reversible within 48 hours.
 Conjunctivae and Chemosis: 1 (1 out of 6 rabbits; Max. 2); not fully reversible within 7 days.
 Conjunctivae and Chemosis: 2 (1 out of 6 rabbits; Max. 2); not fully reversible within 7 days.
 There were no effects found in other treated animals, the substance was classified as irritating to eyes (Category 2B) based on the criteria.
 Reference: ECHA (2011).

101-42-8 Fenuron**Damage/Irritation** (No data available)**Potential Health Effect(s):**

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

Respiratory or Skin Sensitization**25068-38-6 Bisphenol-A-(epichlorohydrin) epoxy resin**

Sensitization	Skin	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).
	Respiratory	(No data available)

92704-41-1 Calcined Kaolin

Sensitization	Skin	not sensitizing (mouse) (OECD TG 429; Read-across from 1335-30-4) None of the measured parameters reached or exceeded the positive levels that can define sensitization by comparing the treated animals with the control groups. Reference: ECHA (2011).
	Respiratory	(Test species: n/a) Due to the wetted form, inhalative effects of the substance can be seen as negligible.

26142-30-3 Polymer of epichlorohydrin-polyglycol

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

67762-90-7 Siloxanes and 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)

461-58-5 Cyanoguanidine

Sensitization	Skin	not sensitizing (guinea pig) (Draize test) Only one out of eight animals showed positive reaction after test; the substance was not sensitizing to skin based on the criteria. Reference: ECHA (2011).
	Respiratory	(No data available)

101-42-8 Fenuron

Sensitization	Skin	(guinea pig) (test detail not available) The substance was not a skin sensitizer. Reference: NLM HSDB (2011).
	Respiratory	(No data available)

Potential Health Effect(s):

May cause an allergic skin reaction.

(Contd. on page 11)

Safety Data Sheet

acc. to OSHA HCS

Print Date 05/14/2015

Revision Date 05/14/2015

Trade Name: EP962

(Contd. of page 10)

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

Mutagenicity positive (Chinese hamster lung fibroblast cells) (In Vitro (Chromosomal Aberration))
 In Vitro (Chromosomal Aberration; Chinese hamster lung fibroblast cells) - Positive without metabolic activation; negative with metabolic activation.
 Positive (salmonella typhimurium) (In Vitro (Ames assay)). Due to the absence from In Vivo tests, it was not possible to make a conclusion of mutagenicity of the substance.
 Reference: NLM CCRIS (2010).

92704-41-1 Calcined Kaolin

Mutagenicity (Test species listed below)
 (Read-across from supporting substance (structural analogue or surrogate; no identification available))
 In Vitro (bacterial reverse mutation assay; TA97a, TA98, TA100, TA102, TA1535 Salmonella typhimurium; OECD TG 471) - negative with and without metabolic activation
 In Vitro (mammalian chromosome aberration test; human embryonic lung cultures) - negative without metabolic activation
 In Vitro (mammalian cell gene mutation assay; CHO-K1-BH4 (Chinese Hamster Ovary); OECD TG 476) - negative with and without metabolic activation
 In Vivo (chromosome aberration assay; rat; oral with up to 425 mg/kg bw; OECD TG 475) - negative; no detectable significant aberration of the bone marrow metaphase chromosomes was observed.
 Thus, the substance can be considered as non-mutagenic.
 Reference: ECHA (2011).

26142-30-3 Polymer of epichlorohydrin-polyglycol**Mutagenicity** (No data available)**67762-90-7 Siloxanes and Silicones, di-Me, reaction products with silica**

Mutagenicity negative (Chinese Hamster) (In Vitro (AMES Test))
 negative (Chinese Hamster) (In Vitro (Chromosomal aberration in ovary cells))
 Reference: Cabot (M)SDS (2012).

461-58-5 Cyanoguanidine

Mutagenicity negative (salmonella typhimurium)
 In Vitro (bacterial reverse mutation assay; OECD TG 471) - negative with and without metabolic activation (Chinese hamster Ovary cells)
 In Vitro (mammalian cell gene mutation assay; OECD TG 476) - negative with and without metabolic activation
 In Vitro ((mammalian chromosome aberration test; OECD TG 473) - negative with and without metabolic activation (rat hepatocytes)
 In Vitro (DNA damage and repair assay, and unscheduled DNA synthesis in mammalian cells; EPA OTS 798.5550) - negative without metabolic activation.
 Reference: ECHA (2011).

