02/25/2020	Kit Components
Product code	Description
1,015	Triggerbond® T10-3005NSCL Epoxy Resin & Mercaptan Polymer Formulation
Components:	
13	10-3005RNSCL, 92-3005RNSCL Epoxy Resin Formulation
157	10-3005CNSCL, 92-3005CNSCL Mercaptan Polymer

Formulation

Printing date 02/25/2020 Reviewed on 02/17/2020

1 Identification

· Product identifier

· Trade name: 10-3005RNSCL, 92-3005RNSCL

· Article number: Epoxy Resin Formulation

Details of the supplier of the safety data sheet

· Manufacturer/Supplier:

Epoxies, Etc. 21 Starline Way Cranston, RI 02921 USA

General Telephone: 401-946-5564

· Information department: Product safety department.

· Emergency telephone number: Domestic: 800-255-3924 International: +01-813-248-0585



2 Hazard(s) identification

· Classification of the substance or mixture



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).
- · Hazard pictograms GHS07
- · Signal word Warning
- · Hazard-determining components of labeling:

reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight \leq 700)

· Hazard statements

Causes skin irritation.

Causes serious eye irritation.

May cause an allergic skin reaction.

· Precautionary statements

Avoid breathing dust/fume/gas/mist/vapors/spray

Wash thoroughly after handling.

Contaminated work clothing must not be allowed out of the workplace.

Wear protective gloves / eye protection / face protection.

If on skin: Wash with plenty of water.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Take off contaminated clothing and wash it before reuse.

If skin irritation or rash occurs: Get medical advice/attention.

Specific treatment (see on this label).

If eye irritation persists: Get medical advice/attention.

Wash contaminated clothing before reuse.

Dispose of contents/container in accordance with local/regional/national/international regulations.

(Contd. on page 2)

(Contd. of page 1)

Safety Data Sheet acc. to OSHA HCS

Reviewed on 02/17/2020 Printing date 02/25/2020

Trade name: 10-3005RNSCL, 92-3005RNSCL

· Classification system:

· NFPA ratings (scale 0 - 4)



Health = 2Fire = 1Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Fire = 1

- · Other hazards
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable. · vPvB: Not applicable.

3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- Description: The exact percentage (concentration) of composition has been withheld as a trade secret.

· Dangerous components:		
25068-38-6	reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular	50-100%
	$weight \leq 700$)	
7631-86-9	Synthetic Amorphous/fumed/pyrogenic silica	2.5-10%

4 First-aid measures

- · Description of first aid measures
- · After inhalation:

Supply fresh air. If required, provide artificial respiration, Keep patient warm, Consult doctor if symptoms persist. *In case of unconsciousness place patient stably in side position for transportation.*

· After skin contact:

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

· After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· After swallowing:

Seek immediate medical advice.

A person vomiting while lying on their back should be turned onto their side.

DO NOT attempt to give anything by mouth to an unconscious person.

- · Information for doctor:
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed

No further relevant information available.

Printing date 02/25/2020 Reviewed on 02/17/2020

Trade name: 10-3005RNSCL, 92-3005RNSCL

(Contd. of page 2)

5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents:

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Use fire fighting measures that suit the environment.

- · Special hazards arising from the substance or mixture No further relevant information available.
- Advice for firefighters
- · Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

Do not inhale explosion gases or combustion gases.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Wear protective clothing.

Keep people at a distance and stay upwind.

· Environmental precautions:

Do not allow product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/surface or ground water.

· Methods and material for containment and cleaning up:

Send for recovery or disposal in suitable receptacles.

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Ensure adequate ventilation.

· Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

Protective Action Criteria for Chemicals

1 Totalive 21	cuon Crucrui for Chemicuis	
· <i>PAC-1</i> :		
25068-38-6	reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)	r 90 mg/m
7631-86-9	Synthetic Amorphous/fumed/pyrogenic silica	18 mg/m
<i>PAC-2:</i>		
25068-38-6	reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight \leq 700)	990 mg/m
7631-86-9	Synthetic Amorphous/fumed/pyrogenic silica	740 mg/m
<i>PAC-3</i> :		
25068-38-6	reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average 5 molecular weight \leq 700)	,900 mg/m
7631-86-9	Synthetic Amorphous/fumed/pyrogenic silica 4	,500 mg/m

7 Handling and storage

- · Handling:
- Precautions for safe handling

Store in cool, dry place in tightly closed receptacles.

(Contd. on page 4)

Printing date 02/25/2020 Reviewed on 02/17/2020

Trade name: 10-3005RNSCL, 92-3005RNSCL

(Contd. of page 3)

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

Store at ambient temperature 25 C.

- · Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles:

Store only in the original receptacle.

Stoor indoors.

- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: Keep receptacle tightly sealed.
- · Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · Control parameters
- · Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove material

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

(Contd. on page 5)

(Contd. of page 4)

Safety Data Sheet acc. to OSHA HCS

Printing date 02/25/2020 Reviewed on 02/17/2020

Trade name: 10-3005RNSCL, 92-3005RNSCL

· Eye protection:



Tightly sealed goggles

· Body protection: Protective work clothing

Information on basic physical and c General Information Appearance:		
Appearance:		
Form:	Liquid	
Color:	According to product specification	
Odor:	Mild	
Odor threshold:	Not determined.	
pH-value:	Not determined.	
Change in condition		
Melting point/Melting range:	Undetermined.	
Boiling point/Boiling range:	> 260 °C (> 500 °F)	
Flash point:	249 °C (480.2 °F)	
Flammability (solid, gaseous):	Not applicable.	
Decomposition temperature:	Not determined.	
Auto igniting:	Product is not selfigniting.	
Danger of explosion:	Product does not present an explosion hazard.	
Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
Vapor pressure:	Not determined.	
Density:	Not determined.	
Relative density	Not determined.	
Vapor density	Not determined.	
Evaporation rate	Not determined.	
Solubility in / Miscibility with		
Water:	Not miscible or difficult to mix.	
Partition coefficient (n-octanol/wate	er): Not determined.	
Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
Solvent content:		
Organic solvents:	0.0 %	
VOC content:	0.0 g/l / 0.00 lb/gal	

(Contd. on page 6)

Printing date 02/25/2020 Reviewed on 02/17/2020

Trade name: 10-3005RNSCL, 92-3005RNSCL

(Contd. of page 5)

· Other information

No further relevant information available.

10 Stability and reactivity

- · Reactivity No further relevant information available.
- · Chemical stability
- · Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

Avoid elevated temperatures.

· Possibility of hazardous reactions

Hazardous polymerization may occur if mixed with epoxy resin catalysts (mercaptans/amines). Excessive exothermic reactions will occur when mixed in larger masses (>50 grams).

· Conditions to avoid

Heat is generated during the curing/crosslinking process when mixed with epoxy resin catalysts (mercaptans/amines). Minimize the mass (refer to possibility of hazardous reactions) to prevent a premature exothermic reaction with the production of intense heat and smoke.

- · Incompatible materials: Strong acids, strong bases, strong oxidizers, amines, and mercaptans.
- · Hazardous decomposition products:

Carbon monoxide and carbon dioxide

Unknown hydrocarbons.

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- · Primary irritant effect:
- · on the skin: Irritant to skin and mucous membranes.
- · on the eye: Irritating effect.
- · Sensitization: Sensitization possible through skin contact.
- · Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations: Irritant

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)

7631-86-9 Synthetic Amorphous/fumed/pyrogenic silica

3

· NTP (National Toxicology Program)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.

(Contd. on page 7)

Printing date 02/25/2020 Reviewed on 02/17/2020

Trade name: 10-3005RNSCL, 92-3005RNSCL

(Contd. of page 6)

- · Ecotoxical effects:
- · Remark: Toxic for fish
- · Additional ecological information:
- · General notes:

Also poisonous for fish and plankton in water bodies.

