

PRODUCT NAME: ABRO Epoxy Steel Adhesive (one hour)

(Hardener)

PRODUCT NUMBER/SIZE: ES-506 / 2 oz. Revision Date: 04/29/2019

SECTION 1

Identification of the Substance and of the Company/Undertaking

MANUFACTURER'S NAME: ABRO INDUSTRIES, INC.

ADDRESS: 3580 Blackthorn Court

South Bend, IN 46628

USA

PRODUCT DESCRIPTION: Adhesive

COMPANY PHONE: 574-232-8289

EMERGENCY 24-HR TELEPHONE: Chemtrec: US/Canada 1-800-424-9300

International +1-703-527-3887

SECTION 2 Hazards Identification

GHS classification in accordance with: (US) OSHA (29 CFR 1910.1200)

- Skin corrosion/irritation (chapter 3.2), Cat. 2

- Eye damage/irritation (chapter 3.3), Cat. 2

Label Pictogram(s):



Signal Word: WARNING

Hazard Phrases: Causes skin irritation. Causes serious eye irritation

Precautionary

Phrases:

Wash hands thoroughly after handling. Wear protective gloves/protective

clothing/eye protection/face protection.

Response: IF ON SKIN: Wash with plenty of water and soap. If skin irritation occurs: Get

medical advice/attention. Take off contaminated clothing and wash it before reuse. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. If eye irritation

persists: Get medical advice/attention.

Storage / Store locked up. Dispose of contents/container in accordance with

Disposal: local/regional/national/international regulations.



Other hazards which do not result in classification

None known.

SECTION 3 Composition/Information on Ingredients

Mixtures:

Hazardous components

uous components	
Component	
Concentration	
2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL (CAS no.: 90-72-2; EC no.: 202-013-9; Index no.: 603 - <= 15 % (weight)	,
CLASSIFICATIONS: Acute toxicity (chapter 3.1), Cat. 4; Serious eye damage/eye irritation (chapter 3.3), Cat corrosion/irritation (chapter 3.2), Cat. 2. HAZARDS: H302 - Harmful if swallowed; H315 - Causes skin irr Causes serious eye irritation.	
Calcium carbonate (Natural) (CAS no.: 1317-65-3)	>= 5 - <= 25 %
(weight)	
CLASSIFICATIONS: No data available. HAZARDS: No data available.	
nonylphenol (CAS no.: 25154-52-3; EC no.: 246-672-0; Index no.: 601-053-00-8)	>= 3 - <= 13 %
(weight)	
CLASSIFICATIONS: Toxic to reproduction (chapter 3.7), Cat. 2; Acute toxicity (chapter 3.1), Cat. 4; Skir corrosion/irritation (chapter 3.2), Cat. 1B; Hazardous to the aquatic environment, short-term (acute) (chapter 1; Hazardous to the aquatic environment, long-term (chronic) (chapter 4.1), Cat. 1. HAZARDS: H302 - F swallowed; H314 - Causes severe skin burns and eye damage; H361fd - ; H400 - Very toxic to aquatic I toxic to aquatic life with long lasting effects.	apter 4.1), Cat. Harmful if
Barium sulfate (CAS no.: 7727-43-7) % (weight)	>= 10 - <= 35
CLASSIFICATIONS: No data available. HAZARDS: No data available.	
TALC powder (CAS no.: 14807-96-6)	>= 10 - <= 35
% (weight)	
CLASSIFICATIONS: No data available. HAZARDS: No data available.	- 00000 00 4)
Fatty acids, C18-unsatd, dimers, polymers with tall-oil fatty acids and triethylenetetramine (CAS no).: 68082-29-1) >= 20 - <= 50
% (weight)	
CLASSIFICATIONS: No data available. HAZARDS: No data available.	

SECTION 4 First Aid Measures

First Aid Measures

General Advice

If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Avoid contact with eyes and skin. Keep out of reach of children

Inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The



exposed person may need to be kept under medical surveillance

for 48 hours.

Skin Contact Wash contaminated skin with plenty of soap and water. Continue

to rinse for at least 20 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Eye Contact Immediately flush eyes with plenty of water, occasionally lifting the

upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20 minutes. Get medical

attention.

If Swallowed Wash out mouth with water. Remove dentures if any. Remove

victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do

not induce vomiting unless directed to do so by medical

personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open

airway. Loosen tight clothing such as a collar, tie, belt or

waistband.

