MATERIAL SAFETY DATA SHEET

Date Issued: 08/31/2012 **MSDS No:** IsoKote 531

IsoKote 531 (Synlube 531)

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: IsoKote 531 (Synlube 531)

MANUFACTURER

24 HR. EMERGENCY TELEPHONE NUMBERS CHEMTREC: 800-424-9300

Isotec® International, Inc. 201 Longview St. Canton, GA 30114 Service Number: 800-234-6300

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

PHYSICAL APPEARANCE: Beige to translucent colored liquid with an aromatic odor.

IMMEDIATE CONCERNS: DANGER! Extremely flammable liquid and vapor. Vapor may cause flash fire. Harmful if swallowed or inhaled. Causes irritation to skin, eyes and respiratory tract. Affects central nervous system.

POTENTIAL HEALTH EFFECTS

EYES: Liquids, vapors, or mists are irritating to the eyes and can cause stinging, burning, lachrymation, or tearing.

SKIN: Irritating due to defatting action on skin. Can cause redness, pain, drying and cracking of the skin.

SKIN ABSORPTION: Skin absorption hazard.

INGESTION: Harmful if swallowed. Aspiration hazard. Can cause effects similar to those for inhalation exposure.

INHALATION: Can cause respiratory tract irritation. Inhalation at high concentrations can affect central nervous system. (loss of coordination, weakness, fatigue, mental confusion and blurred vision)

ROUTES OF ENTRY: Inhalation, skin contact, skin absorption, eye contact, ingestion.

WARNING CAUTION LABELS: Flammable liquid. Keep away from ignition sources.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS	EINECS
Toluene	75 - 80	108-88-3	203-625-9
Xylene	4 - 8	1330-20-7	215-535-7
Non-hazardous release blend	4 - 8	Mixture	Mixture
Solvent naphtha (petroleum) light aromatic	3 - 6	64742-95-6	
Acetone	3 - 6	67-64-1	200-662-2

4. FIRST AID MEASURES

EYES: Immediately flush eyes with plenty of water for at least 15 minutes, lifting upper and lower eyelids occasionally. Seek immediate medical attention.

SKIN: Remove contaminated clothing. Wash affected areas thoroughly with soap and water. Wash clothing thoroughly before reuse. For severe exposure, seek medical attention immediately. For lesser exposure, seek medical attention if swelling or redness occurs, or if irritation persists after being washed.



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INGESTION: Do not induce vomiting. If the individual is conscious, rinse mouth with water and give 1 to 2 cups of water to drink. Never give anything by mouth to an unconscious person. Seek immediate medical attention.

INHALATION: Remove individual from exposure, keep warm and at rest. If breathing is labored, oxygen should be administered by qualified personnel. Apply artificial respiration if breathing has ceased or shows signs of failing. Obtain immediate medical attention.

5. FIRE FIGHTING MEASURES

FLASH POINT AND METHOD: (45°F) Closed Cup

FLAMMABLE LIMITS: 1.1 (Toluene) to 12.8 (Acetone)

AUTOIGNITION TEMPERATURE: Not Determined

GENERAL HAZARD: May be ignited by heat, sparks, and flame. Vapors are heavier than air and may travel to a source of ignition and flash back. Vapors can spread along the ground and collect in low or confined areas.

EXTINGUISHING MEDIA: For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam. For large fires, use water spray, fog, or alcohol-resistant foam. Use water spray to cool fire-exposed containers. Water may be ineffective. Do NOT use straight streams of water. Cool containers with flooding quantities of water until well after fire is out.

EXPLOSION HAZARDS: Containers can build up pressure if exposed to heat and/or fire.

FIRE FIGHTING EQUIPMENT: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.

SENSITIVE TO STATIC DISCHARGE: Material can accumulate static charges which can cause an incendiary electrical discharge.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Eliminate all ignition sources. Wear appropriate personal protective equipment. (See Section 8) Absorb with dry chemical absorbent, earth, sand, or any other inert material. Do not use combustible materials such as sawdust. Place in a chemical waste container. Move to outside well-ventilated area away from ignition sources.