101-42-8 Fenuron

Mutagenicity not classified (mouse)
 Not classified. 1,1-DIMETHYL-3-PHENYL-UREA: Ames mutagenicity test: negative. DNA inhibition, mouse, 500 mk/kg: Positive.
 Reference: Vendor SDS 2014

Potential Health Effect(s): No further relevant information; classification is not possible.**Carcinogenicity****25068-38-6 Bisphenol-A-(epichlorohydrin) epoxy resin**

Carcinogenicity negative (Test species: n/a) (Not listed by ACGIH, IARC, NTP, or OSHA) (Mouse)
 1 out of 4 cases with female mice showed positive carcinogenic results after a repeated dermal application with 10% concentration of the substance for two years. When considering all of the evidence, the substance was not classified as a carcinogen.
 Reference: Dow (M)SDS (2010).

92704-41-1 Calcined Kaolin

(Contd. on page 12)

Safety Data Sheet
acc. to OSHA HCS

Print Date 05/14/2015

Revision Date 05/14/2015

Trade Name: EP962

(Contd. of page 11)

Carcinogenicity	(rat) (Read-across from supporting substance (structural analogue or surrogate; no identification available)) NOAEL (Oral; OECD TG 453; 103 weeks; both males and females) = 1760 mg/kg bw/day; there was no adverse effect regarding carcinogenicity observed during the 103-week oral study. Thus, the substance was not classified as a carcinogen. Reference: ECHA (2011).
------------------------	---

26142-30-3 Polymer of epichlorohydrin-polyglycol

Carcinogenicity	(Test species: n/a) Not listed as a carcinogen according to ACGIH, IARC, NTP, or OSHA.
------------------------	---

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

Carcinogenicity	(Test species: n/a) (Not listed by IARC, NTP, OSHA or ACGIH)
------------------------	--

461-58-5 Cyanoguanidine

Carcinogenicity	negative (rat) (EPA OPP 83-5) Route: oral with 5.0% in diet for 2 years The substance had no carcinogenic potential under conditions of the study. (rat) (OECD TG 453) Route: oral with up to 50000 ppm/day (1740 mg/kg/day) Only depression of body weights were observed at 50000 ppm dose level; the substance was not classified as a carcinogen. Reference: ECHA (2011).
------------------------	---

101-42-8 Fenuron

Carcinogenicity	(Test species: n/a) (not listed as a Carcinogen by NTP, IARC or OSHA)
------------------------	---

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

Reproductive Toxicity

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

Reproductive Toxi.	negative (Test species: n/a) (no reproductive or developmental effect observed) There was no reproductive or developmental effect observed at dosing levels that were toxic to parental animals. Reference: GHS-J (2006).
---------------------------	---

92704-41-1 Calcined Kaolin

Reproductive Toxi.	negative (rabbit) (Read-across from supporting substance (structural analogue or surrogate; no identification available)) NOAEL (Maternal toxicity and teratogenicity; Oral; Day 6 to 18 of gestation) = 1600 mg/kg bw/day (maximum dose test). There was no developmental toxicity observed. Reference: ECHA (2011).
---------------------------	--

26142-30-3 Polymer of epichlorohydrin-polyglycol

Reproductive Toxi.	(No data available)
---------------------------	---------------------

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

Reproductive Toxi.	(No data available)
---------------------------	---------------------

461-58-5 Cyanoguanidine

Reproductive Toxi.	negative (rat) (OECD TG 416) NOAEL = 15000 ppm (ca. 725 mg/kg bw/day in male rats (week 13-14)) Consistent and significant difference in body weights, as well as a slight reduction in fertility and pregnancy rates were observed at 50000 ppm (ca. 2400 mg/kg; the maximum dose) diet group. Due to the insignificant reproductive effects and its dose level, the substance was not classified as a reproductive hazard. Reference: ECHA (2011).
---------------------------	---

101-42-8 Fenuron

Reproductive Toxi.	not classified (Test species: n/a) Not classified. 1,1-DIMETHYL-3-PHENYL-UREA: Some teratogenicity and embryotoxicity effects have been reported in the literature. Reference: Vendor SDS 2014
---------------------------	--

Potential Health Effect(s): Not a known Reproductive hazard.

