

MATERIAL SAFETY DATA SHEET

Ashland

Page 001
Date Prepared: 07/19/05
Date Printed: 03/13/06
MSDS No: 303.0407174-001.001

PLIOGRIP PANEL 60 EPOXY

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Material Identity

Product Name: PLIOGRIP PANEL 60 EPOXY
Product Code: 599062
General or Generic ID: EPOXY ADHESIVE

Company

Ashland
Ashland Distribution Co. &
Ashland Specialty Chemical Co.
P. O. Box 2219
Columbus, OH 43216
614-790-3333

Emergency Telephone Number:

1-800-ASHLAND (1-800-274-5263)
24 hours everyday

Regulatory Information Number:
1-800-325-3751

2. COMPOSITION/INFORMATION ON INGREDIENTS

| Ingredient(s) | CAS Number | % (by weight) |
|------------------|--------------|---------------|
| EPOXY RESIN | Trade Secret | 60.0- 64.0 |
| ELASTOMER | Trade Secret | 9.0- 13.0 |
| WOLLASTONITE | 13983-17-0 | 6.0- 10.0 |
| GLASS OXIDE | 65997-17-3 | 5.0- 9.0 |
| EPOXY DILUENT | Trade Secret | 3.0- 7.0 |
| COLLOIDAL SILICA | 67762-90-7 | 2.0- 6.0 |
| TALC | 14807-96-6 | 1.0- 5.0 |

3. HAZARDS IDENTIFICATION

Potential Health Effects

Eye

May cause mild eye irritation. Symptoms include stinging, tearing, and redness. Fibrous glass or its dust may cause eye irritation from the material scratching the eyes. Symptoms include itching, stinging, tearing, redness, and swelling of eyes.

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Skin

Can cause skin irritation. Symptoms may include redness and burning of skin, and other skin damage. Unlikely to cause skin irritation or injury. Prolonged or repeated contact may dry and crack the skin. Contact with fibrous glass or its dust can cause skin irritation. Symptoms may include redness and an itchy, sometimes bumpy, rash. The rash is aggravated by rubbing or scratching which may even force the glass fibers into the skin. With repeated exposure, some individuals will develop a hardening of the skin and a resistance to the irritant effects of the fibers. Skin irritation is common in individuals newly exposed to fibrous glass. Additional symptoms of skin contact may include: allergic skin reaction (delayed skin rash which may be followed by blistering, scaling and other skin effects), Passage of this material into the body through the skin is possible, but it is unlikely that this would result in harmful effects during safe handling and use.

Swallowing

Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful.

Inhalation

It is possible to breathe this material under certain conditions of handling and use (for example, during heating, spraying, or stirring). Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful. Symptoms usually occur at air concentrations higher than the recommended exposure limits (See Section 8). Prolonged or repeated breathing of dust may result in progressive and permanent lung disease (fibrosis) which may cause death from respiratory and/or heart failure. Symptoms include coughing and difficult breathing which becomes worse with physical activity. Breathing of glass fibers can cause short-term irritation of the mouth, nose, and throat. Other symptoms may include coughing and wheezing. Because of the structure of the fibers, they do not enter the lungs (See Other Health Effects).

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Symptoms of Exposure

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: mouth and throat irritation (soreness, dry or scratchy feeling, cough), stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), runny nose, cough, sneezing, bronchitis, chest pain, difficult breathing.

Target Organ Effects

Overexposure to this material (or its components) has been suggested as a cause of the following effects in humans: effects on lung function.

Developmental Information

There are no data available for assessing risk to the fetus from maternal exposure to this material.

Cancer Information

This material is not listed as a carcinogen by the International Agency for Research on Cancer, the National Toxicology Program, or the Occupational Safety and Health Administration. Studies with workers employed up to 40 years in the manufacture of fiberglass have shown no increase in cancer due to fiberglass exposure. Breathing continuous filament fiberglass did not cause cancer in laboratory animals. Studies using artificial implantation or injection of glass fibers into animals have resulted in cancer. Those studies are not considered relevant to human exposure. Neopentyl glycol diglycidyl ether caused skin cancer in mice when applied to the skin over the lifetime of the animals. This product may contain non-asbestiform talc. Inhalation of non-asbestiform talc has been shown to cause lung and adrenal cancer in female rats and adrenal gland cancer in male rats. It did not cause cancer in male or female mice similarly exposed. Talc is not listed as a carcinogen by the International Agency for Research on Cancer, the National Toxicology Program, or the Occupational Safety and Health Administration.

