Safety Data Sheet acc. To OSHA HCS

Revision Date: 12/3/2015

1 Identification

Product Identifier Epiweld 9 N 7 Part A

Article number:

Relevant Identified uses of the substance or mixture and uses advised against

No further relevant information available

Application of the substance / the mixture

Details of the supplier of the safety data sheet

Manufacturer/Supplier Lambert Corporation

20 Coburn Ave. Orlando, FL 32805

(407) 841-2940

Emergency Telephone Number: (800) 424-9300 - Chemtrec

Information Department: Environmental, Health, and Safety department

2 Hazard(s) Identification

Classification of the substance or mixture

Classification System:

Hazard Pictograms



GHS07

Signal Word Warning

Hazard-determining components of labeling:

Hazard Statements

Harmful if swallowed

Causes eye irritation

May cause an allergic skin reaction.

Precautionary statements

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

Wear protective gloves

Wash contaminated clothing before reuse

Store locked up.

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

Classification system:

HMIS ratings (scale 0 - 4)



Other Hazards

Results of PBT and vPvB assessment

PBT: Not applicablevPvB: Not applicable

3 Composition/Information on Ingredients

Chemical Characterization: Mixtures

Description: Mixture of the substances listed below with nonhazardous additions

Dangerous Components:

25068-38-6 Reaction product of Epichlorohydrin and Bisphenol A

Additional information For the wording of the listed risk phrases refer to section 16.

4 First-Aid Measures

Description of first aid measures

General Information:

Immediately remove any clothing soiled by the product

In the event of persistent symptoms recieve medical treatment.

After Inhalation:

Supply fresh air and call a doctor if systems persist

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:

Clean mouth with water and drink afterwards plenty of water. Consult doctor if symptoms persist

Most important symptoms and effects, both acute and delayed: No further information available

Indication of any immediate medical attention and special treatment needed:

No further information available

5 Fire-Fighting Measures

Extinguishing media:

Suitable extinguishing agents:

Use extinguishing measures that are appropriate to local circumstances and the surrounding

environment

Special hazards arising from the substance or mixture: No further information available

Advice for firefighters:

Protective equipment:

Because fire may produce thermal decomposition products, wear a self-contained breathing apparatus

(SCRA) with a fell formula apparatus

(SCBA) with a full face piece operated in pressure-demand or positive-pressure mode

6 Accidental Release Measures

Personal precautions, protective equipment and emergency procedures:

Wear protective equipment. Keep unprotected persons away.

Environmental procedures:

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

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.

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.

7 Handling and Storage

Wear appropriate personal protective clothing to prevent eye and skin contact. Avoid

Precautions for safe handling: breathing vapors or mists of this product. Use with adequate ventilation. Do not take

internally.

Information for protection against explosions and fires: Keep respiratory protective device available.

Conditions for safe storage, including any incompatibilities:

Storage: Cool and dry area

Requirements to be met by storerooms and receptacles: No special requirements

Information about storage in one common storage facility: Not required.

Further information about storage conditions: Keep receptacle tightly sealed.

Specific end use(s): N/A

8 Exposure Controls/Personal Protection

Additional information about design of technical systems: N/A

Control parameters:

Components with limit values that require monitoring at the workplace:

Additional information:

Exposure controls: The lists that were valid during the creation were used as basis

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

Store protective clothing separately.

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

Material of gloves: Nitrile Rubber

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: Wear appropriate eye protection to prevent eye contact.

9 Physical and Chemical Properties

Information of basic physical and chemical properties

General information

Appearance:

Form: Liquid

Color: Light yellow

Odor: Irritating odor

Odor threshold: Not determined

pH- value: Not determined

Change in condition:

Melting point/Melting range: Not determined >212°F(100°C)Boiling point/Boiling range: Flash point: Not applicable Flammability (solid, gaseous): Not applicable

Ignition temperature:

Decomposition temperature: Not determined Auto igniting: Not self-igniting

Danger of explosion: No explosion hazard

Explosion limits:

Lower: Not determined Upper: Not determined *Vapor pressure at 20 °C (68 °F):* Not determined 1.14 g/cm^3 Density at 20 °C (68 °F) Relative density: Not determined

Vapor density: Not determined Evaporation rate: Not determined Solubility in / Miscibility with Water: Negligible

Viscosity:

Not determined Dynamic:

 $> 20.5 \text{ mm}^2/\text{s} \text{ at } 104 \text{ }^{\circ}\text{F} \text{ } (40 \text{ }^{\circ}\text{C})$ Kinematic:

Other information: None

10 Stability and Reactivity

Reactivity: No decomposition if stored and applied as directed

Chemical stability: No decomposition if stored and applied as directed

Thermal decomposition / Conditions to be avoided: No decomposition if used according to specifications.