Specific Target Organ Toxicity - Single Exposure

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

(Contd. on page 13)

Safety Data Sheet
acc. to OSHA HCS

Print Date 05/14/2015

Revision Date 05/14/2015

Trade Name: EP962

(Contd. of page 12)

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 11400 mg/kg to rats, or 15600 mg/kg to mice of the substance. However, the dose levels were both outside of the guidance value ranges. Reference: NLM Toxnet (2010).
92704-41-1 Calcined Kaolin	
STOT-Single	(rat) (Read-across from supporting substance (structural analogue or surrogate; no identification available)) Target organ: None All animals survived, and appeared active and healthy after a single oral administration of 5000 mg/kg bw, or a single dermal application of 5000 mg/kg bw of the substance during a 14 day observation period. Reference: ECHA (2011).
26142-30-3 Polymer of epichlorohydrin-polyglycol	
STOT-Single	(No data available)
67762-90-7 Siloxanes and Silicones, di-Me, reaction products with silica	
STOT-Single (dynamic)	(No data available)
461-58-5 Cyanoguanidine	
STOT-Single	Target: None (rat) Hypothermia, lateral position, cyanosis, and decrease in locomotor activity were observed within 1-2 hours after a single dose with 30000 mg/kg bw of the substance in diet. The dose level was out of the guidance value ranges. Reference: OECD SIDS (2004).
101-42-8 Fenuron	
STOT-Single	not classified (Test species: n/a) Not classified (based on available data, the classification criteria are not met). Reference: Vendor SDS 2014

Potential Health Effect(s): Not a known hazard to organs upon single exposure.

Specific Target Organ Toxicity - Repeated Exposure

25068-38-6 Bisphenol-A-(epichlorohydrin) epoxy resin	
STOT-Repeated	Target: N/A (guinea pig) (insufficient data for classification) With dermal application of the substance for 55 days, increased seromuroid concentrations, decreased lactate-dehydrogenase (LDH), and decreased leucyl-naphthylamidase (LNA) were observed in the test animals. Meanwhile, the substance caused a toxic effect on blood components of female guinea-pigs with greater effects on pregnant animals. However, there was no detail available regarding the dose level or test guideline, classification was thus not possible. Reference: HSNO CCID (2010).
92704-41-1 Calcined Kaolin	
STOT-Repeated	negative (rat) (Read-across from supporting substance (structural analogue or surrogate; no identification available)) Target organ: None NOAEL (Oral; OECD TG 453; 103 weeks; both males and females) = 1760 mg/kg bw/day: there was no systemic effect observed during the 103-week oral study. The NOAEL was outside of guidance value ranges; not classified. Reference: ECHA (2011).
26142-30-3 Polymer of epichlorohydrin-polyglycol	
STOT-Repeated	(No data available)
67762-90-7 Siloxanes and Silicones, di-Me, reaction products with silica	
STOT-Repeated	(No data available)
461-58-5 Cyanoguanidine	
STOT-Repeated	Target: None (rat) (OECD TG 408) NOAEL (oral; 90 day) > 24000 ppm (the highest dose) No discernible gross or microscopic lesions observed during the test. Reference: ECHA (2011).
101-42-8 Fenuron	
STOT-Repeated	(Test species listed below) Rats given 500 ppm in food for 90 days showed no ill effects. However, in guinea pigs daily oral doses of 15 to 150 mg/kg for 10 months produced anemia, hypothyroidism and structural alterations in liver, kidney, spleen and myocardium. Cows and sheep receiving 2 to 5 daily doses of 500 mg/kg showed anorexia and incoordination progressing to death. In surviving animals, recovery was extremely slow. Necropsy revealed congestion of lungs and myocardial hemorrhages. No more test detail available, classification was not possible. Reference: ACToR (2011). Vendor SDS 2014

(Contd. on page 14)

Safety Data Sheet

acc. to OSHA HCS

Print Date 05/14/2015

Revision Date 05/14/2015

Trade Name: EP962

(Contd. of page 13)

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

Aspiration Hazard**25068-38-6 Bisphenol-A-(epichlorohydrin) epoxy resin**

Aspiration Hazard (No data available)

92704-41-1 Calcined Kaolin

Aspiration Hazard (No data available)

26142-30-3 Polymer of epichlorohydrin-polyglycol

Aspiration Hazard (No data available)

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

Aspiration Hazard (No data available)

461-58-5 Cyanoguanidine

Aspiration Hazard (No data available)

101-42-8 Fenuron

Aspiration Hazard (No data available)

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

Additional Information No further relevant information.