Personal Protective Equipment for first-aid responders

Use personal protective equipment as required. No action shall be taken involving any personal risk or without suitable training. It

may be dangerous to the person providing aid to give mouth-to-

mouth resuscitation.

Most important symptoms/effects, acute and delayed

Causes serious eye irritation.

Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

Causes skin irritation

If ingested, Irritating to mouth, throat and stomach.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician: In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

No specific treatment.

SECTION 5 Fire Fighting Measures

Suitable Extinguishing Media: Carbon dioxide, dry chemical, foam

Specific hazards arising from the

chemical

Special protective actions for fire-

fighters

Not available

Protective equipment for firefighters: Firefighters should wear full protective clothing including self-contained breathing

apparatus, MSHA/NIOSH (approved or equivalent)



Hazardous combustion products: May include and are not limited to: Oxides of carbon. Oxides of nitrogen. Oxides of

Sulphur.

Further Information: Explosion data:

Sensitivity to mechanical impact: Not available Sensitivity to static discharge: Not available

SECTION 6 Accidental Release Measures

Personal precautions, protective equipment and emergency

procedures:

Keep unnecessary personnel away. Do not touch or walk through spilled material. Ensure adequate ventilation. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and

upwind of spill/leak.

Methods and materials for containment and cleaning up:

Stop the flow of material, if this is without risk.

Before attempting clean up, refer to hazard data given above. Dampen material with water and use shovel or scoop to collect material in clean container for proper disposal. Rinse area with water. Prevent large spills from entering sewers or waterways.

Contact emergency services and supplier for advice.

Environmental Precautions:

Prevent entry into waterways, sewers, basements or confined

areas.

SECTION 7 Handling and Storage

Precautions for Safe Handling

Precautions for safe

handling:

Use good industrial hygiene practices in handling this material.

Avoid contact with eyes, skin and clothing.

Avoid prolonged or repeated skin contact with this material.

Wash thoroughly after handling. Avoid breathing vapors or mist.

Use personal protective equipment as required.

Conditions for safe storage, including any incompatibilities:

Keep out of reach of children. Store in a tightly closed container in a dry, cool, well-ventilated place. Keep away from incompatible materials such as strong oxidizing agents, peroxides, acids, sodium hypochlorite, calcium

hypochlorite.

SECTION 8 Exposure Controls/Personal Protection

Control parameters

CAS: (not specified)
Soapstone



Cal/OSHA: See Annotated Z-3 PEL inhalation; NIOSH: See Annotated Z-3 REL inhalation; OSHA: See Annotated Z-3 ppm PEL inhalation; See Annotated Z-3 mg/m3 PEL inhalation

CAS: 1317-65-3

Calcium Carbonate

Cal/OSHA: see PNOR PEL inhalation Calcium Carbonate, Respirable fraction

Cal/OSHA: 5 mg/m3 PEL inhalation; NIOSH: 5 mg/m3 REL inhalation; OSHA: 5 mg/m3 PEL

inhalation

Calcium Carbonate, Total dust

Cal/OSHA: 10 mg/m3 PEL inhalation; NIOSH: 10 mg/m3 REL inhalation; OSHA: 15 mg/m3 PEL inhalation

PEL Innaiau

Limestone

Cal/OSHA: see PNOR PEL inhalation

Limestone, Respirable fraction

Cal/OSHA: 5 mg/m3 PEL inhalation; NIOSH: 5 mg/m3 REL inhalation; OSHA: 5 mg/m3 PEL

inhalation

Limestone, Total dust

Cal/OSHA: 10 mg/m3 PEL inhalation; NIOSH: 10 mg/m3 REL inhalation; OSHA: 15 mg/m3

PEL inhalation

Marble

Cal/OSHA: See PNOR PEL inhalation

Marble, Respirable fraction

Cal/OSHA: 5 mg/m3 PEL inhalation; NIOSH: 5 mg/m3 REL inhalation; OSHA: 5 mg/m3 PEL

inhalation

Marble, Total dust

Cal/OSHA: 10 mg/m3 PEL inhalation; NIOSH: 10 mg/m3 REL inhalation; OSHA: 15 mg/m3