Possibility of hazardous reactions: No dangerous reactions known.

Conditions to avoid: Keep away from heat and sources of ignition Incompatible materials: No further relevant information available

Hazardous decomposition products: No dangerous decomposition products known

11 Toxicological Information:

Information on toxicological effects:

Primary irritant effect:

on the skin: May cause skin irritation

on the eye: May cause irritation

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)

None of the ingredients listed

NTP (National Toxicology Program)

None of the ingredients listed

OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients listed.

12 Ecological Information

Toxicity: No further relevant information available.

Aquatic toxicity: No further relevant information available.

Persistence and degradability:

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

Results of PBT and vPvB assessment:

PBT: Not applicablevPvB: Not applicable

Other adverse effects: No further relevant information available.

13 Disposal Considerations

Waste treatment methods:

It is the generator's responsibility to determine if the waste meets applicable definitions of hazardous

Recommendation: waste. State and local regulations may differ from federal disposal regulations. Dispose of waste

material according to local, state, federal, and provincial environmental regulations

Uncleaned packagings:

Recommendation: Disposal must be made according to Federal, State, and Local regulations

Recommended cleansing agent: Water, if necessary with cleansing agents.

14 Transport Information

UN-Number:

DOT, ADR, IMDG, IATA:

Not Regulated

UN proper shipping name:

ADR: Not Regulated

Transport hazard class(es):

DOT, ADR, IMDG, IATA:

Class: Not Regulated

Packing group:

DOT, ADR, IMDG, IATA:

Environmental hazards:

Marine pollutant: No

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

Not applicable

Transport/Additional information:

ADR:

U.S. Domestic Ground Shipments: Not Regulated by D.O.T.

U.S. Domestic ground Non-Bulk (119 gal

or less per container) Shipments:

Same as listed for Standard Shipments above

Emergency Response Guide (ERG) Number: Not determined

UN "Model Regulation":

15 Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture:

Sara:

Section 355 (extremely hazardous substances): None of the ingredients listed

This product may contain 1 or more toxic chemicals subject to the reporting

Section 313 (Specific toxic chemical listings): requirements of Section 313 of Title III of the Superfund Amendments and

Reauthorization Act (SARA) of 1986 and 40 CFR part 372. If so, the

chemicals are listed below

None of the ingredients listed.

TSCA (Toxic Substances Control Act):

All ingredients are listed

Proposition 65:

Chemicals known to the State of California (Prop. 65) to cause cancer:

None of the ingredients listed.

Chemicals known to cause reproductive toxicity for females:

None of the ingredients listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients listed.

Chemicals known to cause developmental toxicity:

None of the ingredients listed.

Cancerogenity categories:

EPA (Environmental Protection Agency):

None of the ingredients listed.

TLV (Threshold Limit Value established by ACGIH):

None of the ingredients listed.

MAK (German Maximum Workplace Concentration):

None of the ingredients listed.

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

None of the ingredients listed.

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

Hazard pictograms:



GHS07

Signal word: Danger

Hazard-determining components of labeling:

Hazard statements:

Harmful if swallowed

Causes eye irritation

May cause an allergic skin reaction.

Precautionary statements:

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

Wear protective gloves

Wash contaminated clothing before reuse

Store locked up.

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

National regulations:

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

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

16 Other Information

Department issuing MSDS: Environmental, Health & Safety Department

Contact: Environmental, Health & Safety Manager

Date of preparation / Last revision: 12/3/2015

Abbreviations and acronyms:

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) Skin Sens. 1: Sensitisation - Skin, Hazard Category 1

Carc. 1B: Carcinogenicity, Hazard Category 1B

Safety Data Sheet acc. To OSHA HCS

Revision Date: 12/3/2015

1 Identification

Product Identifier Epiweld 9 N 7 Part B

Article number:

Relevant Identified uses of the substance or mixture and uses advised against

No further relevant information available

Application of the substance / the mixture

Details of the supplier of the safety data sheet

Manufacturer/Supplier Lambert Corporation

20 Coburn Ave. Orlando, FL 32805

(407) 841-2940

Emergency Telephone Number: (800) 424-9300 - Chemtrec

Information Department: Environmental, Health, and Safety department

2 Hazard(s) Identification

Classification of the substance or mixture

Classification System:

Hazard Pictograms



GHS07

Signal Word Warning

Hazard-determining components of labeling:

Hazard Statements

Harmful if swallowed

Causes eye irritation

May cause an allergic skin reaction.

