

MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product number 4503
Product name IES Spray Adhesive
Effective date 20-Nov-2009
Company information International Epoxies & Sealers
P.O. Box #185
San Antonio, FL 33576 United States
Company phone General Assistance 1-800-451-7206
Emergency telephone US INFOTRAC: 800-535-5053
Emergency telephone outside US CALL COLLECT: 352-323-3500
Version # 06
Supersedes date 31-Mar-2009

2. Hazards Identification

Emergency overview EXTREMELY FLAMMABLE
CONTENTS UNDER PRESSURE. Aerosol. Will be easily ignited by heat, spark or flames. Harmful in contact with eyes. Prolonged exposure may cause chronic effects.

Potential health effects

Eyes Contact may irritate or burn eyes. Eye contact may result in corneal injury.

Skin Prolonged or repeated contact can result in defatting and drying of the skin which may result in skin irritation and dermatitis (rash).

Inhalation Intentional misuse by concentrating and inhaling the product can be harmful or fatal. Prolonged inhalation may be harmful.

Ingestion Exposure by ingestion of an aerosol is unlikely. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. May cause delayed lung damage.

Target organs Central nervous system. Respiratory system.

Chronic effects Conjunctiva. May cause central nervous system disorder (e.g., narcosis involving a loss of coordination, weakness, fatigue, mental confusion, and blurred vision) and/or damage. May cause delayed lung damage.

Signs and symptoms Discomfort in the chest. Corneal damage. Narcosis. Conjunctivitis. Defatting of the skin. Irritation.

3. Composition / Information on Ingredients

Components	CAS #	Percent
Acetone	67-64-1	15 - 20
n-Hexane	110-54-3	15 - 20
Dimethyl Ether	115-10-6	10 - 15
n-Butane	106-97-8	8 - 10
Cyclohexane	110-82-7	8 - 10
Isobutane	75-28-5	5 - 8
Propane	74-98-6	5 - 8
Non-hazardous and other components below reportable levels		10 - 20

4. First Aid Measures

First aid procedures

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Get medical attention immediately.

Skin contact Immediately take off all contaminated clothing. Wash off with warm water and soap. Get medical attention if irritation develops or persists.

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.

Ingestion

Rinse mouth. Do not induce vomiting without medical advice. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

5. Fire Fighting Measures

Flammable properties Vapor or gas may spread to distant ignition sources and flash back.

Extinguishing media

Suitable extinguishing media Foam. Alcohol foam. Dry chemical. Carbon dioxide (CO2). Halons.

Protection of firefighters

Protective equipment and precautions for firefighters In the event of fire and/or explosion do not breathe fumes. Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask. Containers should be cooled with water to prevent vapor pressure build up. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

6. Accidental Release Measures

Methods for containment Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable.

Methods for cleaning up

Should not be released into the environment.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean contaminated surface thoroughly.

7. Handling and Storage

Handling Pressurized container: Do not pierce or burn, even after use. Do not handle or store near an open flame, heat or other sources of ignition. Use only in area provided with appropriate exhaust ventilation. Do not use if spray button is missing or defective. Do not get this material in contact with eyes. Do not get this material in contact with skin. Avoid prolonged exposure.

Storage

Level 3 Aerosol.

Contents under pressure. Do not puncture, incinerate or crush. The pressure in sealed containers can increase under the influence of heat. Avoid exposure to long periods of sunlight. Keep in an area equipped with sprinklers. Keep out of the reach of children.

8. Exposure Controls / Personal Protection

Exposure limits**ACGIH**

Components	CAS #	TWA	STEL	Ceiling
Acetone	67-64-1	500 ppm	750 ppm	Not established
n-Hexane	110-54-3	50 ppm	1000 ppm	Not established
n-Butane	106-97-8	1000 ppm	Not established	Not established
Cyclohexane	110-82-7	100 ppm	Not established	Not established
Isobutane	75-28-5	1000 ppm	Not established	Not established
Propane	74-98-6	1000 ppm	Not established	Not established

OSHA

Components	CAS #	TWA	STEL	Ceiling
Acetone	67-64-1	1000 ppm	Not established	Not established
n-Hexane	110-54-3	500 ppm	Not established	Not established
Cyclohexane	110-82-7	300 ppm	Not established	Not established
Propane	74-98-6	1000 ppm	Not established	Not established

Personal protective equipment

Eye / face protection Wear chemical goggles.

Skin protection Protective gloves.