PEL inhalation

CAS: 14807-96-6

Silicates (less than 1% crystalline silica), Talc (containing no asbestos), respirable dust Cal/OSHA: See Annotated Z-3 PEL inhalation; NIOSH: See Annotated Z-3 REL inhalation;

OSHA: See Annotated Z-3 ppm PEL inhalation; See Annotated Z-3 mg/m3 PEL inhalation

CAS: 7727-43-7

Barium sulfate

Cal/OSHA: see PNOR PEL inhalation

Barium sulfate, Respirable fraction

Cal/OSHA: 5 mg/m3 PEL inhalation; NIOSH: 5 mg/m3 REL inhalation; OSHA: 5 mg/m3 PEL

inhalation

Barium sulfate, Total dust

Cal/OSHA: 10 mg/m3 PEL inhalation; NIOSH: 10 mg/m3 REL inhalation; OSHA: 15 mg/m3 PEL

inhalation

Appropriate engineering controls

General ventilation normally adequate. Showers. Eye wash Stations.

Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

Safety glasses with side shields or goggles.

Skin protection

Protective gloves and clothing.

Body protection

As required by employer code



General hygiene considerations: Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink. Wash hands before breaks and immediately after handling the product.

Respiratory protection

Where exposure guideline levels may be exceeded, use an approved NIOSH respirator.

SECTION 9 Physical and Chemical Properties

Information on basic physical and chemical properties

Appearance/form (physical state, color, etc.)

Beige colored liquid

Odor mild odor
Odor threshold Not available

pH Not available
Melting point/freezing point Not available
Initial boiling point and boiling range Not available

Flash point Closed cup: >93.3°C (>199.9°F)

Evaporation rate Not available
Flammability (solid, gas) Not available
Upper/lower flammability limits Not applicable
Upper/lower explosive limits Not applicable
Vapor pressure Not available
Vapor density Not available

Vapor density
Relative density
Solubility(ies)
Partition coefficient: n-octanol/water
Auto-ignition temperature
Decomposition temperature
Viscosity
Not available
Not available
Not available
Not available
Not available
Not available

Viscosity Not available Explosive properties Not available Oxidizing properties Not available

Other safety information

VOC % content <1%

SECTION 10 Stability and Reactivity

Reactivity

No data available.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to avoid

Excessive heat



Incompatible materials

Strong oxidizing agents, peroxides, acids, sodium hypochlorite, calcium hypochlorite.

Hazardous decomposition products

Carbon oxides. Nitrogen oxides. Oxides of Sulphur

SECTION 11 Toxicological Information

Information on toxicological effects

Acute toxicity

2,4,6-Tris(dimethylaminomethyl) phenol: LD50 Dermal Rat 1280 mg/kg - LD50 Oral Rat 1200 mg/kg

Ingestion: Irritating to mouth, throat and stomach.

Skin corrosion/irritation

2,4,6-Tris(dimethylaminomethyl) phenol

Skin - Mild irritant Rat - 0.025 mL -

Skin - Severe irritant Rat - 0.25 mL -

Skin - Severe irritant Rabbit - 24 hours 2 mg

Serious eye damage/irritation

Eyes - Severe irritant Rabbit - 24 hours 50 μg

Respiratory or skin sensitization

Inhalation: Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

Germ cell mutagenicity

There is no data available.

Carcinogenicity

There is no data available.

Reproductive toxicity

There is no data available.

STOT-single exposure

Eyes, Respiratory system, skin.

STOT-repeated exposure

Eyes, Respiratory system, skin.

Aspiration hazard

There is no data available.

Additional information

Numerical measures of toxicity - Acute Toxicity estimates
Oral ATEmix = 1230 mg/kg
Dermal ATEmix = 2000 mg/kg
Inhalation ATEmix = 1.5 mg/l



SECTION 12 Ecological Information

Toxicity

There is no data available.

Persistence and degradability

There is no data available.

Bioaccumulative potential

Low

Mobility in soil

Not available

Other adverse effects

No known significant effects or critical hazards.

SECTION 13 Disposal Considerations

Disposal of the product

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor.

Disposal of contaminated packaging

Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Do not reuse container.

