

MATERIAL SAFETY DATA SHEET

Ashland

Page 001

Date Prepared: 02/01/06

Date Printed: 03/13/06

MSDS No: 303.0408018-001.002

PLIOGRIP ADHESION PROMOTER- TPS

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Material Identity

Product Name: PLIOGRIP ADHESION PROMOTER- TPS

Product Code: 599078

General or Generic ID: ADHESION PROMOTER WITH PROPELLANT

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)
TOLUENE	108-88-3	30.0- 33.0
ACETONE	67-64-1	26.0- 30.0
PROPANE	74-98-6	12.0- 16.0
METHYLCYCLOHEXANE	108-87-2	7.0- 11.0
POLYMER	Trade Secret	6.0- 10.0
ISOBUTANE	75-28-5	4.0- 8.0
ISOPROPANOL	67-63-0	1.0- 3.0

3. HAZARDS IDENTIFICATION

Potential Health Effects

Eye

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

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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. 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. This material can get into the lungs during swallowing or vomiting. This results in lung inflammation and other lung injury. Exposure causes severe irritation of the gastrointestinal tract.

Inhalation

Breathing of vapor or mist is possible. 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).

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: metallic taste, mouth and throat irritation (soreness, dry or scratchy feeling, cough), stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness), central nervous system excitation (giddiness, liveliness, light-headed feeling) followed by central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness) and other central nervous system effects, central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness) and other central nervous system effects, temporary changes in mood and behavior, muscle weakness, low blood pressure, mild, temporary changes in the liver, effects on heart rate, respiratory depression (slowing of the breathing rate), loss of coordination, confusion, irregular heartbeat, high blood sugar, lung edema (fluid buildup in the lung tissue), kidney damage, coma, and death.

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Target Organ Effects

This material (or a component) shortens the time of onset or worsens the liver and kidney damage induced by other chemicals. Breathing isopropanol vapors has caused damage to the lining of the middle ear in experimental animals. The relevance of this finding to humans is uncertain. Prolonged intentional toluene abuse may lead to damage to many organ systems having effects on: central and peripheral nervous systems, vision, hearing, liver, kidneys, heart and blood. Such abuse has been associated with brain damage characterized by disturbances in gait, personality changes and loss of memory. Comparable central nervous system effects have not been shown to result from occupational exposure to toluene. Prolonged intentional toluene abuse may lead to hearing loss progressing to deafness. In addition, while noise is known to cause hearing loss in humans, it has been suggested that workers exposed to organic solvents, including toluene, along with noise may suffer greater hearing loss than would be expected from exposure to noise alone. Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals: mild, reversible liver effects, mild, reversible kidney effects, blood abnormalities, respiratory tract damage (nose, throat, and airways), effects on hearing, central nervous system damage. Overexposure to this material (or its components) has been suggested as a cause of the following effects in humans: kidney damage.

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. Toluene may be harmful to the human fetus based on positive test results with laboratory animals. Case studies show that prolonged intentional abuse of toluene during pregnancy can cause birth defects in humans.

Cancer Information

Based on the available information, this material cannot be classified with regard to carcinogenicity. 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.

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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.

Skin

Remove contaminated clothing. Wash exposed area with soap and water. If 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

Inhalation of high concentrations of this material, as could occur in enclosed spaces or during deliberate abuse, may be associated with cardiac arrhythmias. Sympathomimetic drugs may initiate cardiac arrhythmias in persons exposed to this material. This material is an aspiration hazard. Potential danger from aspiration must be weighed against possible oral toxicity (See Section 3 - Swallowing) when deciding whether to induce vomiting. This material (or a component) has produced hyperglycemia and ketosis following substantial ingestion. Pulmonary edema may be delayed. Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material:

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respiratory tract, skin, lung (for example, asthma-like conditions), liver, kidney, central nervous system, blood-forming system, auditory system, Individuals with preexisting heart disorders may be more susceptible to arrhythmias (irregular heartbeats) if exposed to high concentrations of this material. Administration of high doses of isopropanol in combination with known hepatotoxic chemicals resulted in enhanced liver toxicity in experimental animals.

5. FIRE FIGHTING MEASURES

Flash Point

-140.0 F (-95.5 C)

Explosive Limit

(for component) Lower 1.2 Upper 12.8 %

Autoignition Temperature

No data

Hazardous Products of Combustion

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

Fire and Explosion Hazards

Material is volatile and readily gives off vapors which may travel along the ground or be moved by ventilation and ignited by pilot lights, flames, sparks, heaters, smoking, electric motors, static discharge or other ignition sources at locations near the material handling point. Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively.

Extinguishing Media

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

Fire Fighting Instructions

Wear full firefighting turn-out gear (full Bunker gear), and respiratory protection (SCBA).

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NFPA Rating

Health - 2, Flammability - 4, 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.

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. Static ignition hazard can result from handling and use. Electrically bond and ground all containers, personnel and equipment before transfer or use of material. Special precautions may be necessary to dissipate static electricity for non-conductive containers. Use proper bonding and grounding during product transfer as described in National Fire Protection Association document NFPA 77. 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 smoking. Regular laundering of contaminated clothing is essential to reduce indirect skin contact with this material. DO NOT Smoke. DO NOT puncture or incinerate container

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Storage

Do not store in temperatures above 120 degrees F. Do not store near extreme heat, open flame, or sources of ignition.