Toxic for aquatic organisms

Water hazard class 2 (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packagings:
- · Recommendation:

Disposal must be made according to official regulations.

Dispose of in accordance to all local, state, and/or national regislation.

UN-Number	
DOT	Not Applicable
ADR, IMDG, IATA	UN3082
UN proper shipping name	
DOT	Not Applicable
ADR	3082 Environmentally hazardous substances, liquid, n.o.
	(reaction product: bisphenol-A-(epichlorhydrin) epoxy res
	(number average molecular weight ≤ 700))
· IMDG	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUI
	N.O.S. (reaction product: bisphenol-A-(epichlorhydrin) epo
	resin (number average molecular weight ≤ 700)), MARIN
	POLLUTANT
IATA	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUI
	N.O.S. (reaction product: bisphenol-A-(epichlorhydrin) epo
	resin (number average molecular weight \leq 700))
Transport hazard class(es)	
DOT	
Class	Not Applicable

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Printing date 02/25/2020 Reviewed on 02/17/2020

Trade name: 10-3005RNSCL, 92-3005RNSCL

	(Contd. of page 7
· ADR, IMDG, IATA	
1 1 1 1 1 1 1 1 1 1	
Class	9 Miscellaneous dangerous substances and articles
· Label	9
Packing group	
DOT	Not Applicable
ADR, IMDG, IATA	III
Environmental hazards:	Product contains environmentally hazardous substances: reaction product: bisphenol- A -(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)
Marine pollutant:	Yes
•	Symbol (fish and tree)
Special marking (ADR):	Symbol (fish and tree)
Special marking (IATA):	Symbol (fish and tree)
Special precautions for user	Warning: Miscellaneous dangerous substances and articles
· Hazard identification number (Kemler code)	
EMS Number:	F-A,S-F
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable
	Not applicable.
Transport/Additional information:	
· DOT	
Remarks:	Not regulated.
UN "Model Regulation":	UN3082, Environmentally hazardous substances, liquid, n.o.s (reaction product: bisphenol-A-(epichlorhydrin) epoxy resin

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Sara

25068-38-6 reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)

(number average molecular weight \leq 700)), 9, III

· Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

· TSCA (Toxic Substances Control Act):

All components have the value ACTIVE.

· Hazardous Air Pollutants

None of the ingredients is listed.

· California Proposition 65

· Chemicals known to cause cancer:

7631-86-9 Synthetic Amorphous/fumed/pyrogenic silica

(Contd. on page 9)

Printing date 02/25/2020 Reviewed on 02/17/2020

Trade name: 10-3005RNSCL, 92-3005RNSCL

(Contd. of page 8)

· Chemicals known to cause reproductive toxicity for females:

7631-86-9 Synthetic Amorphous/fumed/pyrogenic silica

· Chemicals known to cause reproductive toxicity for males:

7631-86-9 Synthetic Amorphous/fumed/pyrogenic silica

· Chemicals known to cause developmental toxicity:

7631-86-9 Synthetic Amorphous/fumed/pyrogenic silica

· New Jersey Right-to-Know List:

All ingredients are listed.

· Pennsylvania Right-to-Know List:

All ingredients are listed.

· Cancerogenity categories

· EPA (Environmental Protection Agency)

None of the ingredients is listed.

· TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

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

None of the ingredients is listed.

· Chinese Chemical Inventory of Existing Chemical Substances

All ingredients are listed.

- GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms GHS07
- · Signal word Warning

· Hazard-determining components of labeling:

reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight \leq 700)

· Hazard statements

Causes skin irritation.

Causes serious eye irritation.

May cause an allergic skin reaction.

· Precautionary statements

Avoid breathing dust/fume/gas/mist/vapors/spray

Wash thoroughly after handling.

Contaminated work clothing must not be allowed out of the workplace.

Wear protective gloves / eye protection / face protection.

If on skin: Wash with plenty of water.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Take off contaminated clothing and wash it before reuse.

If skin irritation or rash occurs: Get medical advice/attention.

Specific treatment (see on this label).