Sewage disposal

Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14 Transport Information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

SECTION 15 Regulatory Information

Safety, health and environmental regulations specific for the product in question Pennsylvania Right To Know Components



Chemical name: Phenol, nonyl-CAS number: 25154-52-3

Pennsylvania Right To Know Components

Chemical name: Barium sulfate

CAS number: 7727-43-7

Pennsylvania Right To Know Components

Chemical name: Talc CAS number: 14807-96-6

New Jersey Right To Know Components

Common name: BARIUM SULFATE

CAS number: 7727-43-7

New Jersey Right To Know Components

Common name: TALC (NOT CONTAINING ASBESTOS FIBERS)

CAS number: 14807-96-6

Chemical Safety Assessment

U.S. Federal regulations: TSCA 8(a) CDR Exempt/Partial Exemption: Not determined

United States inventory (TSCA 8b): Not determined

CLEAN AIR ACT SECTION 112: Not listed

CLEAN AIR ACT SECTION 602 - CLASS I SUBSTANCES: Not listed CLEAR AIR ACT SECTION 602 - CLASS II STUBSTANCES: Not listed

DEA LIST I CHEMICALS: Not listed DEA LIST II CHEMICALS: Not listed

SARA 302/304: No products were found

SARA 304 RQ: Not applicable

SARA 311/312: Immediate (acute) health hazard

Composition/Information on ingredients: 2,4,6-Tris(dimethylaminomethyl)phenol 5-15%,

Immediate (acute) health hazard

CALIFORNIA PROP. 65: No products were found

HMIS Rating

<u>o rtating</u>	
60 Minute Epoxy Steel Hard	lener
HEALTH	2
FLAMMABILITY	1
PHYSICAL HAZARD	0
PERSONAL PROTECTION	В

NFPA Rating



SECTION 16 Other Information

We believe all information given is accurate. It is offered in good faith but without guarantee. Since conditions of use are beyond our control, user assumes all responsibility and risk.



The supplier disclaims all expressed or implied warranties of merchantability or fitness for a specific use, with respect to the product or the information provided herein, except for conformation to contracted specifications. All information appearing herein is based upon data obtained from manufacturers and/or recognized technical sources. While the information is believed to be accurate, we make no representations as to its accuracy or sufficiency. Conditions of use are beyond our control, and therefore users are responsible for verifying the data under their own operating conditions to determine whether the product is suitable for their particular purposes and they assume all risks of their use, handling, and disposal of the product. Users also assume all risks in regards to the publication or use of, or reliance upon, information contained herein. This information relates only to the product designated herein, and does not relate to its use in combination with any other material or process.

Key to abbreviations:

ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships,

1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

UN = United Nations



PRODUCT NAME: ABRO Epoxy Steel Adhesive (one hour)

(Resin)

PRODUCT NUMBER/SIZE: ES-506 / 2 oz. Revision Date: 04/29/2019

SECTION 1

Identification of the Substance and of the Company/Undertaking

MANUFACTURER'S NAME: ABRO INDUSTRIES, INC.

ADDRESS: 3580 Blackthorn Court

South Bend, IN 46628

USA

PRODUCT DESCRIPTION: Adhesive

COMPANY PHONE: 574-232-8289

EMERGENCY 24-HR TELEPHONE: Chemtrec: US/Canada 1-800-424-9300

International +1-703-527-3887

SECTION 2

Hazards Identification

GHS classification in accordance with: (US) OSHA (29 CFR 1910.1200)

- Skin corrosion/irritation (chapter 3.2), Cat. 2

- Eye damage/irritation (chapter 3.3), Cat. 2

Label Pictogram(s):



Signal Word: WARNING

Hazard Phrases: Causes skin irritation. Causes serious eye irritation

Precautionary

Phrases:

Wash hands thoroughly after handling. Wear protective gloves/protective

clothing/eye protection/face protection.

Response: IF ON SKIN: Wash with plenty of water and soap. If skin irritation occurs: Get

medical advice/attention. Take off contaminated clothing and wash it before reuse. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. If eye irritation

persists: Get medical advice/attention.

Storage / Store locked up. Dispose of contents/container in accordance with

Disposal: local/regional/national/international regulations.



Other hazards which do not result in classification

None known.

