

MATERIAL SAFETY DATA SHEET

INTERNATIONAL BONDING ADHESIVE

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Material Identity

Product Name: INTERNATIONAL BONDING ADHESIVE

General or Generic ID: SYNTHETIC RUBBER/RESIN IN SOLVENT (S)

Company

Ashland 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

Ingredients (s)	CAS Number	% (by weight)
TOLUENE	108-88-3	37.0
ACETONE	67-64-1	20.0- 24.0
ALIPHATIC PETROLEUM DISTILLATES	64742-89-8	13.0- 17.0
SYNTHETIC RUBBER	Trade Secret	13.0- 17.0
TRET-BUTYLPHENOL, POLYMER W/FORMALDEHYDE		2.5- 6.0
HYDROCARBON RESIN	Trade Secret	1.0- 4.2
AROMATIC HYDROCARBON RESIN	68410-16-2	1.0- 3.7
HEXANE	110-54-3	3.7- 5.0

3. HAZARDS IDENTIFICATION

Potential Health Effects

Eye

Exposure may cause mild eye irritation. Symptoms may include stinging, tearing, and redness.

Skin

Exposure may cause mild skin irritation. Prolonged or repeated exposure may dry the skin. Symptoms may include redness, burning, drying and cracking, and skin burns.

Swallowing

Single dose oral toxicity is low. Swallowing small amounts during normal handling is not likely to cause harmful effects; swallowing large amounts may be harmful. This material can enter the Lungs during swallowing or vomiting and cause lung inflammation and/or damage.

Inhalation

Exposure to vapor or mist is possible. Short-term inhalation toxicity is low. Breathing small Amounts during normal handling is not likely to cause harmful effects; breathing large amounts May be harmful.

Symptoms of Exposure

Gastrointestinal irritation (nausea, vomiting, diarrhea), irritation (nose, throat, respiratory Tract), central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea,

Headache, unconsciousness), and death.

Target Organ Effects

Prolonged and repeated exposure to n-hexane may cause peripheral neuropathy by damaging Peripheral nerve tissue (that of the arms and legs) and result in muscular weakness and loss of Sensation. Prolonged and repeated inhalation of high levels of mixed isomers of hexane resulted In kidney damage in male rats. The effects observed are the same as those seen in male rats Exposed to other hydrocarbons. The mechanism by which these chemicals cause the Characteristic kidney toxicity is unique to the male rat and the kidney effects are not expected To occur in man. Overexposure to this material (or its components) has been suggested as a Cause of the following effects in laboratory animals, and may aggravate pre-existing disorders Of these organs in humans: liver abnormalities, spleen damage, eye damage, kidney damage, Lung damage. Overexposure to his material (or its components) has been suggested as a cause Of the following effectes in humans, and may aggravate pre-existing disorders of these organs: Central nervous system effects, liver abnormalities.

Developmental information

No data

Cancer Information

No data

Other Health Effects

No data

Primary Route (s) of Entry

Inhalation, Skin absorption, Skin contact.

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.

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

No data

5. FIRE FIGHTING MEASURES

Flash Point

-2.0 F (-18.8 C) SETA

Explosive Limit

(for component) Lower 1.0 Upper 7.0 %

INTERNATIONAL BONDING ADHESIVE

Autoignition Temperature

No data

Hazardous Products of Combustion

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

Fire and Explosion Hazards

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

Extinguishing Media

Regular foam, water fog, carbon dioxide, dry chemical.

Fire Fighting Instructions

Wear a self-contained breathing apparatus with a full facepiece operated in the positive pressure demand mode with appropriate turn-out gear and chemical resistant personal protective equipment. Refer to the personal protective equipment section of this MSDS.

NFPA Rating

Not determined

6. ACCIDENTAL RELEASE MEASURES

Small Spill

Absorb liquid on vermiculite, floor absorbent, or other absorbent material and transfer to hood. Eliminate all sources of ignition such as flares, flames (including pilot lights), and electrical sparks.