Precautionary statements

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

Wear protective gloves

Wash contaminated clothing before reuse

Store locked up.

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

Classification system:

HMIS ratings (scale 0 - 4)



Other Hazards

Results of PBT and vPvB assessment

PBT: Not applicablevPvB: Not applicable

3 Composition/Information on Ingredients

Chemical Characterization: Mixtures

Description: Mixture of the substances listed below with nonhazardous additions

Dangerous Components:

68082-29-1 Modified Polymido Amine

111-40-0 Diethylenetetramine

31326-29-1 Amine Adduct

80-05-7 Bisphenol A

140-31-8 Aminoethylpiperazine

Additional information For the wording of the listed risk phrases refer to section 16.

4 First-Aid Measures

Description of first aid measures

General Information:

Immediately remove any clothing soiled by the product

In the event of persistent symptoms recieve medical treatment.

After Inhalation:

 $Supply fresh\ air\ and\ call\ a\ doctor\ if\ systems\ persist$

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:

Clean mouth with water and drink afterwards plenty of water. Consult doctor if symptoms persist

Most important symptoms and effects, both acute and delayed: No further information available

Indication of any immediate medical attention and special treatment needed:

No further information available

5 Fire-Fighting Measures

Extinguishing media:

Suitable extinguishing agents:

Use extinguishing measures that are appropriate to local circumstances and the surrounding

environment

Special hazards arising from the substance or mixture: No further information available

Advice for firefighters:

Protective equipment:

Because fire may produce thermal decomposition products, wear a self-contained breathing apparatus

(SCRA) with a full formula apparatus

(SCBA) with a full face piece operated in pressure-demand or positive-pressure mode

6 Accidental Release Measures

Personal precautions, protective equipment and emergency procedures:

Wear protective equipment. Keep unprotected persons away.

Environmental procedures:

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

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.

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.

7 Handling and Storage

Wear appropriate personal protective clothing to prevent eye and skin contact. Avoid

Precautions for safe handling: breathing vapors or mists of this product. Use with adequate ventilation. Do not take

internally.

Information for protection against explosions and fires: Keep respiratory protective device available.

Conditions for safe storage, including any incompatibilities:

Storage:

Requirements to be met by storerooms and receptacles: No special requirements

Information about storage in one common storage facility: Not required.

Further information about storage conditions: Keep receptacle tightly sealed.

Specific end use(s): N/A

8 Exposure Controls/Personal Protection

Additional information about design of technical systems: N/A

Control parameters:

Components with limit values that require monitoring at the workplace:

Additional information:

Exposure controls: The lists that were valid during the creation were used as basis

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

Store protective clothing separately.

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

Material of gloves: Nitrile Rubber

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: Wear appropriate eye protection to prevent eye contact.

9 Physical and Chemical Properties

Information of basic physical and chemical properties

General information

Appearance:

Form: Liquid
Color: Gray

Odor: Irritating odor
Odor threshold: Not determined
pH- value: Not determined

Change in condition:

Melting point/Melting range:

Boiling point/Boiling range:

>212°F (100°C)

Flash point:

Not applicable

Flammability (solid, gaseous):

Not applicable

Ignition temperature:

Decomposition temperature:Not determinedAuto igniting:Not self-ignitingDanger of explosion:No explosion hazard

Explosion limits:

Lower:Not determinedUpper:Not determinedVapor pressure at $20 \, ^{\circ}C$ ($68 \, ^{\circ}F$):Not determinedDensity at $20 \, ^{\circ}C$ ($68 \, ^{\circ}F$) $1.7 \, g/cm^3$

Relative density:Not determinedVapor density:Not determinedEvaporation rate:Not determined

Solubility in / Miscibility with Water: Negligible

Viscosity:

Dynamic: Not determined

Kinematic: $> 20.5 \text{ mm}^2/\text{s} \text{ at } 104 \text{ }^{\circ}\text{F} \text{ } (40 \text{ }^{\circ}\text{C})$

Other information: None

10 Stability and Reactivity

Reactivity: No decomposition if stored and applied as directed

Chemical stability: No decomposition if stored and applied as directed

Thermal decomposition / Conditions to be avoided: No decomposition if used according to specifications.