SECTION 3 Composition/Information on Ingredients

Mixtures:

Hazardous components

Component	
Concentration	
Calcium carbonate (Natural) (CAS no.: 1317-65-3)	>= 5 - <= 25 %
(Weight)	
CLASSIFICATIONS: No data available. HAZARDS: No data available.	
TALC powder (CAS no.: 14807-96-6)	>= 10 - <= 35
% (Weight)	
CLASSIFICATIONS: No data available. HAZARDS: No data available.	
EPOXYRESIN, reaction product: BISPHENOL-A(EPICHLOROHYDRIN) (CAS no.: 25068-38-6; EC no	,
Index no.: 603-074-00-8)	>= 25 - <= 45
% (Weight)	
CLASSIFICATIONS: Eye damage/irritation (chapter 3.3), Cat. 2; Skin corrosion/irritation (chapter 3.2), Cat. 3; Skin corrosion/irritatio	
Sensitization, skin (chapter 3.4), Cat. 1; Hazardous to the aquatic environment - long-term hazard (chapter 3.4)	
HAZARDS: H315 - Causes skin irritation; H317 - May cause an allergic skin reaction; H319 - Causes se	erious eye
irritation; H411 - Toxic to aquatic life with long lasting effects.	
Phenol, 4,4'-methylenebis- (CAS no.: 620-92-8)	>= 10 - <= 35
% (Weight)	
CLASSIFICATIONS: No data available. HAZARDS: No data available.	> = E 4= 4E 0/
IRON powder- Flammable (CAS no.: 7439-89-6)	>= 5 - <= 15 %
(Weight)	
CLASSIFICATIONS: No data available. HAZARDS: No data available.	. 04 . 0
Iron oxide (Fe3O4) (CAS no.: 1317-61-9)	>= 0.1 - <= 3
% (Weight)	
CLASSIFICATIONS: No data available. HAZARDS: No data available.	>=04
Distillates (petroleum), hydrotreated light (CAS no.: 64742-47-8)	>= 0.1 - <= 1
% (Weight)	
CLASSIFICATIONS: No data available. HAZARDS: No data available.	

SECTION 4 First Aid Measures

First Aid Measures

General Advice

If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Avoid contact with eyes and skin. Keep out of reach of children

Inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The



exposed person may need to be kept under medical surveillance

for 48 hours.

Skin Contact Wash contaminated skin with plenty of soap and water. Continue

to rinse for at least 20 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Eye Contact Immediately flush eyes with plenty of water, occasionally lifting the

upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20 minutes. Get medical

attention.

If Swallowed Wash out mouth with water. Remove dentures if any. Remove

victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do

not induce vomiting unless directed to do so by medical

personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open

airway. Loosen tight clothing such as a collar, tie, belt or

waistband.

Personal Protective Equipment for first-aid responders

Use personal protective equipment as required. No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-

mouth resuscitation.

Most important symptoms/effects, acute and delayed

Causes serious eye irritation.

Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

Causes skin irritation

If ingested, Irritating to mouth, throat and stomach.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician: In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

No specific treatment.

SECTION 5 Fire Fighting Measures

Suitable Extinguishing Media: Carbon dioxide, dry chemical, foam

Specific hazards arising from the

chemical

Special protective actions for fire-

fighters

Not available

Protective equipment for firefighters: Firefighters should wear full protective clothing including self-contained breathing apparatus, MSHA/NIOSH (approved or equivalent)



Hazardous combustion products: May include and are not limited to: Oxides of carbon. Oxides of nitrogen. Oxides of

Sulphur.

Further Information: Explosion data:

Sensitivity to mechanical impact: Not available Sensitivity to static discharge: Not available

SECTION 6 Accidental Release Measures

Personal precautions, protective equipment and emergency

procedures:

Keep unnecessary personnel away. Do not touch or walk through spilled material. Ensure adequate ventilation. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and

upwind of spill/leak.

Methods and materials for containment and cleaning up:

Stop the flow of material, if this is without risk.

Before attempting clean up, refer to hazard data given above. Dampen material with water and use shovel or scoop to collect material in clean container for proper disposal. Rinse area with water. Prevent large spills from entering sewers or waterways.

Contact emergency services and supplier for advice.

Environmental Precautions:

Prevent entry into waterways, sewers, basements or confined

areas.

SECTION 7 Handling and Storage

Precautions for Safe Handling

Precautions for safe

Use good industrial hygiene practices in handling this material.

handling:

Avoid contact with eyes, skin and clothing.

Avoid prolonged or repeated skin contact with this material.

Wash thoroughly after handling. Avoid breathing vapors or mist.

Use personal protective equipment as required.

