

**1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

Product Name: #1450 Brake Silencer  
Date Printed: February 28, 2011  
Product Use/Class: Brake Silencer

Supplier: International Epoxies & Sealers  
30241 Commerce Drive  
San Antonio, FL 33576  
Information Phone: 1-800-451-7206

Emergency Telephone: INFOTRAC 1-800-535-5053  
Outside the U.S. Call collect: 1-352-323-3500

**2. COMPOSITION / INFORMATION ON INGREDIENTS**

Item	Chemical Name	CAS Number	%
01	Isopropyl Alcohol	67-63-0	80-90
02	Graphite	7782-42-5	1-10
03	N-Butyl Alcohol	71-36-3	1-10
04	1-Methoxy-2-Propanol	107-98-2	1-10

\*\*\*\*\*Exposure Limits \*\*\*\*\*

Item	ACGIH		OSHA		COMPANY	
	TLV-TWA	TLV-STEL	PEL-TWA	PEL-CEILING	TLV-TWA	SKIN
01	400 PPM	500 PPM	400 PPM	N.E.	N.E.	NO
02	N.E.	N.E.	N.E.	N.E.	N.E.	NO
03	20 MG/M <sup>3</sup>	50 PPM SKIN*	300 MG/M <sup>3</sup>	50 PPM SKIN	N.E.	YES
04	100 PPM	150 PPM	100 PPM	N.E.	N.E.	NO

(See Section 16 for abbreviation legend), \* - Ceiling Value.

**3. HAZARDOUS IDENTIFICATION**

\*\*\* EMERGENCY OVERVIEW \*\*\*: Causes eye irritation. Flammable liquid and vapor. Vapors may cause flash fire or explosion. Aspiration hazard. HARMFUL OR FATAL IF SWALLOWED. MAY ENTER LUNGS AND CAUSE DAMAGE.

**EFFECTS OF OVEREXPOSURE:**

**EYE CONTACT:** Direct eye contact may cause slight temporary irritation. Contact with eye may cause irritation. Causes irritation, redness and pain. Causes moderate to severe eye irritation.

**SKIN CONTACT:** Prolonged or repeated contact can result in defatting and drying of the skin which may result in skin irritation and dermatitis (rash). May cause irritation. May be absorbed through skin with health effects parallel to those of inhalation.

**INHALTION:** Prolonged inhalation may be harmful. Inhaling large quantities of mist or vapors may cause some irritation to nose, throat, lungs. Avoid breathing mist from this product. Headache. Dizziness.

**INGESTION:** Ingestion is not considered to be a hazard encountered in normal industrial use. This material may be harmful or fatal if swallowed. Product has expected low level of acute toxicity based on data from similar products.

Aspiration hazard. Depression of the central nervous system can occur. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

**CHRONIC HAZARDS:** No information.

**PRIMARY ROUTES OF ENTRY:** Skin contact. Skin absorption. Inhalation. Ingestion. Eye contact.

**4. FIRST AID MEASURES**

**Ingestion:** If swallowed, do not induce vomiting. Call physician or poison control center immediately. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.

**Inhalation:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention.

**Skin Contact:** Wash with soap and large amounts of water. Remove contaminated clothing. Wash clothing before reuse. Get medical attention if irritation develops or persists.

**Eye Contact:** Flush with plenty of water for 15 minutes. Get medical attention. Holding eyelids open, flush eyes with running water for 5 minutes. Remove contact lenses if wearing and flush open eyes with running water for at least 15 minutes.

**5. FIRE FIGHTING MEASURES**

Flash Point (SETAFLASH CLOSED CUP): 53 °F  
 Lower Explosive Limit: 1.4%  
 Upper Explosive Limit: 12.0%  
 Autoignition Temperature: ND  
 Extinguishing Media: Alcohol foam, CO2, dry chemical, foam, water, fog

UNUSUAL FIRE OR EXPLOSION HAZARDS: Vapors may form explosive mixture with air. Flammable liquid. Can release vapors that form explosive mixtures at temperatures at or above the flashpoint. "Empty" containers retain product residue (liquid and/or vapor) and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY OR OTHER SOURCES OF IGNITION – THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.

SPECIAL FIREFIGHTING PROCEDURES: Containers can build up pressure if exposed to heat (fire). As in any fire, wear self-contained breathing apparatus pressure-demand (MSHA/NIOSH approved or equivalent) and full protective gear. Water runoff can cause environmental damage. Dike and collect water used to fight fire. Keep containers and surroundings cool with water spray. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

**6. ACCIDENTAL RELEASE MEASURES**

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Use recommended personal protective equipment. Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container. Avoid runoff into storm sewers and ditches which lead to waterways. Wear a self-contained breathing apparatus and appropriate personal protective equipment. (See Exposure Controls/Personal Protection Section) Do not flush into surface water or sanitary sewer system.

**7. HANDLING AND STORAGE**

Handling: Ensure all equipment is electrically grounded before beginning transfer operations. Use only in well-ventilated area.  
 Storage: Keep away from heat, sparks and flame. Keep container closed when not in use. KEEP OUT OF REACH OF CHILDREN.