Possibility of hazardous reactions:No dangerous reactions known.Conditions to avoid:Keep away from heat and sources of ignitionIncompatible materials:No further relevant information available

Hazardous decomposition products: No dangerous decomposition products known

11 Toxicological Information:

Information on toxicological effects:

Primary irritant effect:

on the skin: May cause skin irritation

on the eye: May cause irritation

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)

None of the ingredients listed

NTP (National Toxicology Program)

None of the ingredients listed

OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients listed.

12 Ecological Information

Toxicity: No further relevant information available.

Aquatic toxicity: No further relevant information available.

Persistence and degradability:

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

Results of PBT and vPvB assessment:

PBT: Not applicablevPvB: Not applicable

Other adverse effects: No further relevant information available.

13 Disposal Considerations

Waste treatment methods:

It is the generator's responsibility to determine if the waste meets applicable definitions of hazardous Recommendation:

waste. State and local regulations may differ from federal disposal regulations. Dispose of waste

material according to local, state, federal, and provincial environmental regulations

Uncleaned packagings:

Recommendation: Disposal must be made according to Federal, State, and Local regulations

14 Transport Information

UN-Number:

DOT, ADR, IMDG, IATA: Not Regulated

UN proper shipping name:

ADR: Not Regulated

Transport hazard class(es): DOT, ADR, IMDG, IATA:

Class: Not Regulated

Packing group:

DOT, ADR, IMDG, IATA: III

Environmental hazards:

Marine pollutant: No

Transport in bulk according to Annex II Not applicable of MARPOL73/78 and the IBC Code

Transport/Additional information:

ADR:

U.S. Domestic Ground Shipments: *Not Regulated by D.O.T.*

U.S. Domestic ground Non-Bulk (119 gal

or less per container) Shipments:

Same as listed for Standard Shipments above

Not determined Emergency Response Guide (ERG) Number:

UN "Model Regulation":

15 Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture:

Sara:

Section 355 (extremely hazardous substances): None of the ingredients listed

This product may contain 1 or more toxic chemicals subject to the reporting

Section 313 (Specific toxic chemical listings):

requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR part 372. If so, the chemicals are listed below

None of the ingredients listed.

TSCA (Toxic Substances Control Act):

All ingredients are listed

Proposition 65:

Chemicals known to the State of California (Prop. 65) to cause cancer:

None of the ingredients listed.

Chemicals known to cause reproductive toxicity for females:

None of the ingredients listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients listed.

Chemicals known to cause developmental toxicity:

None of the ingredients listed.

Cancerogenity categories:

EPA (Environmental Protection Agency):

None of the ingredients listed.

TLV (Threshold Limit Value established by ACGIH):

None of the ingredients listed.

MAK (German Maximum Workplace Concentration):

None of the ingredients listed.

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

None of the ingredients listed.

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

Hazard pictograms:



GHS07

Signal word: Danger

Hazard-determining components of labeling:

Hazard Statements

Harmful if swallowed

Causes eye irritation

May cause an allergic skin reaction.

Precautionary statements:

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

Wear protective gloves

Wash contaminated clothing before reuse

Store locked up.

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

National regulations:

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

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

16 Other Information

Department issuing MSDS: Environmental, Health & Safety Department

Contact: Environmental, Health & Safety Manager

Date of preparation / Last revision: 12/3/2015

Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the

International Carriage of Dangerous Goods by Road)

 ${\it IMDG: International\ Maritime\ Code\ for\ Dangerous\ Goods}$

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) Skin Sens. 1: Sensitisation - Skin, Hazard Category 1 Carc. 1B: Carcinogenicity, Hazard Category 1B

Safety Data Sheet acc. To OSHA HCS

Revision Date: 11/25/2015

1 Identification

Product Identifier Epiweld 9 N 7 Part C

Article number:

Relevant Identified uses of the substance or mixture and uses advised against

No further relevant information available

Application of the substance / the mixture

Details of the supplier of the safety data sheet

Manufacturer/Supplier Lambert Corporation

20 Coburn Ave. Orlando, FL 32805

(407) 841-2940

Emergency Telephone Number: (800) 424-9300 - Chemtrec

Information Department: Environmental, Health, and Safety department

2 Hazard(s) Identification

Classification of the substance or mixture

Carc. 1A H350 May cause cancer.