12 Ecological information

Aquatic Environmental Toxicity**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).

92704-41-1 Calcined Kaolin

Algae Toxicity > 100 mg/l (Scenedesmus subspicatus) (ErC50 (72 hrs); OECD TG 201)

Crustacean Toxicity > 1 mg/l (Daphnia magna (water flea)) (EC50 (96 hrs); OECD TG 202)

Fish Toxicity (Oncorhynchus mykiss (Rainbow trout))

LC50 (96 hrs; OECD TG 203) > 100 mg/L

NOEC(30 day; growth rate) = 100 mg/L

When considering all of the evidence, the substance is not classified as an environmental hazard.

Reference: ECHA (2011) and IUCLID Dataset (2000).

26142-30-3 Polymer of epichlorohydrin-polyglycol

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)

Crustacean Toxicity > 1000 mg/l (Daphnia magna (water flea)) (EC50 (24 hrs), OECD 202)

Fish Toxicity > 10000 mg/l (Brachydanio rerio (Zebra fish)) (LC50 (96 hrs), OECD 203)

Reference: Cabot (M)SDS (2012).

461-58-5 Cyanoguanidine

Algae Toxicity (Selenastrum capricornum) (OECD TG 201)

EbC50 (biomass; 0-72 h) = 935 mg/L

ErC50 (growth rate; 24-72 h) > 1000 mg/L

(Contd. on page 15)

US

Safety Data Sheet
acc. to OSHA HCS

Print Date 05/14/2015

Revision Date 05/14/2015

Trade Name: EP962

(Contd. of page 14)

Crustacean Toxicity	3177 mg/l (Daphnia magna (water flea)) EC50 (48 hrs) 3177 mg/L Reference: Sigma Aldrich
Fish Toxicity	7700 mg/l (Oncorhynchus mykiss (Rainbow trout)) LC50 (96 hrs) > 1000 mg/L (Oryzias latipes) LC50 (96 hrs) > 100 mg/L (OECD TG 203 and TG 204) LC50 (14 days) > 100 mg/L; the substance is not expected to pose an environmental hazard. Reference: OECD SIDS (2004) and ECHA (2011). LC50 Rainbow trout 7700 mg/l 96h Reference: Sigma Aldrich

101-42-8 Fenuron

Algae Toxicity	(Test species listed below) (Chlorococccum sp.) EC50 (10 days) = 0.75 mg/L (Phaeodactylum tricornutum) EC50 (10 days) = 0.75 mg/L Based on rapid degradability and the Chronic EC50 < 1 mg/l, the substance is classified as a Chronic-3 environmental hazard. Algae 96 hour EC50 - 1.55 mg/L (unspecified time period) Algae 72 hour EC50 - 1.2 mg/L (1.5 hours) Reference: Vendor SDS 2014
Crustacean Toxicity	(No data available)
Fish Toxicity	(Guppy (Poecilia reticulata)) LC50 (48 hrs) = 610 mg/L (Lepomis macrochirus) EC50 (96 hrs) = 53 mg/L Reference: ACToR (2011) and EnviChem (2011).

Aquatic Environmental Toxicity Assessment: Toxic to aquatic life with long lasting effects.

Degradability and Stability

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

Biodegradation	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. Reference: Dow (M)SDS (2010) and CHRIP (2010).
Persistence	(Test species: n/a) (This substance is persistent) Reference: Canada DSL (2007) and CHRIP (2010).
Photodegradation	6.69E-11 cm ³ /molecule-sec (OH radical) (Half-life (T1/2) = 1.92 hrs) However, photolysis in water is negligible. Reference: Dow (M)SDS (2010).
Stability in water	(No data available)

92704-41-1 Calcined Kaolin

Biodegradation	(No data available) As an inorganic metal compound, biodegradation of the substance is not expected.
Persistence	(Test species: n/a) The substance is persistent. Reference: Canada DSL (2007)
Photodegradation	(No data available) As an inorganic metal compound, photodegradation of the substance is not expected.
Stability in water	(Test species: n/a) (Directive 84/449/EEC; abiotic; at 25 °C) Half-life (PH= 4, 7 and 9) > 1 year; the substance is expected to be hydrolytically stable. Reference: IUCLID Dataset (2000).