**8. EXPOSURE CONTROLS, PERSONAL PROTECTION**

Eye/Face Protection: Wear safety glasses or goggles with side shields.  
 Skin Protection: Impervious gloves should be used. Wear impervious protective clothing, including boots, gloves, protective apron or coveralls to prevent skin contact. The glove(s) listed below may provide protection against permeation. Gloves of other chemically resistant materials may not provide adequate protection. Nitrile gloves are recommended. Butyl gloves recommended. Viton gloves.  
 Respiratory Protection: A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.  
 Engineering Controls: Local exhaust ventilation may be necessary to control any air contaminants to within their TLV's during the use of this product. Use explosion-proof ventilation equipment.  
 Other Protective Equip: Standard industrial clothing standards should be followed.  
 Hygienic Practices: Wash hands before eating. Use only in a well-ventilated area. Follow all MSDS/label precautions even after container is emptied because they may retain product residues. Ground and bond containers when transferring material. Use spark-proof tools and explosion proof equipment. Avoid prolonged or repeated contact with skin. Avoid contact with eyes, skin and clothing.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

Boiling Range:	180– 248 °F	Vapor Density:	Is heavier than air
Odor:	Alcohol	Odor Threshold:	ND
Appearance:	Gray	Evaporation Rate:	Is faster than Butyl Acetate
Solubility in H2O:	Negligible	Specific Gravity:	0.8151
Freeze Point:	ND	pH @ 0.0%:	NA
Vapor Pressure:	ND	Viscosity:	ND
Physical State:	Liquid		
Coefficient of Water/Oil Distribution:	ND		
Volatile Organic Compounds (VOCS):	6.45 lbs/gal		773 grams/ltr

# MATERIAL SAFETY DATA SHEET

Product #1450

VOC, % (wt): 95.00%

See Section 16 for abbreviation legend.

## 10. STABILITY AND REACTIVITY

Conditions To Avoid: Avoid open flames and high temperatures. Avoid elevated temperatures which can cause product to decompose. Avoid contact with strong oxidizing agents.

Stability: Stable under normal storage conditions.

Hazardous Polymerization: Will not occur under normal conditions.

Hazardous Decomposition Products: Oxides of carbon, Aldehydes, Hydrocarbons. Carbon Monoxide, Carbon Dioxide, smoke, fumes.

Incompatibility: Strong oxidizers. Strong mineral acids and strong oxidizing agents. Halogens. Strong bases.

## 11. TOXICOLOGICAL INFORMATION

Product LD50: 790 mg/kg                      Product LC50: >7500 ppm

Component Toxicological Information:

<u>Chemical Name:</u>	<u>LD50</u>	<u>LC50</u>
Isopropyl Alcohol	5045 MG/KG/RAT	72600 MG/M3/RAT
Graphite	No Info	No Info
N-butyl Alcohol	790 MG/KG/RAT	24000 MG/M3/4H/RAT
1-Methoxy-2-Propanol	7200 MG/KG/RAT	>7500 PPM/6H/RAT

## 12. ECOLOGICAL INFORMATION

This material is expected to be readily biodegradable. Low toxicity to aquatic organisms such as bacteria, algae, protzoa and fish.

## 13. DISPOSAL CONSIDERATIONS

Recommended Methods Of Disposal: Dispose of according to Federal, State and Local regulations.

## 14. TRANSPORTATION INFORMATION

U.S. Dept. of Transportation Ground (49 CFR):

Proper Shipping Name: Isopropanol Solution

Hazard Class or Division: 3

DOT UN/NA Number: UN1219

Packaging Group: II

IMDG Shipping Information: Isopropanol Solution

IMDG Hazard Class: 3

Packing Group: II

IMDG Shipping Information: UN1219

Flash Point, C: 11.7

IMDG Special Instructions:

Marine Pollutant: No

IATA Shipping Information: Package size not allowed.

IATA Proper Shipping Name: Forbidden.

## 15. REGULATORY INFORMATION

U.S. Federal Regulations:

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200)

CERCLA – SARA HAZARD CATEGORY: This product has been reviewed according to the EPA “Hazard Categories” promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories: IMMEDIATE HEALTH HAZARD, CHRONIC HEALTH HAZARD, FIRE HAZARD

# MATERIAL SAFETY DATA SHEET

**Product #1450**

SARA SECTION 313: this product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

<u>Chemical</u>	<u>CAS #</u>	<u>Wt/Wt % Is Less Than:</u>
N-Butyl Alcohol	71-36-3	1-10

TOXIC SUBSTANCES CONTROL ACT: This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

<u>Chemical</u>	<u>CAS #</u>	<u>Wt/Wt % Is Less Than:</u>
No information is available		

U.S State Regulations:

NEW JERSEY RIGHT TO KNOW: No non-hazardous materials among the top five ingredients.

PENNSYLVANIA RIGHT TO KNOW: No non-hazardous ingredients are present in at greater than 3%.

CALIFORNIA PROPOSITION 65: No Proposition Chemicals exist in this product,

International Regulations:

Canadian WHMIS: This MSDS has been prepared in compliance with Controlled Product Regulations except for the use of the 16 headings.

Canadian WHMIS Class: No information available.

## 16. OTHER INFORMATION

HMIS RATINGS: Health: 2 Flammability: 3 Reactivity: 0

Legend: N.A. - Not Applicable N.E. - Not Established N.D. - Not Determined

Prepared by: Technical Manager

DISCLAIMER: Some of the information presented is from sources other than direct test data on the product itself. The information in this MSDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, expressed or implied, regarding its correctness. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS may not be applicable.

**END OF MSDS**