

MATERIAL SAFETY DATA SHEET

Ashland

Page 001

Date Prepared: 09/28/05

Date Printed: 03/13/06

MSDS No: 303.0408573-001.001

PLIOGRIP PLASTIC PANEL-15 CURATIVE

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Material Identity

Product Name: PLIOGRIP PLASTIC PANEL-15 CURATIVE

Product Code: 599121

General or Generic ID: URETHANE 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)
POLYETHER POLYOL	Trade Secret	39.0- 43.0
POLYOL	Trade Secret	24.0- 28.0
TALC	14807-96-6	22.0- 26.0
URETHANE PREPOLYMER	57047-34-4	1.0- 5.0
CLAY	71011-26-2	1.0- 4.0
AMORPHOUS SILICA	68909-20-6	1.0- 3.0

3. HAZARDS IDENTIFICATION

Potential Health Effects

Eye

May cause mild eye irritation. Symptoms include stinging, tearing, and redness. Dust can cause eye irritation. Symptoms include stinging, tearing, redness, and swelling of eyes.

Continued on next page

MATERIAL SAFETY DATA SHEET

Ashland

Page 002

Date Prepared: 09/28/05

Date Printed: 03/13/06

MSDS No: 303.0408573-001.001

PLIOGRIP PLASTIC PANEL-15 CURATIVE

Skin

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. May cause mild skin irritation. Symptoms may include redness and burning of skin. 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. Swallowing this material is not likely to be harmful.

Inhalation

Breathing of vapor or mist is possible. 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.

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: stomach or intestinal upset (nausea, vomiting, diarrhea) irritation (nose, throat, airways), runny nose, cough, sneezing, bronchitis, chest pain, difficult breathing, Exposure to this product (or a component) may cause an allergic reaction (narrowing of the air passages of the lungs resulting in difficult breathing, tightness in the chest, coughing and wheezing) in some sensitive individuals. Other symptoms of an allergic reaction may include itchy and watery eyes, runny and stuffy nose, sweating, flushing, hives, rapid heart rate, and lowered blood pressure.

Continued on next page

MATERIAL SAFETY DATA SHEET

Ashland

Page 003

Date Prepared: 09/28/05

Date Printed: 03/13/06

MSDS No: 303.0408573-001.001

PLIOGRIP PLASTIC PANEL-15 CURATIVE

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 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

No data

Primary Route(s) of Entry

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

4. FIRST AID MEASURES

Eyes

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. 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. Wash exposed area with soap and water. If symptoms persist, seek medical attention. Launder clothing before reuse.

Continued on next page

MATERIAL SAFETY DATA SHEET

Ashland

Page 004

Date Prepared: 09/28/05

Date Printed: 03/13/06

MSDS No: 303.0408573-001.001

PLIOGRIP PLASTIC PANEL-15 CURATIVE

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. First aid is not normally required. If symptoms develop, seek medical attention.

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.

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

> 200.0 F (93.3 C)

Explosive Limit

No data

Autoignition Temperature

No data

Hazardous Products of Combustion

May form: carbon dioxide and carbon monoxide, nitrogen compounds, 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.

Continued on next page

MATERIAL SAFETY DATA SHEET

Ashland

Page 005

Date Prepared: 09/28/05

Date Printed: 03/13/06

MSDS No: 303.0408573-001.001

PLIOGRIP PLASTIC PANEL-15 CURATIVE

Extinguishing Media

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

Fire Fighting Instructions

DO NOT direct a solid stream of water or foam into hot, burning pools of liquid since this may cause frothing and increase fire intensity. Frothing can be violent and possibly endanger any firefighter standing too close to the burning liquid. 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 - 1, 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.

Continued on next page

MATERIAL SAFETY DATA SHEET

Ashland

Page 006

Date Prepared: 09/28/05

Date Printed: 03/13/06

MSDS No: 303.0408573-001.001

PLIOGRIP PLASTIC PANEL-15 CURATIVE

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 such as: polyethylene, 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.

Engineering Controls

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

Exposure Guidelines

Component

POLYETHER POLYOL

No exposure limits established

POLYOL

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

URETHANE PREPOLYMER (57047-34-4)

No exposure limits established

CLAY (71011-26-2)

No exposure limits established

Continued on next page

MATERIAL SAFETY DATA SHEET

Ashland

Page 007

Date Prepared: 09/28/05

Date Printed: 03/13/06

MSDS No: 303.0408573-001.001

PLIOGRIP PLASTIC PANEL-15 CURATIVE

AMORPHOUS SILICA (68909-20-6)
NO exposure limits established

9. PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point
No data

Vapor Pressure
No data

Specific Vapor Density
No data

Specific Gravity
1.620 @ 77.00 F

Liquid Density
10.500 lbs/gal @ 77.00 F
1.260 kg/l @ 25.00 C

Percent Volatiles
.0 %

Evaporation Rate
No data

Appearance
GREEN

State
LIQUID

Physical Form
No data

Color
No data

Continued on next page

MATERIAL SAFETY DATA SHEET

Ashland

Page 008

Date Prepared: 09/28/05

Date Printed: 03/13/06

MSDS No: 303.0408573-001.001

PLIOGRIP PLASTIC PANEL-15 CURATIVE

Odor

No data

pH

No data

10. STABILITY AND REACTIVITY

Hazardous Polymerization

Product will not undergo hazardous polymerization.