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).

Respiratory Protections

Not required under normal conditions of use. 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. If overexposure has been determined or documented, a NIOSH/MSHA jointly approved air supplied respirator is advised in absence of proper environmental control. OSHA regulations also permit other NIOSH/MSHA respirators under specified conditions. (See your safety equipment supplier.) 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). Not required under normal conditions of use. However, if unusual operating conditions exist, then provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below PEL/TLV (s).

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Exposure Guidelines

Component

TOLUENE (108-88-3)

OSHA PEL 200.000 ppm - TWA

OSHA PEL 300.000 ppm - Ceiling

OSHA VPEL 100.000 ppm - TWA

OSHA VPEL 150.000 ppm - STEL

ACGIH TLV 50.000 ppm - TWA (Skin)

ACGIH TLV 0.000 mg/m3 - Ceiling (Skin)

ACETONE (67-64-1)

OSHA PEL 1000.000 ppm - TWA

OSHA VPEL 750.000 ppm - TWA

OSHA VPEL 1000.000 ppm - STEL

ACGIH TLV 500.000 ppm - TWA

ACGIH TLV 750.000 ppm - STEL

PROPANE (74-98-6)

OSHA PEL 1000.000 ppm - TWA

OSHA VPEL 1000.000 ppm - TWA

ACGIH TLV 2500.000 ppm - TWA

METHYLCYCLOHEXANE (108-87-2)

OSHA PEL 500.000 ppm - TWA

OSHA VPEL 400.000 ppm - TWA

ACGIH TLV 400.000 ppm - TWA

POLYMER

No exposure limits established

ISOBUTANE (75-28-5)

No exposure limits established

ISOPROPANOL (67-63-0)

OSHA PEL 400.000 ppm - TWA

OSHA VPEL 400.000 ppm - TWA

OSHA VPEL 500.000 ppm - STEL

ACGIH TLV 200.000 ppm - TWA

ACGIH TLV 400.000 ppm - STEL

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9. PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point

(for component) 11.8 F (-11.1 C)

Vapor Pressure

(for component) > 6000.000 mmHg

Specific Vapor Density

No data

Specific Gravity

No data

Liquid Density

6.880 lbs/gal @ 68.00 F

6.880 lbs/gal @ 68.00 F

Percent Volatiles

No data

Volatile Organic Compounds (VOC)

4.810 lbs/gal

Evaporation Rate

No data

Appearance

CLEAR AND CLEAN

State

LIQUID

Physical Form

SOLUTION

Color

WATER WHITE TO PALE YELLOW

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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, various hydrocarbons.

Chemical Stability

Stable.

Incompatibility

Avoid contact with: acids.

11. TOXICOLOGICAL INFORMATION

LD 50 and LC 50 Data

ISOPROPANOL (CAS# 67-63-0)

Oral LD50 (rat): 5045 mg/kg

Dermal LD50 (rabbit): 12,800 mg/kg

Inhalation LC50 (rat, 4 hour): 16,000 ppm

TOLUENE (CAS# 108-88-3)

Oral LD50 (rat): 5000 mg/kg

Dermal LD50 (rabbit): 14,000 mg/kg

Inhalation LC50 (rat, 4 hour): 8000 ppm

ACETONE (CAS# 67-64-1)

Oral LD50 (rat): 5800 mg/kg

Dermal LD50 (rabbit): >20,000 mg/kg

Inhalation LC50 (rat, 4 hour): >16,000 ppm

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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:

AEROSOLS, 2.1, UN1950

Container/Mode:

55 GAL DRUM/TRUCK PACKAGE

NOS Component:

None

RQ (Reportable Quantity) - 49 CFR 172.101

Product Quantity (lbs) Component

3123	TOLUENE
17857	ACETONE

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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)

Component	RQ (lbs)
TOLUENE	1000
ACETONE	5000

SARA 302 Components - 40 CFR 355 Appendix A
None

Section 311/312 Hazard Class - 40 CFR 370.2

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

SARA 313 Components - 40 CFR 372.65

Section 313 Component(s)	CAS Number	%
TOLUENE	108-88-3	32.01

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 listed.

PICCS (PHILIPPINES) The intentional ingredients of this product

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are listed.

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.

BENZENE

PHENYL GLYCIDYL ETHER

EPICHLOROHYDRIN

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.

TOLUENE

BENZENE

EPICHLOROHYDRIN

New Jersey RTK Label Information

TOLUENE	108-88-3
ACETONE	67-64-1
PROPANE	74-98-6
METHYLCYCLOHEXANE	108-87-2
ISOBUTANE	75-28-5
ISOPROPYL ALCOHOL	67-63-0

Pennsylvania RTK Label Information

BENZENE, METHYL-	108-88-3
2-PROPANONE	67-64-1
PROPANE	74-98-6
CYCLOHEXANE, METHYL-	108-87-2
PROPANE, 2-METHYL-	75-28-5
2-PROPANOL	67-63-0

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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.