Conditions for safe storage, including any incompatibilities:

Keep out of reach of children. Store in a tightly closed container in a dry, cool, well-ventilated place. Keep away from incompatible materials such as

strong oxidizing agents, bases, acids, amines.

SECTION 8 Exposure Controls/Personal Protection

Control parameters

1. Calcium Carbonate (CAS: 1317-65-3)

PEL (Inhalation): see PNOR (Cal/OSHA) OSHA Annotated Table Z-1, www.osha.gov



2. Calcium Carbonate, Total dust (CAS: 1317-65-3)

PEL (Inhalation): 15 mg/m3 (OSHA)

OSHA Annotated Table Z-1, www.osha.gov

3. Calcium Carbonate, Total dust (CAS: 1317-65-3)

PEL (Inhalation): 10 mg/m3 (Cal/OSHA/NIOSH) OSHA Annotated Table Z-1, www.osha.gov

4. Calcium Carbonate, Respirable fraction (CAS: 1317-65-3)

PEL (Inhalation): 5 mg/m3 (Cal/OSHA/NIOSH) OSHA Annotated Table Z-1, www.osha.gov

5. Limestone (CAS: 1317-65-3)

PEL (Inhalation): see PNOR (Cal/OSHA) OSHA Annotated Table Z-1, www.osha.gov

6. Limestone, Total dust (CAS: 1317-65-3)

PEL (Inhalation): 15 mg/m3 (OSHA)

OSHA Annotated Table Z-1, www.osha.gov

10. Limestone, Total dust (CAS: 1317-65-3)

PEL (Inhalation): 10 mg/m3 (Cal/OSHA/NIOSH) OSHA Annotated Table Z-1, www.osha.gov

11. Limestone, Respirable fraction (CAS: 1317-65-3)

PEL (Inhalation): 5 mg/m3 (Cal/OSHA/NIOSH) OSHA Annotated Table Z-1, www.osha.gov

12. Marble (CAS: 1317-65-3)

PEL (Inhalation): See PNOR (Cal/OSHA)
OSHA Annotated Table Z-1, www.osha.gov

13. Marble, Total dust (CAS: 1317-65-3)

PEL (Inhalation): 15 mg/m3 (OSHA)

OSHA Annotated Table Z-1, www.osha.gov

14. Marble, Total dust (CAS: 1317-65-3)

PEL (Inhalation): 10 mg/m3 (Cal/OSHA/NIOSH) OSHA Annotated Table Z-1, www.osha.gov

15. Marble, Respirable fraction (CAS: 1317-65-3)

PEL (Inhalation): 5 mg/m3 (Cal/OSHA/NIOSH) OSHA Annotated Table Z-1, www.osha.gov

16. Silicates (less than 1% crystalline silica), Talc (containing no asbestos), respirable dust (CAS: 14807-96-6)

PEL (Inhalation): See Annotated Z-3 ppm (OSHA)

OSHA Annotated Table Z-1, www.osha.gov

17. Silicates (less than 1% crystalline silica), Talc (containing no asbestos), respirable dust (CAS: 14807-96-6)

PEL (Inhalation): See Annotated Z-3 mg/m3 (OSHA)

OSHA Annotated Table Z-1, www.osha.gov

18. Silicates (less than 1% crystalline silica), Talc (containing no asbestos), respirable dust (CAS: 14807-96-6)

PEL (Inhalation): See Annotated Z-3 (Cal/OSHA/NIOSH)

OSHA Annotated Table Z-1, www.osha.gov

19. Soapstone

PEL (Inhalation): See Annotated Z-3 ppm (OSHA)

OSHA Annotated Table Z-1, www.osha.gov



20. Soapstone

PEL (Inhalation): See Annotated Z-3 mg/m3 (OSHA)

OSHA Annotated Table Z-1, www.osha.gov

21. Soapstone

PEL (Inhalation): See Annotated Z-3 (Cal/OSHA/NIOSH)

OSHA Annotated Table Z-1, www.osha.gov

Appropriate engineering controls

General ventilation normally adequate. Showers. Eye wash Stations.

Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

Safety glasses with side shields or goggles.

Skin protection

Protective gloves and clothing.

Body protection

As required by employer code

General hygiene considerations: Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink. Wash hands before breaks and immediately after handling the product.

Respiratory protection

Where exposure guideline levels may be exceeded, use an approved NIOSH respirator.