Large Spill

Eliminate all ignition sources (flares, flames including pilot lights, electrical sparks). Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Stop spill at source. Prevent from entering drains, sewers, streams or other bodies of water. Prevent from spreading. If runoff occurs, notify authorities as required. Pump or vacuum transfer spilled products to clean containers for recovery. Absorb unrecoverable product. Transfer contaminated absorbent, soil and other materials to containers for disposal. Notify the proper authorities as required that a spill has occurred.

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. All five gallon pails and larger metal containers including tank cars and tank trucks should be grounded and/or bonded when material is transferred. When used as part of an EPDM roofing system involving roller application, pails should be electrically and mechanically connected to the application equipment and the system should be grounded. When used as part of a roofing system involving spray application, the roof surface, applicator nozzle and human operator should be electrically and mechanically connected and the system should be grounded.

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.

Engineering Controls

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

Exposure Guidelines

Component

TOLUENE (108-88-3)

OSHA VPEL 100.000 ppm – TWA

OSHA VPEL 150.000 ppm – STEL

ACGIH TLV 50.000 ppm – TWA (Skin)

ACGIH TLV 150.000 ppm – STEL (Skin)

ACETONE (67-64-1)

OSHA VPEL 750.000 ppm – TWA

OSHA VPEL 1000.000 ppm – STEL

ACGIH TLV 750.000 ppm – TWA

ACGIH TLV 1000.000 ppm – STEL

ALIPHATIC PETROLEUM DISTILLATES 964742-89-8)

No Exposure limits established

SYNTHETIC RUBBER

No exposure limits established

TERT-BUTYLPHENOL, POLYMER W/FORMALDEHYDE

No exposure limits established

HYDROCARBON RESIN

No exposure limits established

AROMATIC HYDROCARBON RESIN (68410-16-2)

No exposure limits established

HEXANE (110-54-3)

OSHA VPEL 50.000 ppm – TWA

ACGIH TLV 50.000 ppm – TWA

INTERNATIONAL BONDING ADHESIVE

9. PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point

(for component) 133.0 F (56.1 C) @ 760 mmHg

Vapor Pressure

(for component) 181.700 mmHg @ 68.00 F

Specific Vapor Density

1.000 @ AIR=1

Specific Gravity

.872 @ 77.00 F

Liquid Density

7.260 lbs/gal @ 77.00 F

.871 kg/a @ 25.00 C

Percent Volatiles

73.0 - 77.0 %

Evaporation Rate

SLOWER THAN ETHYL ETHER

Appearance

No data

State

SEMISOLID

Physical Form

PASTE

Color

YELLOW

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, phenols, various hydrocarbons.

Chemical Stability

Stable.

Incompatibility

Avoid contact with: strong alkalies, 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.

14. TRANSPORT INFORMATION

DOT information – 49 CFR 172.101

DOT Description:

ADHESIVES,3,UN1133,III

Container/Mode:

55 GAL DRUM/TRUCK PACKAGE

NOS Component:

NONE

RQ (Reportable Quantity) – 49 CFR 172.101

Product Quantity (lbs)	Component
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2727	TOLUENE
22272	ACETONE

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

Component	RQ (lbs)
TOLUENE	1000
ACETONE	5000
HEXANE	1

INTERNATIONAL BONDING ADHESIVE

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	Max %
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TOLUENE	108-88-3	36.67
N-HEXANE	110-54-3	5.21

International Regulations

Inventory Status

DSL (CANADA) The intentional ingredients of this product 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

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

New Jersey RTK Label Information

TOLUENE	108-88-3
ACETONE	67-64-1
NAPHTHA, SOLVENT	64742-89-8
N-HEXANE	110-54-3

Pennsylvania RTK Label Information

BENZENE, METHYL-	108-88-3
2-PROPANONE	67-64-1
HEXANE	110-54-3

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.