Hazardous Decomposition

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

Chemical Stability

Stable.

Incompatibility

Avoid contact with: strong alkalis, strong mineral acids, strong oxidizing agents.

11. TOXICOLOGICAL INFORMATION

No data

12. ECOLOGICAL INFORMATION

No data

13. DISPOSAL CONSIDERATION

Waste Management Information

Destroy by liquid incineration in accordance with applicable 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.

Continued on next page

MATERIAL SAFETY DATA SHEET

Ashland

Page 009

Date Prepared: 09/28/05

Date Printed: 03/13/06

MSDS No: 303.0408573-001.001

PLIOGRIP PLASTIC PANEL-15 CURATIVE

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

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

Continued on next page

MATERIAL SAFETY DATA SHEET

Ashland

Page 010
Date Prepared: 09/28/05
Date Printed: 03/13/06
MSDS No: 303.0408573-001.001

PLIOGRIP PLASTIC PANEL-15 CURATIVE

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

EPA Accidental Release Prevention 40 CFR 68
None listed

International Regulations

Inventory Status

CICS (CHINESE) The intentional ingredients of this product are NOT listed.

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

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

ENCS (JAPAN) 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.

Last page

MATERIAL SAFETY DATA SHEET

Ashland

Page 001
Date Prepared: 02/07/06
Date Printed: 03/13/06
MSDS No: 303.0279263-008.001

PLIOGRIP PLASTIC PANEL-15 PREPOLYMER

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Material Identity

Product Name: PLIOGRIP PLASTIC PANEL-15 PREPOLYMER
General or Generic ID: POLYURETHANE PREPOLYMER

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)
METHYLENE PHENYLENE ISOCYANATE	101-68-8	30.0- 40.0
URETHANE PREPOLYMER	Trade Secret	20.0- 25.0
MDI HOMOPOLYMER	25686-28-6	10.0- 15.0
TALC	14807-96-6	5.0- 10.0
URETHANE PREPOLYMER	Trade Secret	1.0- 7.0
COLLOIDAL SILICA	68611-44-9	3.0- 7.0
SILICON DIOXIDE	7631-86-9	1.0- 5.0
ALUMINUM OXIDE	1344-28-1	1.0- 3.0
SODIUM OXIDE	1313-59-3	1.0- 3.0
CALCIUM MONOXIDE	1305-78-8	1.0- 3.0

3. HAZARDS IDENTIFICATION

Potential Health Effects

Eye

Can cause eye irritation. Symptoms include stinging, tearing, redness, and swelling of eyes.

Continued on next page

MATERIAL SAFETY DATA SHEET

Ashland

Page 002

Date Prepared: 02/07/06

Date Printed: 03/13/06

MSDS No: 303.0279263-008.001

PLIOGRIP PLASTIC PANEL-15 PREPOLYMER

Skin

Can cause skin irritation. Symptoms may include redness and burning of skin, and other skin damage. 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 this material 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.

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: stomach or intestinal upset (nausea, vomiting, diarrhea) irritation (nose, throat, airways), runny nose, cough, sneezing, bronchitis, headache, chest pain, difficult breathing, lung edema (fluid buildup in the lung tissue), Exposure to this product (or a component) may cause an allergic reaction (narrowing of the air passages of the lungs resulting in difficult breathing, tightness in the chest, coughing and wheezing) in some sensitive individuals. Other symptoms of an allergic reaction may include itchy and watery eyes, runny and stuffy nose, sweating, flushing, hives, rapid heart rate, and lowered blood pressure.

Continued on next page

MATERIAL SAFETY DATA SHEET

Ashland

Page 003

Date Prepared: 02/07/06

Date Printed: 03/13/06

MSDS No: 303.0279263-008.001

PLIOGRIP PLASTIC PANEL-15 PREPOLYMER

Target Organ Effects

Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals: nasal damage, lung damage, 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

This material (or a component) has been shown to cause harm to the fetus in laboratory animal studies. Harm to the fetus occurs only at exposure levels that harm the pregnant animal. The relevance of these findings to humans is uncertain.