If eye irritation persists: Get medical advice/attention.

Wash contaminated clothing before reuse.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· National regulations:

· Other regulations, limitations and prohibitive regulations

· Substances of very high concern (SVHC) according to REACH, Article 57

None of the ingredients is listed.

(Contd. on page 10)

Printing date 02/25/2020 Reviewed on 02/17/2020

Trade name: 10-3005RNSCL, 92-3005RNSCL

(Contd. of page 9)

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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. The information given and the recomendations made herein apply to our product alone and are not combined with other product(s). Such are based on our research and on data from other reliable sources and are believed to be accurate. No guarantee of accuracy is made. It is the user's responsibility before using any product to verify this data under their own operating conditions and to determine whether the product is suitable for their purposes.

- · Department issuing SDS: Product safety department.
- · Contact: Environmental Health & Safety (EHS) personnel
- · Date of preparation / last revision 02/17/2020 / -
- · Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

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

ICAO: International Civil Aviation Organisation

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

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

PBT: Persistent, Bioaccumulative and Toxic

SVHC: Substances of Very High Concern

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

 ${\it Skin Irrit.~2: Skin corrosion/irritation-Category~2}$

Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A

Skin Sens. 1: Skin sensitisation – Category 1

USA

Reviewed on 02/17/2020 Printing date 02/25/2020

1 Identification

- · Product identifier
- · Trade name: 10-3005CNSCL, 92-3005CNSCL
- · Article number: Mercaptan Polymer Formulation
- · Application of the substance / the mixture Adhesives
- Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Epoxies, Etc. 21 Starline Way Cranston, RI 02921 USA

General Telephone: 401-946-5564

- · Information department: Product safety department.
- · Emergency telephone number: Domestic: 800-255-3924 International: +01-813-248-0585



2 Hazard(s) identification

· Classification of the substance or mixture



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).
- · Hazard pictograms GHS07
- · Signal word Warning
- · Hazard-determining components of labeling:

Reaction products of pentaerythritol, propoxylated and 1-chloro-2,3-epoxypropane with hydrogen sulfide

· Hazard statements

May cause an allergic skin reaction.

· Precautionary statements

Avoid breathing dust/fume/gas/mist/vapors/spray

Contaminated work clothing must not be allowed out of the workplace.

Wear protective gloves.

If on skin: Wash with plenty of water.

If skin irritation or rash occurs: Get medical advice/attention.

Specific treatment (see on this label).

Wash contaminated clothing before reuse.

Dispose of contents/container in accordance with local/regional/national/international regulations.

- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 0Fire = 1

Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Health = 0

Fire = 1

(Contd. on page 2)

Printing date 02/25/2020 Reviewed on 02/17/2020

Trade name: 10-3005CNSCL, 92-3005CNSCL

(Contd. of page 1)

- · Other hazards
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.

3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- Description: The exact percentage (concentration) of composition has been withheld as a trade secret.

· Dangerous	· Dangerous components:		
	Reaction products of pentaerythritol, propoxylated and 1-chloro-2,3-epoxypropane with hydrogen sulfide	50-100%	
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol	2.5-10%	
7631-86-9	Synthetic Amorphous/fumed/pyrogenic silica	2.5-10%	

4 First-aid measures

- · Description of first aid measures
- · After inhalation:

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist. In case of unconsciousness place patient stably in side position for transportation.

· After skin contact:

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

- · After eye contact: Rinse opened eye for several minutes under running water.
- · After swallowing:

Do not induce vomiting. Give large amounts of water followed by milk if available. If vomiting should occur spontaneously, keep airway clear. Get medical attention. Never give anything by mouth to an unconscious person.

- · Information for doctor:
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents:

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

· Special hazards arising from the substance or mixture

Carbon dioxoide, carbon monoxide, hydrogen sulfide, & oxides of sulfur.

- · Advice for firefighters
- · Protective equipment:

Wear fully protective suit.

Do not inhale explosion gases or combustion gases.

Wear self-contained respiratory protective device.