Other Health Effects

Continuous filament fiber glass is a type of man-made mineral fiber. Fiber diameter is the most important factor in determining whether or not fibers can get into the lungs if breathed. Fibers that can enter the lungs are called respirable fibers. According to the National Institute for Occupational Safety and Health (NIOSH), fibers with diameters greater than 3.5 microns are not respirable. This product is composed of glass strands with diameters greater than 3.5 microns, and therefore, if breathed,

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would not enter the lungs. Instead, they would be stopped in the upper respiratory tract where they would be removed by natural mechanisms such as filtering by nasal hairs. Continuous filament fiber glass products that are chopped, crushed, or severely mechanically processed during manufacturing or use may contain a very small amount of respirable fibers that could reach the deep lung. The measured airborne concentration of these respirable fibers in areas where severe processing of fiberglass occurred has been shown to be extremely low and well below the TLV. Repeated or prolonged exposure to respirable glass fibers has caused fibrosis, lung cancer and mesothelioma in long-term studies in laboratory animals.

Primary Route(s) of Entry

Inhalation, Skin absorption, Skin contact, Eye contact, Ingestion.

4. FIRST AID MEASURES

Eyes

If material gets into the eyes, immediately flush eyes gently with water for at least 15 minutes while holding eyelids apart. If symptoms develop as a result of vapor exposure, immediately move individual away from exposure and into fresh air before flushing as recommended above. Seek immediate medical attention. If symptoms develop, move individual away from exposure and into fresh air. Flush eyes gently with water while holding eyelids apart. If symptoms persist or there is any visual difficulty, seek medical attention.

Skin

Remove contaminated clothing. Flush exposed area with large amounts of water. If skin is damaged, seek immediate medical attention. If skin is not damaged and symptoms persist, seek medical attention. Launder clothing before reuse. Remove contaminated clothing. Wash exposed area with soap and water. If symptoms persist, seek medical attention. Launder clothing before reuse. First aid is not normally required. However, it is recommended that exposed areas be cleaned by washing with soap and water.

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Swallowing

Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting. If possible, do not leave individual unattended.

Inhalation

If symptoms develop, move individual away from exposure and into fresh air. If symptoms persist, seek medical attention. If breathing is difficult, administer oxygen. Keep person warm and quiet; seek immediate medical attention.

Note to Physicians

Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: skin, lung (for example, asthma-like conditions).

5. FIRE FIGHTING MEASURES

Flash Point

> 230.0 F (110.0 C)

Explosive Limit

No data

Autoignition Temperature

No data

Hazardous Products of Combustion

May form: carbon dioxide and carbon monoxide, methanol, various hydrocarbons.

Fire and Explosion Hazards

No special fire hazards are known to be associated with this product.

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Extinguishing Media

regular foam (such as AFFF), water fog, carbon dioxide, dry chemical.

Fire Fighting Instructions

Use water spray to cool fire exposed containers and structures until fire is out if it can be done with minimal risk. Avoid spreading burning liquid with water used for cooling purposes. Wear full firefighting turn-out gear (full Bunker gear), and respiratory protection (SCBA).

NFPA Rating

Health - 2, Flammability - 1, Reactivity - 0

6. ACCIDENTAL RELEASE MEASURES

Small Spill

Absorb liquid on vermiculite, floor absorbent or other absorbent material.

Large Spill

Prevent run-off to sewers, streams or other bodies of water. If run-off occurs, notify proper authorities as required, that a spill has occurred. Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Stop spill at source, dike area of spill to prevent spreading, pump liquid to salvage tank. Remaining liquid may be taken up on sand, clay, earth, floor absorbent, or other absorbent material and shoveled into containers.