Label Elements

GHS label elements

Hazard Pictograms



GHS08

Signal Word Danger

Hazard-determining components of labeling:

Quartz (SiO2)

Hazard Statements

May cause cancer.

Precautionary statements

Wear protective gloves/protective clothing/eye protection/face protection.

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood

 ${\it IF\ exposed\ or\ concerned:\ Get\ medical\ advice/attention.}$

Store locked up

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

Classification system:

NFPA ratings (scale 0 - 4)



HMIS ratings (scale 0 - 4)



Other Hazards

Results of PBT and vPvB assessment

PBT: Not applicablevPvB: Not applicable

3 Composition/Information on Ingredients

Chemical Characterization: Mixtures

Description: Mixture of the substances listed below with nonhazardous additions

Dangerous Components:

14808-60-7 Quartz (SiO2)

Additional information For the wording of the listed risk phrases refer to section 16.

4 First-Aid Measures

Description of first aid measures

After Inhalation: Supply fresh air; consult doctor in case of complaints

After Skin Contact: If skin irritation continues, consult a doctor

After Eye Contact: Rinse opened eye for several minutes under running water.

After Swallowing: Seek medical treatment

Most important symptoms and effects, both acute and delayed: No further information available

Indication of any immediate medical attention and special treatment needed:

No further information available

5 Fire-Fighting Measures

Extinguishing media:

Suitable extinguishing agents: CO2, sand, extinguishing powder, foam. Fight larger fires with water spray

For safety reasons unsuitable extinguishing agents: Water

Special hazards arising from the substance or mixture: No further relevant information available

Advice for firefighters:

Protective equipment:Because fire may produce thermal decomposition products, wear a self-contained breathing apparatus

(SCBA) with a full face piece operated in pressure-demand or positive-pressure mode

6 Accidental Release Measures

Personal precautions, protective equipment and emergency procedures:

Wear protective equipment. Keep unprotected persons away.

Environmental procedures: No special measures required

Methods and material for containment and cleaning up: Pick up mechanically

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.

7 Handling and Storage

Wear appropriate personal protective clothing to prevent eye and skin contact. Avoid

Precautions for safe handling: breathing vapors or mists of this product. Use with adequate ventilation. Do not take

internally.

Information for protection against explosions and fires: No special requirements

Conditions for safe storage, including any incompatibilities:

Storage: No special requirements

Requirements to be met by storerooms and receptacles: No special requirements

Information about storage in one common storage facility: Not required.

Further information about storage conditions: None

Specific end use(s): N/A

8 Exposure Controls/Personal Protection

Additional information about design of technical systems: N/A

Control parameters:

Components with limit values that require monitoring at the workplace:

14808-60-7 Quartz (SiO2)

PEL See Quartz listing

REL Short-term value: $0.05* mg/m^3$

*respirable dust; See Pocket Guide App. A

TLV Long-term value: $0.025* mg/m^3$

*as respirable fraction

Additional information: The lists that were valid during the creation were used as basis

Exposure controls:

Personal protective equipment:

General protective and hygienic measures:

Wash hands before breaks and at the end of work

Breathing equipment Not required

Protection of hands:



Protective Gloves

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: Wear appropriate eye protection to prevent eye contact.

9 Physical and Chemical Properties

Information of basic physical and chemical properties

General information

Appearance:

Form: Solid

Color: According to product specification

Odor: Characteristic
Odor threshold: Not determined
pH- value: Not applicable

Change in condition:

Melting point/Melting range: Not determined

Boiling point/Boiling range: Not determined

Flash point: Not applicable

Flammability (solid, gaseous): Not determined

Ignition temperature: Not determined

Decomposition temperature: Not determined

Auto igniting: Not self-igniting

Danger of explosion: Product is not explosive

Explosion limits:

Lower: Not determined

Upper: Not determined

Vapor pressure at 20 °C (68 °F): Not applicable

Density at 20 °C (68 °F) 2.74819 g/cm³ (22.934 lbs/gal)

Relative density:Not determinedVapor density:Not applicableEvaporation rate:Not applicable

Solubility in / Miscibility with Water: Soluble

Partition coefficient (n-octanol/water) Not determined

Viscosity:

Dynamic: Not determined

Kinematic: Not determined

Solvent content:

Organic solvents: 0.00%

Solids content: 100.00%

Other information: None

Volatile organic compounds: Contains less than 800 g/L

10 Stability and Reactivity

Reactivity:

Chemical stability:

Thermal decomposition / Conditions to be avoided:

No decomposition if used according to specifications.