USA

Printing date 02/25/2020 Reviewed on 02/17/2020

Trade name: 10-3005CNSCL, 92-3005CNSCL

(Contd. of page 2)

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Wear protective clothing.

Keep people at a distance and stay upwind.

- Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- · Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

Flush area with water to remove residues.

· Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

· Protective Action Criteria for Chemicals

· PAC-1:		
90-72-2 2,	4,6-tris(dimethylaminomethyl)phenol	6.5 mg/m^3
7631-86-9 Sy	onthetic Amorphous/fumed/pyrogenic silica	18 mg/m³
· <i>PAC-2</i> :		
90-72-2 2,	4,6-tris(dimethylaminomethyl)phenol	72 mg/m³
7631-86-9 Sy	onthetic Amorphous/fumed/pyrogenic silica	740 mg/m^3
· PAC-3:		
90-72-2 2,	4,6-tris(dimethylaminomethyl)phenol	430 mg/m³
7631-86-9 Sy	onthetic Amorphous/fumed/pyrogenic silica	$4,500 \text{ mg/m}^3$

7 Handling and storage

- · Handling:
- · Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

- · Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles:

Store only in the original receptacle.

Store in a cool location.

- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: None.
- · Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

· Additional information about design of technical systems: No further data; see item 7.

(Contd. on page 4)

Printing date 02/25/2020 Reviewed on 02/17/2020

Trade name: 10-3005CNSCL, 92-3005CNSCL

(Contd. of page 3)

- · Control parameters
- · Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove material

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

- · Eye protection: Goggles recommended during refilling.
- · **Body protection:** Protective work clothing

9 Physical and chemical properties

· Information	on basic	nhysical	and	chemical	nronerties
1111VI muuvi	on ousic	DHVStCut	unu	Chemicai	DIODELIES

· General Information

· Appearance:

Form: Liquid

Color: According to product specification
Odor: Like rotten eggs (mercaptans)

· *Odor threshold:* Not determined.

· pH-value: Not determined.

· Change in condition

Melting point/Melting range: Undetermined.
Boiling point/Boiling range: Undetermined.

• Flash point: 259 °C (498.2 °F)

· Flammability (solid, gaseous): Not applicable.

Decomposition temperature: Not determined.

(Contd. on page 5)

Printing date 02/25/2020 Reviewed on 02/17/2020

Trade name: 10-3005CNSCL, 92-3005CNSCL

		(Contd. of page
· Auto igniting:	Product is not selfigniting.	
· Danger of explosion:	Product does not present an explosion hazard.	
· Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
· Vapor pressure:	Not determined.	
· Density:	Not determined.	
· Relative density	Not determined.	
Vapor density	Not determined.	
Evaporation rate	Not determined.	
· Solubility in / Miscibility with		
Water:	Not miscible or difficult to mix.	
· Partition coefficient (n-octanol/wa	iter): Not determined.	
· Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
· Solvent content:		
VOC content:	0.00 %	
	0.0 g/l / 0.00 lb/gal	
Solids content:	100.0 %	
Other information	No further relevant information available.	

10 Stability and reactivity

- · Reactivity No further relevant information available.
- · Chemical stability
- · Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions

Hazardous polymerization may occur if mixed with epoxy resins. Excessive exothermic reactions will occur when mixed with epoxy resins in larger masses (>50 grams).

· Conditions to avoid

Heat is generated during the curing/crosslinking process when mixed with epoxy resins. Minimize the mass (refer to possibility of hazardous reactions) to prevent a premature exothermic reaction producing intense heat and smoke.

- · Incompatible materials: Strong acids, strong bases, strong oxidizers, epoxy resins
- · Hazardous decomposition products:

Hydrogen sulfide

Carbon monoxide

Sulfur oxides (SOx)

Carbon dioxide

- USA

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11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- · Primary irritant effect:
- on the skin: No irritant effect.
- · on the eye: No irritating effect.
- · Sensitization: Sensitization possible through skin contact.
- · Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations: Irritant

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)

7631-86-9 Synthetic Amorphous/fumed/pyrogenic silica

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· NTP (National Toxicology Program)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12 Ecological information

- Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packagings:
- · Recommendation:

Disposal must be made according to official regulations.