7. HANDLING AND STORAGE

Handling

Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed. Precautions during use: avoid prolonged or frequently repeated skin contact with this material. Skin contact can be minimized by wearing impervious protective gloves. As with all products of this nature, good personal hygiene is essential. Hands and other exposed areas should be washed thoroughly with soap and water after contact, especially before eating and/or

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smoking. Regular laundering of contaminated clothing is essential to reduce indirect skin contact with this material. Warning. Sudden release of hot organic chemical vapors or mists from process equipment operating at elevated temperature and pressure, or sudden ingress of air into vacuum equipment, may result in ignitions without the presence of obvious ignition sources. Published "autoignition" or "ignition" temperature values cannot be treated as safe operating temperatures in chemical processes without analysis of the actual process conditions. Any use of this product in elevated temperature processes should be thoroughly evaluated to establish and maintain safe operating conditions. Keep the work area clean of dusts and fibers released during processing or fabrication. Use vacuum equipment to clean up product. Avoid dry sweeping or using compressed air as these techniques cause dust and fibers to reenter the air.

Storage

Do not store near high heat or open flames. Store in closed containers in a dry, well-ventilated area.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye Protection

Chemical splash goggles in compliance with OSHA regulations are advised; however, OSHA regulations also permit other type safety glasses. Consult your safety representative.

Skin Protection

Wear resistant gloves (consult your safety equipment supplier). To prevent repeated or prolonged skin contact, wear impervious clothing and boots.

Respiratory Protections

If workplace exposure limit(s) of product or any component is exceeded (see exposure guidelines), a NIOSH/MSHA approved air supplied respirator is advised in absence of proper environmental control. OSHA regulations also permit other NIOSH/MSHA respirators (negative pressure type) under specified conditions (see your industrial hygienist). Engineering or administrative controls should be implemented to reduce exposure.

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Engineering Controls

Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below TLV(s).

Exposure Guidelines

Component

EPOXY RESIN

No exposure limits established

ELASTOMER

No exposure limits established

WOLLASTONITE (13983-17-0)

No exposure limits established

GLASS OXIDE (65997-17-3)

ACGIH TLV 5.000 mg/m3 - TWA

EPOXY DILUENT

No exposure limits established

COLLOIDAL SILICA (67762-90-7)

No exposure limits established

TALC (14807-96-6)

OSHA PEL 20.000 mppcf - TWA

OSHA VPEL 2.000 mg/m3 - TWA respirable dust (less than 1% crystalline silica)

ACGIH TLV 2.000 mg/m3 - TWA

9. PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point

(for component) > 300.0 F (148.8 C)

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Vapor Pressure
(for product) .000

Specific Vapor Density
No data

Specific Gravity
1.120 @ 77.00 F

Liquid Density
9.300 lbs/gal @ 77.00 F
1.120 kg/l @ 25.00 C

Percent Volatiles
.0 %

Volatile Organic Compounds (VOC)
.000 lbs/gal

Evaporation Rate
No data

Appearance
SMOOTH

State
LIQUID

Physical Form
PASTE

Color
WHITE

Odor
No data

pH
No data

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10. STABILITY AND REACTIVITY

Hazardous Polymerization

Product will not undergo hazardous polymerization.

Hazardous Decomposition

May form: carbon dioxide and carbon monoxide, methanol, various hydrocarbons.

Chemical Stability

Stable.

Incompatibility

Avoid contact with: amines, strong alkalis, strong mineral acids, strong oxidizing agents, Contact with water liberates methanol.

11. TOXICOLOGICAL INFORMATION

No data

12. ECOLOGICAL INFORMATION

No data

13. DISPOSAL CONSIDERATION

Waste Management Information

Dispose of in accordance with all applicable local, state and federal regulations. For assistance with your waste management needs - including disposal, recycling and waste stream reduction, contact Ashland Distribution Company, IC&S Environmental Services Group at 800-531-7106.

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14. TRANSPORT INFORMATION

DOT Information - 49 CFR 172.101

DOT Description:

NON-REGULATED BY D.O.T.

Container/Mode:

55 GAL DRUM/TRUCK PACKAGE

NOS Component:

None

RQ (Reportable Quantity) - 49 CFR 172.101

Not applicable

Other Transportation Information

The Transport Information may vary with the container and mode of shipment.

15. REGULATORY INFORMATION

US Federal Regulations

TSCA (Toxic Substances Control Act) Status

TSCA (UNITED STATES) The intentional ingredients of this product are listed.