Respiratory protection

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

9. Physical & Chemical Properties

Appearance	Compressed liquefied gas.
Boiling point	69.8 °F (21.1 °C) estimated
Color	Tan.
Flammability (HOC)	41.8016 kJ/g estimated
Flash back	Yes
Flash point	-156 °F (-104.4 °C) Propellant
Form	Aerosol.
Odor	Solvent.
pH	Not applicable
Physical state	Liquid.
Pressure	50 - 65 psig @ 70F
Solubility	None
Specific gravity	0.7069 estimated

10. Chemical Stability & Reactivity Information

Chemical stability	Risk of ignition.
Conditions to avoid	Heat, flames and sparks.
Hazardous decomposition products	May include oxides of oxides of carbon.

11. Toxicological Information

Acute effects	Acute LD50: 8571 mg/kg estimated, Rat, Dermal Acute LC50: 99 mg/l/4h estimated, Rat, Inhalation
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Component analysis - LD50**Toxicology Data - Selected LD50s and LC50s**

Acetone	67-64-1	Oral LD50 Rat 5800 mg/kg
Cyclohexane	110-82-7	Inhalation LC50 Rat 13.9 mg/L 4 h; Oral LD50 Rat >5000 mg/kg; Dermal LD50 Rabbit >2000 mg/kg
Dimethyl Ether	115-10-6	Inhalation LC50 Rat 308.5 mg/L 4 h
Isobutane	75-28-5	Inhalation LC50 Rat 658 mg/L 4 h
n-Butane	106-97-8	Inhalation LC50 Rat 658 mg/L 4 h
n-Hexane	110-54-3	Inhalation LC50 Rat 48000 ppm 4 h; Oral LD50 Rat 25 g/kg; Dermal LD50 Rabbit 3000 mg/kg
Propane	74-98-6	Inhalation LC50 Rat 658 mg/L 4 h

12. Ecological Information

Ecotoxicity	LC50 15.77 mg/L, Fish, 96.00 Hours, EC50 66843 mg/L, Daphnia, 48.00 Hours, IC50 5138 mg/L, Algae, 72.00 Hours,
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13. Disposal Considerations

Waste codes	D001: Waste Flammable material with a flash point <140 F
Disposal instructions	Contents under pressure. Dispose of this material and its container at hazardous or special waste collection point. Do not allow this material to drain into sewers/water supplies. If discarded, this product is considered a RCRA ignitable waste, D001. Dispose in accordance with all applicable regulations.

14. Transport Information

Department of Transportation (DOT) Requirements

Basic shipping requirements:

Proper shipping name	Consumer commodity
Hazard class	ORM-D
Subsidiary hazard class	None
Additional information:	
Packaging exceptions	156, 306
Packaging non bulk	156, 306
Packaging bulk	None

IMDG

Basic shipping requirements:

Proper shipping name	AEROSOLS
Hazard class	2.1
UN number	1950
Additional information:	
Packaging exceptions	LTD QTY
Item	5F
Labels required	None
Transport Category	2



IATA

Basic shipping requirements:

Proper shipping name	Aerosols, flammable
Hazard class	2.1
UN number	1950
Additional information:	
Packaging exceptions	LTD QTY
Labels required	2.1



15. Regulatory Information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

U.S. - CERCLA/SARA - Section 313 - Emission Reporting

Cyclohexane	110-82-7	1.0 % de minimis concentration
n-Hexane	110-54-3	1.0 % de minimis concentration

Occupational Safety and Health Administration (OSHA)

29 CFR 1910.1200 hazardous chemical Yes

CERCLA (Superfund) reportable quantity

Acetone: 5000.0000
n-Hexane: 5000.0000
Cyclohexane: 1000.0000

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
Immediate Hazard - Yes
Delayed Hazard - Yes
Fire Hazard - Yes
Pressure Hazard - Yes
Reactivity Hazard - No

Section 302 extremely hazardous substance No

Section 311 hazardous chemical Yes

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of New and Existing Chemicals (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

State regulations**U.S. - Pennsylvania - RTK (Right to Know) List**

Acetone	67-64-1	Environmental hazard
Cyclohexane	110-82-7	Environmental hazard
Dimethyl Ether	115-10-6	Present
Isobutane	75-28-5	Present
n-Butane	106-97-8	Present
n-Hexane	110-54-3	Present
Propane	74-98-6	Present

16. Other Information**HMIS® ratings**

Health: 1*
 Flammability: 4
 Physical hazard: 0

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

MSDS sections updated

Product and Company Identification: Product and Company Identification
 Physical & Chemical Properties: Fire Fighting Measures
 Transport Information: Product Shipping Name/Packing Group

Prepared by

Regulatory Compliance