Possibility of hazardous reactions: No dangerous reactions known.

Conditions to avoid: Keep away from heat and sources of ignition

Incompatible materials: No further relevant information available

Hazardous decomposition products: No dangerous decomposition products known

11 Toxicological Information:

Information on toxicological effects:

Acute toxicity:

Primary irritant effect:

on the skin: May cause skin irritation
 on the eye: No irritating effect known
 Sensitization: No sensitizing effects known

Additional toxicological information:

Carcinogenic categories

IARC (International Agency for Research on Cancer)

14808-60-7 Quartz (SiO2)

NTP (National Toxicology Program)

14808-60-7 Quartz (SiO2)

OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients listed.

12 Ecological Information

Toxicity:

Aquatic toxicity: No further relevant information available.

Persistence and degradability: No further relevant information available.

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

Results of PBT and vPvB assessment:

PBT: Not applicablevPvB: Not applicable

Other adverse effects: No further relevant information available.

13 Disposal Considerations

Waste treatment methods:

Recommendation:

Must not be disposed of as normal garbage. Do not allow product to reach sewage system. It is the generator's responsibility to determine if the waste meets applicable definitions of hazardous waste. State and local regulations may differ from federal disposal regulations. Dispose of waste material

according to local, state, federal, and provincial environmental regulations.

Uncleaned packagings:

Recommendation: Disposal must be made according to Federal, State, and Local regulations

14 Transport Information

UN-Number:

DOT, ADR, ADN, IMDG, IATA Not regulated

UN proper shipping name:

DOT, ADR, ADN, IMDG, IATA Not regulated

Transport hazard class(es):

DOT, ADR, IMDG, IATA

Class Not regulated

Packing group:

DOT, ADR, IMDG, IATA:

Not regulated

Environmental hazards:

Marine pollutant: No

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

Not applicable

 ${\it Transport/Additional\ information:}$

ADR:

U.S. Domestic Ground Shipments: Same as listed for Standard Shipments above.

U.S. Domestic ground Non-Bulk (119 gal

or less per container) Shipments:

Same as listed for Standard Shipments above.

Emergency Response Guide (ERG) Number: Not determined

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": N/E

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 listed

Section 313 (Specific toxic chemical listings):

This product may contain 1 or more toxic chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR part 372. If so, the chemicals are listed below

TSCA (Toxic Substances Control Act):

14808-60-7 Quartz (SiO2)

Proposition 65:

Chemicals known to the State of California (Prop. 65) to cause cancer:

14808-60-7 Quartz (SiO2)

Chemicals known to cause reproductive toxicity for females:

None of the ingredients listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients listed.

Chemicals known to cause developmental toxicity:

None of the ingredients listed.

Cancerogenity categories:

EPA (Environmental Protection Agency):

None of the ingredients listed.

TLV (Threshold Limit Value established by ACGIH):

14808-60-7 Quartz (SiO2)

MAK (German Maximum Workplace Concentration):

14808-60-7 Quartz (SiO2)

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

14808-60-7 Quartz (SiO2)

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

Hazard pictograms:



GHS08

Signal word: Danger

Hazard-determining components of labeling:

Quartz (SiO2)

Hazard statements:

May cause cancer

Precautionary statements:

Wear protective gloves/protective clothing/eye protection/face protection.

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

IF exposed or concerned: Get medical advice/attention

Store locked up

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

National regulations:

Information about limitation of use:

Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation. Exceptions can be made by the authorities in certain cases

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

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

16 Other Information

Department issuing MSDS: Environmental, Health & Safety Department

Contact: Environmental, Health & Safety Manager

Date of preparation / Last revision: 11/25/2015

Abbreviations and acronyms:

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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Flam. Liq. 3: Flammable liquids, Hazard Category 3

Acute Tox. 4: Acute toxicity, Hazard Category 4

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Carc. 2: Carcinogenicity, Hazard Category 2

Repr. 2: Reproductive toxicity, Hazard Category 2

STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2

Asp. Tox. 1: Aspiration hazard, Hazard Category 1