CERCLA RQ - 40 CFR 302.4(a)

None listed

SARA 302 Components - 40 CFR 355 Appendix A

None

Section 311/312 Hazard Class - 40 CFR 370.2

Immediate(X) Delayed(X) Fire() Reactive() Sudden
Release of Pressure()

SARA 313 Components - 40 CFR 372.65

None

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OSHA Process Safety Management 29 CFR 1910
None listed

EPA Accidental Release Prevention 40 CFR 68
None listed

International Regulations

Inventory Status

DSL (CANADA) This product complies with the Chemical Substance Inventory requirements.

EINECS (EUROPE) This product complies with the Chemical Substance Inventory requirements.

State and Local Regulations

California Proposition 65

The following statement is made in order to comply with the California Safe Drinking Water and Toxic Enforcement Act of 1986: This product contains the following substance(s) known to the state of California to cause cancer.

EPICHLOROHYDRIN

PHENYL GLYCIDYL ETHER

The following statement is made in order to comply with the California Safe Drinking Water and Toxic Enforcement Act of 1986: This product contains the following substance(s) known to the state of California to cause reproductive harm.

EPICHLOROHYDRIN

New Jersey RTK Label Information

TALC

14807-96-6

Pennsylvania RTK Label Information

TALC (MG3H2(SIO3)4)

14807-96-6

16. OTHER INFORMATION

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.

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Date Prepared: 04/18/05

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PLIOGRIP PANEL 60 CURATIVE

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Material Identity

Product Name: PLIOGRIP PANEL 60 CURATIVE

Product Code: 599060

General or Generic ID: CURATIVE

Company

Ashland
 Ashland Distribution Co. &
 Ashland Specialty Chemical Co.
 P. O. Box 2219
 Columbus, OH 43216
 614-790-3333

Emergency Telephone Number:

1-800-ASHLAND (1-800-274-5263)
 24 hours everyday

Regulatory Information Number:

1-800-325-3751

2. COMPOSITION/INFORMATION ON INGREDIENTS

| Ingredient(s) | CAS Number | % (by weight) |
|--------------------------|--------------|---------------|
| WOLLASTONITE | 13983-17-0 | 25.0- 29.0 |
| SYNTHETIC RUBBER | Trade Secret | 16.0- 20.0 |
| ALIPHATIC DIAMINE | Trade Secret | 11.0- 15.0 |
| MODIFIED FATTY ACIDS | Trade Secret | 8.0- 12.0 |
| AMINO ETHER | Trade Secret | 8.0- 12.0 |
| GLASS OXIDE | 65997-17-3 | 6.0- 10.0 |
| TALC | 14807-96-6 | 2.0- 6.0 |
| COLLOIDAL SILICA | 67762-90-7 | 2.0- 6.0 |
| AMIDE | Trade Secret | 1.0- 5.0 |
| EPOXY RESIN CURING AGENT | Trade Secret | 1.0- 5.0 |

3. HAZARDS IDENTIFICATION

Potential Health Effects

Eye

Dust can cause eye irritation. Symptoms include stinging, tearing, redness, and swelling of eyes. Exposure to liquid can cause irreversible eye damage. Exposure to vapor can cause severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and halo vision characterized by blurring vision around bright objects. Can injure the cornea and cause blindness. Fibrous glass or its dust may cause eye irritation from the

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material scratching the eyes. Symptoms include itching, stinging, tearing, redness, and swelling of eyes.

Skin

Can cause permanent skin damage. Symptoms may include redness, burning, and swelling of skin, burns, and other skin damage. May cause mild skin irritation. Prolonged or repeated contact may dry the skin. Symptoms may include redness, burning, drying and cracking of skin, and skin burns. Contact with fibrous glass or its dust can cause skin irritation. Symptoms may include redness and an itchy, sometimes bumpy, rash. The rash is aggravated by rubbing or scratching which may even force the glass fibers into the skin. With repeated exposure, some individuals will develop a hardening of the skin and a resistance to the irritant effects of the fibers. Skin irritation is common in individuals newly exposed to fibrous glass. Additional symptoms of skin contact may include: allergic skin reaction (delayed skin rash which may be followed by blistering, scaling and other skin effects), Passage of this material into the body through the skin is possible, but it is unlikely that this would result in harmful effects during safe handling and use.