Dispose of in accordance to all local, state, and/or national regislation.

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4 Transport information	
· UN-Number · DOT, ADR, ADN, IMDG · IATA	Not Applicable UN3334
· UN proper shipping name · DOT, ADR, ADN, IMDG · IATA	Not Applicable Aviation regulated liquid, n.o.s.
· Transport hazard class(es)	
· DOT, ADR, ADN, IMDG · Class	Not Applicable
· IATA	
· Class · Label	9 Miscellaneous dangerous substances and articles 9
· Packing group · DOT, ADR, IMDG · IATA	Not Applicable III
· Environmental hazards: · Marine pollutant:	No
· Special precautions for user	Not applicable.
· Transport in bulk according to Annex MARPOL73/78 and the IBC Code	II of Not applicable.
· Transport/Additional information:	
· DOT · Remarks:	Not Regulated
· ADR · Remarks:	Not regulated
· IMDG · Remarks:	Not Regulated
· UN "Model Regulation":	Not Applicable

15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Sara
- · Section 355 (extremely hazardous substances):

None of the ingredient is listed.

Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

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· TSCA (Toxic Substances Control Act):

All components have the value ACTIVE.

· Hazardous Air Pollutants

None of the ingredients is listed.

· California Proposition 65

· Chemicals known to cause cancer:

7631-86-9 Synthetic Amorphous/fumed/pyrogenic silica

· Chemicals known to cause reproductive toxicity for females:

7631-86-9 Synthetic Amorphous/fumed/pyrogenic silica

· Chemicals known to cause reproductive toxicity for males:

7631-86-9 Synthetic Amorphous/fumed/pyrogenic silica

Chemicals known to cause developmental toxicity:

7631-86-9 Synthetic Amorphous/fumed/pyrogenic silica

· New Jersey Right-to-Know List:

7631-86-9 Synthetic Amorphous/fumed/pyrogenic silica

· Pennsylvania Right-to-Know List:

7631-86-9 Synthetic Amorphous/fumed/pyrogenic silica

· Cancerogenity categories

· EPA (Environmental Protection Agency)

None of the ingredients is listed.

· TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

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

None of the ingredients is listed.

· Chinese Chemical Inventory of Existing Chemical Substances

All ingredients are listed.

- GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms GHS07
- · Signal word Warning

· Hazard-determining components of labeling:

Reaction products of pentaerythritol, propoxylated and 1-chloro-2,3-epoxypropane with hydrogen sulfide

· Hazard statements

May cause an allergic skin reaction.

· Precautionary statements

Avoid breathing dust/fume/gas/mist/vapors/spray

Contaminated work clothing must not be allowed out of the workplace.

Wear protective gloves.

If on skin: Wash with plenty of water.

If skin irritation or rash occurs: Get medical advice/attention.

Specific treatment (see on this label).

Wash contaminated clothing before reuse.

Dispose of contents/container in accordance with local/regional/national/international regulations.

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- · National regulations:
- · Other regulations, limitations and prohibitive regulations
- Substances of very high concern (SVHC) according to REACH, Article 57

None of the ingredients is listed.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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. The information given and the recommendations made herein apply to our product alone and are not combined with other product(s). Such are based on our research and on data from other reliable sources and are believed to be accurate. No guarantee of accuracy is made. It is the user's responsibility before using any product to verify this data under their own operating conditions and to determine whether the product is suitable for their purposes.

- · **Department issuing SDS:** Product safety department.
- · Contact: Paul C. Harrington
- Date of preparation / last revision 02/17/2020 / -
- · Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

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

ICAO: International Civil Aviation Organisation

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

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU) PBT: Persistent, Bioaccumulative and Toxic

SVHC: Substances of Very High Concern

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Skin Sens. 1: Skin sensitisation - Category 1