SECTION 9 Physical and Chemical Properties

Information on basic physical and chemical properties

Appearance/form (physical state, color, etc.)

Dark brown colored liquid

Odor Mild odor
Odor threshold Not available
pH Not available
Melting point/freezing point Not available

Initial boiling point and boiling range > 232°C (>450°F)

Flash point Closed cup: >93.3°C (>199.9°F) [Pensky-Martens.

Evaporation rate < 1

Flammability (solid, gas)

Upper/lower flammability limits

Upper/lower explosive limits

Not applicable

Not applicable

Vapor pressureNot availableVapor density> 1Relative density1.5 - 1.7Solubility(ies)Not availablePartition coefficient: n-octanol/waterNot availableAuto-ignition temperatureNot available

Auto-ignition temperature

Decomposition temperature

Viscosity

Not available

Not available

Explosive properties Not available



Oxidizing properties

Not available

Other safety information

VOC % content <1%

SECTION 10 Stability and Reactivity

Reactivity

No data available.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to avoid

Excessive heat

Incompatible materials

Strong oxidizing agents, bases, acids, amines

Hazardous decomposition products

Carbon oxides.

SECTION 11 Toxicological Information

Information on toxicological effects

Acute toxicity

Ingestion: Irritating to mouth, throat and stomach.

Bisphenol A (25068-38-6) Oral LD50 = 11400 mg/kg (Rat)

Iron (7439-89-6) Oral LD50 = 984 mg/kg (Rat)

Skin corrosion/irritation

Skin Contact: Causes skin irritation.

Serious eye damage/irritation

Eye Contact: Causes serious eye irritation

Respiratory or skin sensitization

Inhalation: Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

Germ cell mutagenicity

There is no data available.

Carcinogenicity

There is no data available.

Reproductive toxicity

There is no data available.



STOT-single exposure

Eyes, Respiratory system, skin.

STOT-repeated exposure

Eyes, Respiratory system, skin.

Aspiration hazard

There is no data available.

Additional information

Numerical measures of toxicity - Acute Toxicity estimates

Oral ATEmix = 3544 mg/kg Dermal ATEmix = 42800 mg/kg

Inhalation ATEmix = 32.1 mg/l

SECTION 12 Ecological Information

Toxicity

There is no data available.

Persistence and degradability

There is no data available.

Bioaccumulative potential

Low

Mobility in soil

Not available

Other adverse effects

No known significant effects or critical hazards.

SECTION 13 Disposal Considerations

Disposal of the product

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor.

Disposal of contaminated packaging

Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Do not reuse container.

Sewage disposal

Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.



SECTION 14 Transport Information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

SECTION 15 Regulatory Information

Safety, health and environmental regulations specific for the product in question

New Jersey Right To Know Components

Common name: TALC (NOT CONTAINING ASBESTOS FIBERS)

CAS number: 14807-96-6

Pennsylvania Right To Know Components

Chemical name: Talc CAS number: 14807-96-6

Chemical Safety Assessment

U.S. Federal regulations: TSCA 8(a) CDR Exempt/Partial Exemption: Not determined

United States inventory (TSCA 8b): Not determined

CLEAN AIR ACT SECTION 112: Not listed

CLEAN AIR ACT SECTION 602 - CLASS I SUBSTANCES: Not listed CLEAR AIR ACT SECTION 602 - CLASS II STUBSTANCES: Not listed

DEA LIST I CHEMICALS: Not listed DEA LIST II CHEMICALS: Not listed

SARA 302/304: No products were found

SARA 304 RQ: Not applicable

SARA 311/312: Immediate (acute) health hazard

Composition/Information on ingredients: 2,4,6-Tris(dimethylaminomethyl)phenol 5-15%,

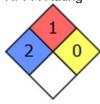
Immediate (acute) health hazard

CALIFORNIA PROP. 65: No products were found

HMIS Rating

O realing	
60 Minutes Epoxy Steel R	esin
HEALTH	2
FLAMMABILITY	1
PHYSICAL HAZARD	0
PERSONAL PROTECTION	Х

NFPA Rating





SECTION 16 Other Information

We believe all information given is accurate. It is offered in good faith but without guarantee. Since conditions of use are beyond our control, user assumes all responsibility and risk.

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Key to abbreviations:

ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships,

1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

UN = United Nations