Swallowing

Swallowing this material may be harmful or fatal. Symptoms may include severe stomach and intestinal irritation (nausea, vomiting, diarrhea), abdominal pain, and vomiting of blood. Swallowing this material may cause burns and destroy tissue in the mouth, throat, and digestive tract. Low blood pressure and shock may occur as a result of severe tissue injury. Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful.

Inhalation

It is possible to breathe this material under certain conditions of handling and use (for example, during heating, spraying, or stirring). This material is a dust or may produce dust. Breathing this material may be harmful or fatal. Symptoms may include severe irritation and burns to the nose, throat, and respiratory tract. Prolonged or repeated breathing of this material may result in chronic bronchitis (inflammation of the airways of the lungs). Symptoms include coughing and shortness of breath. Symptoms usually occur at air concentrations higher than the recommended exposure limits (See Section 8). Prolonged or repeated breathing of dust may result in progressive and permanent lung disease (fibrosis) which may cause death from respiratory and/or heart failure. Symptoms include coughing and difficult

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breathing which becomes worse with physical activity. Breathing of glass fibers can cause short-term irritation of the mouth, nose, and throat. Other symptoms may include coughing and wheezing. Because of the structure of the fibers, they do not enter the lungs (See Other Health Effects).

Symptoms of Exposure

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: mouth and throat irritation (soreness, dry or scratchy feeling, cough), stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), runny nose, cough, sneezing, bronchitis, chest pain, difficult breathing.

Target Organ Effects

Overexposure to this material (or its components) has been suggested as a cause of the following effects in humans: effects on lung function.

Developmental Information

There are no data available for assessing risk to the fetus from maternal exposure to this material.

Cancer Information

This material is not listed as a carcinogen by the International Agency for Research on Cancer, the National Toxicology Program, or the Occupational Safety and Health Administration. Studies with workers employed up to 40 years in the manufacture of fiberglass have shown no increase in cancer due to fiberglass exposure. Breathing continuous filament fiberglass did not cause cancer in laboratory animals. Studies using artificial implantation or injection of glass fibers into animals have resulted in cancer. Those studies are not considered relevant to human exposure. This product may contain non-asbestiform talc. Inhalation of non-asbestiform talc has been shown to cause lung and adrenal cancer in female rats and adrenal gland cancer in male rats. It did not cause cancer in male or female mice similarly exposed. Talc is not listed as a carcinogen by the International Agency for Research on Cancer, the National Toxicology Program, or the Occupational Safety and Health Administration.

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Other Health Effects

Continuous filament fiber glass is a type of man-made mineral fiber. Fiber diameter is the most important factor in determining whether or not fibers can get into the lungs if breathed. Fibers that can enter the lungs are called respirable fibers. According to the National Institute for Occupational Safety and Health (NIOSH), fibers with diameters greater than 3.5 microns are not respirable. This product is composed of glass strands with diameters greater than 3.5 microns, and therefore, if breathed, would not enter the lungs. Instead, they would be stopped in the upper respiratory tract where they would be removed by natural mechanisms such as filtering by nasal hairs. Continuous filament fiber glass products that are chopped, crushed, or severely mechanically processed during manufacturing or use may contain a very small amount of respirable fibers that could reach the deep lung. The measured airborne concentration of these respirable fibers in areas where severe processing of fiberglass occurred has been shown to be extremely low and well below the TLV. Repeated or prolonged exposure to respirable glass fibers has caused fibrosis, lung cancer and mesothelioma in long-term studies in laboratory animals.

Primary Route(s) of Entry

Inhalation, Skin absorption, Skin contact, Eye contact, Ingestion.

4. FIRST AID MEASURES

Eyes

If material gets into the eyes, immediately flush eyes gently with water for at least 15 minutes while holding eyelids apart. If symptoms develop as a result of vapor exposure, immediately move individual away from exposure and into fresh air before flushing as recommended above. Seek immediate medical attention. If symptoms develop, immediately move individual away from exposure and into fresh air. Flush eyes gently with water for at least 15 minutes while holding eyelids apart; seek immediate medical attention.