Cancer Information

In a two-year inhalation study in rats, exposure to polymeric methylene bisphenylisocyanate (MDI) aerosol caused a significant increase in benign (noncarcinogenic) lung tumors, along with a single carcinogenic lung tumor, at the highest dose only (6 mg/m³). The tumors occurred along with irritation of the respiratory tract and the accumulation of a yellow material in the lungs. There was irritation only at 1.0 mg/m³ and no effect at 0.2 mg/m³. MDI is not listed as carcinogenic by the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP) or the Occupational Safety and Health Administration (OSHA). 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

No data

Primary Route(s) of Entry

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

4. FIRST AID MEASURES

Eyes

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

Continued on next page

MATERIAL SAFETY DATA SHEET

Ashland

Page 004

Date Prepared: 02/07/06

Date Printed: 03/13/06

MSDS No: 303.0279263-008.001

PLIOGRIP PLASTIC PANEL-15 PREPOLYMER

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.

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

Pulmonary edema may be delayed. 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).

5. FIRE FIGHTING MEASURES

Flash Point

> 200.0 F (93.3 C) SETA

Explosive Limit

Not applicable

Autoignition Temperature

No data

Continued on next page

MATERIAL SAFETY DATA SHEET

Ashland

Page 005

Date Prepared: 02/07/06

Date Printed: 03/13/06

MSDS No: 303.0279263-008.001

PLIOGRIP PLASTIC PANEL-15 PREPOLYMER

Hazardous Products of Combustion

May form: carbon dioxide and carbon monoxide, hydrogen cyanide, nitrogen compounds, 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

water fog, carbon dioxide, dry chemical.

Fire Fighting Instructions

DO NOT direct a solid stream of water or foam into hot, burning pools of liquid since this may cause frothing and increase fire intensity. Frothing can be violent and possibly endanger any firefighter standing too close to the burning liquid. 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). Polymerization will take place under fire conditions. If polymerization occurs in a closed container, there is a possibility it will rupture violently. Cool storage container with water, if exposed to fire.

NFPA Rating

Health - 2, Flammability - 1, Reactivity - 1

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. Neutralize spill with an aqueous solution of ammonia. Remaining liquid may be taken up on sand, clay, earth, floor absorbent, or other absorbent material and shoveled into containers.

Continued on next page

MATERIAL SAFETY DATA SHEET

Ashland

Page 006

Date Prepared: 02/07/06

Date Printed: 03/13/06

MSDS No: 303.0279263-008.001

PLIOGRIP PLASTIC PANEL-15 PREPOLYMER

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.

Storage

Store in tightly closed containers. Do not allow moisture or water contamination of product. Contamination with water can cause dangerous pressure buildup in resealed containers. Do not reseal containers if contamination is suspected.

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 such as: nitrile rubber, butyl rubber, 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.

Engineering Controls

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

Continued on next page

MATERIAL SAFETY DATA SHEET

Ashland

Page 007

Date Prepared: 02/07/06

Date Printed: 03/13/06

MSDS No: 303.0279263-008.001

PLIOGRIP PLASTIC PANEL-15 PREPOLYMER

Exposure Guidelines

Component

METHYLENE PHENYLENE ISOCYANATE (101-68-8)

OSHA PEL 0.020 ppm - Ceiling

OSHA PEL 0.200 mg/m3 - Ceiling

OSHA VPEL 0.200 mg/m3 - Ceiling

OSHA VPEL 0.020 ppm - Ceiling

ACGIH TLV 0.005 ppm - TWA

ACGIH TLV 0.051 mg/m3 - TWA

URETHANE PREPOLYMER

No exposure limits established

MDI HOMOPOLYMER (25686-28-6)

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) (Listed under 'Silicates')

ACGIH TLV 2.000 mg/m3 - TWA (this TLV is for the respirable fraction of dust for Talc)

URETHANE PREPOLYMER

No exposure limits established

COLLOIDAL SILICA (68611-44-9)

No exposure limits established

SILICON DIOXIDE (7631-86-9)

No exposure limits established

ALUMINUM OXIDE (1344-28-1)

OSHA PEL 5.000 mg/m3 - TWA respirable fraction

OSHA PEL 15.000 mg/m3 - TWA total dust

OSHA VPEL 5.000 mg/m3 - TWA respirable fraction

OSHA VPEL 10.000 mg/m3 - TWA total dust

ACGIH TLV 10.000 mg/m3 - TWA as Al (The value is for total dust containing no asbestos and < 1% crystalline silica)

SODIUM OXIDE (1313-59-3)

No exposure limits established

CALCIUM MONOXIDE (1305-78-8)

Continued on next page

MATERIAL SAFETY DATA SHEET

Ashland

Page 008

Date Prepared: 02/07/06

Date Printed: 03/13/06

MSDS No: 303.0279263-008.001

PLIOGRIP PLASTIC PANEL-15 PREPOLYMER

OSHA PEL 5.000 mg/m3 - TWA

OSHA VPEL 5.000 mg/m3 - TWA (not in effect as a result of reconsideration)