26142-30-3 Polymer of epichlorohydrin-polyglycol

Biodegradation	(No data available) Based on the persistent properties, the substance is expected to be non-biodegradable.
Persistence	(Test species: n/a) The substance is persistent. Reference: Canada DSL (2007).
Photodegradation	(No data available)

(Contd. on page 16)

Safety Data Sheet

acc. to OSHA HCS

Print Date 05/14/2015

Revision Date 05/14/2015

Trade Name: EP962

(Contd. of page 15)

Stability in water	(No data available)
67762-90-7 Siloxanes and Silicones, di-Me, reaction products with silica	
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)

461-58-5 Cyanoguanidine

Biodegradation	non-degrad. (Activated Sludge) (OECD TG 301C) Biodegradation (2 weeks; chemical concentration: 100 ppm; Indirect analysis from BOD) = 0% Biodegradation (2 weeks; chemical concentration: 100 ppm; Direct analysis from TOC, UV-vis) = 0%, 0.7% Reference: CHRIP (2011).
Persistence	(Test species: n/a) The substance is persistent. Reference: Canada DSL (2007).
Photodegradation	4.2E-11 cm ³ /molecule-sec (OH radical) Half-life (1.5E6 OH/cm ³) = 3.1 hours; however, hydrolysis in water is negligible. Reference: OECD SIDS (2004).
Stability in water	stable (Test species: n/a) (OECD TG 111) Less than 10% of the substance hydrolyzed in 5 days, it is considered as hydrolytically stable. Reference: ECHA (2011).

101-42-8 Fenuron

Biodegradation	readily biodeg. (Test species: n/a) Biodegradation (2 weeks; Chemical concentration 10 ug/L) = 80%; biodegradation is expected to be the primary fate process in aquatic ecosystems. Reference: NLM HSDB (2011).
Persistence	(Test species: n/a) The substance is not persistent. Reference: Canada DSL (2007).
Photodegradation	1.68E(-10) cm ³ /molecule-sec (OH radical) Half-life (25 °C; 5E5 OH/cm ³) = 2.3 hours The photodegradation is very rapid; thus, vapor-phase of the substance will be fast degraded in ambient atmosphere by reaction with photochemically formed hydroxyl radicals. Reference: NLM HSDB (2011).
Stability in water	(No data available)

Bioaccumulation and Distribution**25068-38-6 Bisphenol-A-(epichlorohydrin) epoxy resin**

BCF	0.56-42 (Cyprinus carpio) (The substance is low-bioaccumulative) BCF (28 days; Concentration: 10 µg/L) = 0.56 - 0.67, 3.3 - 4.2 BCF (28 days; Concentration: 1 µg/L) = 5.6 - 6.8, 33 - 42 Reference: CHRIP (2010).
Koc	1800 - 4400 L/kg (soil) Potential for mobility in soil is moderate. Reference: Dow (M)SDS (2010).
LogPow	3.7 - 3.9 (Test species: n/a) Reference: Dow (M)SDS (2010).

92704-41-1 Calcined Kaolin

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

26142-30-3 Polymer of epichlorohydrin-polyglycol

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

(Contd. on page 17)

Safety Data Sheet

acc. to OSHA HCS

Print Date 05/14/2015

Revision Date 05/14/2015

Trade Name: EP962

(Contd. of page 16)

LogPow	(No data available)
67762-90-7 Siloxanes and Silicones, di-Me, reaction products with silica	
BCF	(No data available) (The substance is not bioaccumulative) Reference: Canada DSL CCR (2011).
Koc	(No data available)
LogPow	(No data available)
461-58-5 Cyanoguanidine	
BCF	< 0.3 (Cyprinus carpio) (chemical concentration: 2.0 ppm) < 3.1 (chemical concentration: 0.2 ppm) The substance is not or low bioaccumulative in aquatic environment. Reference: CHRIP (2011).
Koc	5.23 L/kg (Test species: n/a) Reference: ECHA (2011).
LogPow	-0.52 (Test species: n/a) (OECD TG 107) Reference: OECD SIDS (2004).
101-42-8 Fenuron	
BCF	6 (Test species: n/a) The substance is not bioaccumulative. Reference: NLM HSDB (2011) and Canada DSL (2007).
Koc	27 - 43 L/kg (Test species: n/a) Reference: NLM HSDB (2011).
LogPow	0.98 (Test species: n/a) Reference: ChemID Full Record (2011).