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Skin

Immediately flush skin with water for at least 15 minutes while removing contaminated clothing and shoes. Seek immediate medical attention. Wash clothing before reuse and discard contaminated shoes. Remove contaminated clothing. Wash exposed area with soap and water. If symptoms persist, seek medical attention. Launder clothing before reuse. First aid is not normally required. However, it is recommended that exposed areas be cleaned by washing with soap and water.

Swallowing

Seek immediate medical attention. Do not induce vomiting. Vomiting will cause further damage to the mouth and throat. If individual is conscious and alert, immediately rinse mouth with water and give milk or water to drink. If possible, do not leave individual unattended. Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting. If possible, do not leave individual unattended.

Inhalation

If symptoms develop, immediately move individual away from exposure and into fresh air. Seek immediate medical attention; keep person warm and quiet. If person is not breathing, begin artificial respiration. If breathing is difficult, administer oxygen. If symptoms develop, move individual away from exposure and into fresh air. If symptoms persist, seek medical attention. If breathing is difficult, administer oxygen. Keep person warm and quiet; seek immediate medical attention. First aid is not normally required. If symptoms develop, move individual away from exposure and into fresh air. If symptoms persist, seek medical attention.

Note to Physicians

Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: respiratory tract skin, lung (for example, asthma-like conditions), kidney, eye.

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5. FIRE FIGHTING MEASURES

Flash Point

> 200.0 F (93.3 C)

Explosive Limit

No data

Autoignition Temperature

No data

Hazardous Products of Combustion

May form: ammonia, carbon dioxide and carbon monoxide, nitrogen oxides, various hydrocarbons.

Fire and Explosion Hazards

Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively.

Extinguishing Media

alcohol resistant (AR) foam, water fog, carbon dioxide, dry chemical.

Fire Fighting Instructions

No data

NFPA Rating

Health - 3, Flammability - 1, Reactivity - 0

6. ACCIDENTAL RELEASE MEASURES

Small Spill

Eliminate all sources of ignition such as flares, flames (including pilot lights), and electrical sparks. Absorb liquid on vermiculite, floor absorbent or other absorbent material. Persons not wearing proper personal protective equipment should be excluded from area of spill.

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Large Spill

Prevent run-off to sewers, streams or other bodies of water. If run-off occurs, notify proper authorities as required, that a spill has occurred. Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Eliminate all ignition sources (flares, flames including pilot lights, electrical sparks).

7. HANDLING AND STORAGE

Handling

Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed. Use good personal hygiene practices. Wash hands before eating, drinking, smoking, or using toilet facilities. Promptly remove soiled clothing and wash before reuse. Shower after work using plenty of soap and water. Warning. Sudden release of hot organic chemical vapors or mists from process equipment operating at elevated temperature and pressure, or sudden ingress of air into vacuum equipment, may result in ignitions without the presence of obvious ignition sources. Published "autoignition" or "ignition" temperature values cannot be treated as safe operating temperatures in chemical processes without analysis of the actual process conditions. Any use of this product in elevated temperature processes should be thoroughly evaluated to establish and maintain safe operating conditions. Keep the work area clean of dusts and fibers released during processing or fabrication. Use vacuum equipment to clean up product. Avoid dry sweeping or using compressed air as these techniques cause dust and fibers to reenter the air.

Storage

Store in a cool, dry, ventilated area. Keep containers closed when not in use.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye Protection

Chemical splash goggles and face shield (8" min.) in compliance with OSHA regulations are advised; however, OSHA regulations also permit other type safety glasses. (Consult your industrial

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hygienist.)

Skin Protection

Wear impervious gloves (consult your safety equipment supplier).
To prevent skin contact, wear impervious full-body protective clothing.

Respiratory Protections

If workplace exposure limit(s) of product or any component is exceeded (see exposure guidelines), a NIOSH/MSHA approved air supplied respirator is advised in absence of proper environmental control. OSHA regulations also permit other NIOSH/MSHA respirators (negative pressure type) under specified conditions (see your industrial hygienist). Engineering or administrative controls should be implemented to reduce exposure.

Engineering Controls

Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below TLV(s).