ACGIH TLV 2.000 mg/m3 - TWA

9. PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point

No data

Vapor Pressure

(for product) < .010 mmHg @ 77.00 F

Specific Vapor Density

> 1.000 @ AIR=1

Specific Gravity

1.288 @ 77.00 F

Liquid Density

10.720 lbs/gal @ 77.00 F

1.288 kg/l @ 25.00 C

Percent Volatiles

No data

Evaporation Rate

SLOWER THAN ETHYL ETHER

Appearance

No data

State

LIQUID

Physical Form

No data

Continued on next page

MATERIAL SAFETY DATA SHEET

Ashland

Page 009

Date Prepared: 02/07/06

Date Printed: 03/13/06

MSDS No: 303.0279263-008.001

PLIOGRIP PLASTIC PANEL-15 PREPOLYMER

Color

No data

Odor

No data

pH

Not applicable

10. STABILITY AND REACTIVITY

Hazardous Polymerization

Product can undergo hazardous polymerization. Avoid contact with strong alkalis, strong mineral acids, and water.

Hazardous Decomposition

May form: carbon dioxide and carbon monoxide, hydrogen cyanide, nitrogen compounds, various hydrocarbons.

Chemical Stability

Stable.

Incompatibility

Avoid contact with: acids, chlorinated rubber, chlorine trifluoride, ethylene oxide, excessive heat, strong alkalis, strong mineral acids, strong oxidizing agents, water.

11. TOXICOLOGICAL INFORMATION

No data

Continued on next page

MATERIAL SAFETY DATA SHEET

Ashland

Page 010

Date Prepared: 02/07/06

Date Printed: 03/13/06

MSDS No: 303.0279263-008.001

PLIOGRIP PLASTIC PANEL-15 PREPOLYMER

12. ECOLOGICAL INFORMATION

No data

13. DISPOSAL CONSIDERATION

Waste Management Information

Destroy by liquid incineration in accordance with applicable 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.

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

Product Quantity (lbs) Component

14224

METHYLENE BISPHENOL ISOCYANATE (MDI)

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.

Continued on next page

MATERIAL SAFETY DATA SHEET

Ashland

Page 011

Date Prepared: 02/07/06

Date Printed: 03/13/06

MSDS No: 303.0279263-008.001

PLIOGRIP PLASTIC PANEL-15 PREPOLYMER

CERCLA RQ - 40 CFR 302.4(a)

Component	RQ (lbs)
METHYLENE BISPHENOL ISOCYANATE (MDI)	5000

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(X) Sudden
Release of Pressure()

SARA 313 Components - 40 CFR 372.65

Section 313 Component(s)	CAS Number	%
METHYLENEBIS(PHENYLISOCYANATE) (MDI)	101-68-8	35.15
ALUMINUM OXIDE (FIBROUS FORM ONLY)	1344-28-1	2.76

OSHA Process Safety Management 29 CFR 1910

None listed

EPA Accidental Release Prevention 40 CFR 68

None listed

International Regulations

Inventory Status

AICS (AUSTRALIA) The intentional ingredients of this product are listed.

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

ECL (SOUTH KOREA) The intentional ingredients of this product are listed.

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

ENCS (JAPAN) The intentional ingredients of this product are listed.

IECSC (CHINA) The intentional ingredients of this product are NOT listed.

Continued on next page

MATERIAL SAFETY DATA SHEET

Ashland

Page 012

Date Prepared: 02/07/06

Date Printed: 03/13/06

MSDS No: 303.0279263-008.001

PLIOGRIP PLASTIC PANEL-15 PREPOLYMER

State and Local Regulations

California Proposition 65

None

New Jersey RTK Label Information

METHYLENE BISPHENYL ISOCYANATE	101-68-8
TALC	14807-96-6
SILICA, AMORPHOUS	7631-86-9
ALUMINUM OXIDE	1344-28-1
CALCIUM OXIDE	1305-78-8

Pennsylvania RTK Label Information

BENZENE, 1,1'-METHYLENEBIS [4-ISOCYANATO-	101-68-8
TALC (MG3H2(SIO3)4)	14807-96-6
SILICA	7631-86-9
ALUMINUM OXIDE (AL2O3)	1344-28-1
CALCIUM OXIDE (CAO)	1305-78-8

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.

Revision Indicator

This MSDS has been revised in the following section(s):

Section 2. COMPOSITION/INFORMATION ON INGREDIENTS
Section 3. HAZARDS IDENTIFICATION
Section 4. FIRST AID MEASURES
Section 15. REGULATORY INFORMATION