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

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

13 Disposal considerations

· **Hazardous Waste List**

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

· **Waste Treatment Recommendation:**

Generation of waste should be avoided or minimized wherever possible.

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

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

· **Unused and Uncontaminated Packagings**

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

14 Transport information

· **UN-Number**

· **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)

(Contd. on page 18)

Safety Data Sheet
acc. to OSHA HCS

Print Date 05/14/2015

Revision Date 05/14/2015

Trade Name: EP962

(Contd. of page 17)

Transport hazard class(es)

DOT, IMDG, IATA



Class
Label

9 Miscellaneous dangerous substances and articles
9

ADR



Class
Label

9 (M6) Miscellaneous dangerous substances and articles
9

Packing group

DOT, ADR, IMDG, IATA

III

Environmental Hazards:

Marine Pollutant:

Yes
Symbol (fish and tree)

Special Marking (ADR):

Symbol (fish and tree)

Special Marking (IATA):

Symbol (fish and tree)

Special Precautions:

Warning: Miscellaneous dangerous substances and articles

Danger Code (Kemler):

90

EMS Number:

F-A, S-F

Transport in Bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

Transport/Additional Information:

DOT

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

Limited quantities (LQ)

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-A-(epichlorohydrin) epoxy resin), 9, III

US

(Contd. on page 19)

Safety Data Sheet

acc. to OSHA HCS

Print Date 05/14/2015

Revision Date 05/14/2015

Trade Name: EP962

(Contd. of page 18)

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)

None of the ingredients is listed.

Section 311/312 (Hazardous Chemical Inventory Reporting)

25068-38-6	Bisphenol-A-(epichlorohydrin) epoxy resin	A, C	50-60%
1333-86-4	Carbon black	A, C	0-<0.1%

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

14808-60-7	Quartz
1333-86-4	Carbon black
106-89-8	1-chloro-2,3-epoxypropane

Chemicals Known to Cause Reproductive Toxicity for Females

None of the ingredients is listed.

Chemicals Known to Cause Reproductive Toxicity for Males

106-89-8	1-chloro-2,3-epoxypropane
----------	---------------------------

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)

7631-86-9	silicon dioxide, chemically prepared	3
14808-60-7	Quartz	1

NTP (National Toxicology Program)

14808-60-7	Quartz	K
------------	--------	---

TLV (Threshold Limit Value Established by ACGIH)

14808-60-7	Quartz	A2
1333-86-4	Carbon black	A4

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

14808-60-7	Quartz
------------	--------

International Regulation Lists

Canadian Domestic Substance Listings:

25068-38-6	Bisphenol-A-(epichlorohydrin) epoxy resin
92704-41-1	Calcined Kaolin

(Contd. on page 20)

Safety Data Sheet

acc. to OSHA HCS

Print Date 05/14/2015

Revision Date 05/14/2015

Trade Name: EP962

(Contd. of page 19)

26142-30-3	Polymer of epichlorohydrin-polyglycol
67762-90-7	Siloxanes and Silicones, di-Me, reaction products with silica
461-58-5	Cyanoguanidine
101-42-8	Fenuron
7631-86-9	silicon dioxide, chemically prepared
14808-60-7	Quartz
1333-86-4	Carbon black

Canadian Ingredient Disclosure list (limit 0.1%)

None of the ingredients is listed.

Canadian Ingredient Disclosure list (limit 1%)

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

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

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

ChemID (Full Record): US NLM Chemical Information Database (or its Full Record) designed to help search for information by chemical name or structure

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

ECHA: European Chemicals Agency's Dissemination portal with information on chemical substances registered under REACH

EnviChem: Data Bank of Environmental Properties of Chemicals; maintained by Finnish Environment Institute (SYKE), Finland

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)

(Contd. on page 21)

Safety Data Sheet acc. to OSHA HCS

Print Date 05/14/2015

Revision Date 05/14/2015

Trade Name: EP962

(Contd. of page 20)

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)

IUCLID: EU REACH International Uniform Chemical Information Database

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

NLM TOXNET: US National Library of Medicine Toxicology Data Network

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

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

Date of preparation / last revision 05/14/2015 / 1

US