Exposure Guidelines

Component

WOLLASTONITE (13983-17-0)

No exposure limits established

SYNTHETIC RUBBER

No exposure limits established

ALIPHATIC DIAMINE

No exposure limits established

MODIFIED FATTY ACIDS

No exposure limits established

AMINO ETHER

No exposure limits established

GLASS OXIDE (65997-17-3)

ACGIH TLV 5.000 mg/m³ - TWA

TALC (14807-96-6)

OSHA PEL 20.000 mppcf - TWA

OSHA VPEL 2.000 mg/m³ - TWA respirable dust (less than 1% crystalline silica)

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ACGIH TLV 2.000 mg/m3 - TWA

COLLOIDAL SILICA (67762-90-7)
No exposure limits established

AMIDE
No exposure limits established

EPOXY RESIN CURING AGENT
No exposure limits established

9. PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point
No data

Vapor Pressure
(for component) 130.000 mmHg

Specific Vapor Density
No data

Specific Gravity
1.100 @ 77.00 F

Liquid Density
9.150 lbs/gal @ 77.00 F
1.100 kg/l @ 25.00 C

Percent Volatiles
.0 %

Volatile Organic Compounds (VOC)
.000 lbs/gal

Evaporation Rate
No data

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Appearance
SMOOTH

State
LIQUID

Physical Form
PASTE

Color
TAN

Odor
No data

pH
No data

10. STABILITY AND REACTIVITY

Hazardous Polymerization
Product will not undergo hazardous polymerization.

Hazardous Decomposition
May form: ammonia, carbon dioxide and carbon monoxide, nitrogen oxides, various hydrocarbons.

Chemical Stability
Stable.

Incompatibility
Avoid contact with: aluminum, copper, galvanized metals, heat, peroxides, strong mineral acids, strong oxidizing agents, zinc.

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11. TOXICOLOGICAL INFORMATION

No data

12. ECOLOGICAL INFORMATION

No data

13. DISPOSAL CONSIDERATION

Waste Management Information

Dispose of in accordance with all applicable local, state and federal regulations. Do not discharge effluent containing this product into lakes, streams, ponds or estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit, and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA. For assistance with your waste management needs - including disposal, recycling and waste stream reduction, contact Ashland Distribution Company, IC&S Environmental Services Group at 800-531-7106.

14. TRANSPORT INFORMATION

DOT Information - 49 CFR 172.101

DOT Description:

CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S., 8, UN3267, II

Container/Mode:

55 GAL DRUM/TRUCK PACKAGE

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NOS Component:

METHYLPENTAMETHYLENEDIAMINE

2,4,6-TRIS(DIMETHYLAMINOMETHYL) PHENOL

RQ (Reportable Quantity) - 49 CFR 172.101

Not applicable

Other Transportation Information

The Transport Information may vary with the container and mode of shipment.

15. REGULATORY INFORMATION

US Federal Regulations

TSCA (Toxic Substances Control Act) Status

TSCA (UNITED STATES) The intentional ingredients of this product are listed.

CERCLA RQ - 40 CFR 302.4(a)

None listed

CERCLA RQ - 40 CFR 302.4(b)

Materials without a "listed" RQ may be reportable as an "unlisted hazardous substance". See 40 CFR 302.5 (b).

SARA 302 Components - 40 CFR 355 Appendix A

None

Section 311/312 Hazard Class - 40 CFR 370.2

Immediate(X) Delayed(X) Fire() Reactive() Sudden
Release of Pressure()

SARA 313 Components - 40 CFR 372.65

None

OSHA Process Safety Management 29 CFR 1910

None listed

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EPA Accidental Release Prevention 40 CFR 68
None listed

International Regulations

Inventory Status

DSL (CANADA) The intentional ingredients of this product are
NOT listed.

EINECS (EUROPE) The intentional ingredients of this product are
listed.

NDSL (CANADA - NDSL) The intentional ingredients of this
product are listed.

State and Local Regulations

California Proposition 65

None

New Jersey RTK Label Information

TALC

14807-96-6

Pennsylvania RTK Label Information

TALC (MG3H2(SIO3)4)

14807-96-6

16. OTHER INFORMATION

The information accumulated herein is believed to be accurate but
is not warranted to be whether originating with the company or
not. Recipients are advised to confirm in advance of need that the
information is current, applicable, and suitable to their
circumstances.

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