LARGE SPILL: Eliminate all ignition sources. Evacuate and ventilate the area. Create a dike or trench to contain materials. Prevent entry into waterways, sewers, basements or confined areas. Clean-up personnel should wear appropriate personal protection equipment. (See Section 8) A vapor suppressing foam may be used to reduce vapors. Water spray may reduce vapor but may not prevent ignition in closed spaces. Absorb with dry chemical absorbent, earth, sand, or any other inert material. Do not use combustible material such as sawdust. Place in a chemical waste container. Move to outside well-ventilated area away from ignition sources. Clean up residual material by washing area with a 2-5% solution of soda ash.

7. HANDLING AND STORAGE

GENERAL PROCEDURES: Precautions: Containers, even those that have been emptied, can contain flammable vapors. Do not cut, drill, grind, weld or perform similar operations on or near containers. Vapors may accumulate and travel to ignition sources distant from the handling site and flash-fire can result.

HANDLING: Wear proper personal protective equipment. Use in a well ventilated area. Avoid smoking, bare lights, or ignition sources. Avoid physical damage to containers. Practice good hygeine procedures.

STORAGE: Containers can rupture if exposed to high heat conditions. Keep containers sealed in order to avoid contamination. Do not reseal if contaminated. Store indoors in a cool, well-ventilated area.

ELECTROSTATIC ACCUMULATION HAZARD: Material can accumulate static charges which may cause an electrical spark. Use proper bonding and/or grounding procedures.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION



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EXPOSURE GUIDELINES

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)							
		EXPOSURE LIMITS					
		OSHA PEL		ACGIH TLV		Supplier OEL	
Chemical Name		ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³
Toluene	TWA	200	300	50** [1]	188** [1]		
Xylene	TWA	100	435	100	435		
	STEL			150			
Solvent naphtha (petroleum) light aromatic	TWA	NE ^[2]	NE ^[2]	NE	NE	100	
Acetone	TWA	1000	2400	500	1188		
	STEL			750	1782		

Footnotes:

1. ** = Skin

2. NE = Not Established

ENGINE ERING CONTROLS: Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Wear safety glasses with side shields (or goggles) and a face shield.

SKIN: Wear impervious gloves and covering for exposed skin.

RESPIRATORY: If the exposure limit is exceeded and engineering controls are not feasible, a half-face organic vapor respirator may be worn for up to 10 times the exposure limit, or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. A full-face piece organic vapor respirator may be worn up to 50 times the exposure limit, or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. All respirators used should follow the OSHA Respiratory Standard 29 CFR 1910.134.

WORK HYGIENIC PRACTICES: Follow good normal hygiene practices. A void contact with skin. Avoid eating, drinking, or smoking while using this product. Wash hands thoroughly after use.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid

ODOR: Strong solvent odor

COLOR: Beige to translucent

VAPOR PRESSURE: 231 mmHg at (77°F)

Notes: (Acetone)

VAPOR DENSITY: > 1

BOILING POINT: $(120^{\circ}F)$ to $(180^{\circ}F)$

FREEZING POINT: Not Established

FLASH POINT AND METHOD: (45°F) Closed Cup

SOLUBILITY IN WATER: Insoluble

EVAPORATION RATE: Moderate

SPECIFIC GRAVITY: 0.850



10. STABILITY AND REACTIVITY

STABILITY: Stable under recommended storage conditions.

POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: High temperatures, ignition sources, temperatures above 220°C (428 °F).

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon Monoxide, Carbon Dioxide, Nitrous Oxide, Chlorine and chlorine compounds, smoke and incompletely burned hydrocarbons.

INCOMPATIBLE MATERIALS: Acids, oxidizing agents.

11. TOXICOLOGICAL INFORMATION

ACUTE

Chemical Name	ORAL LD ₅₀ (rat)	DERMAL LD ₅₀ (rabbit)	INHALATION LC ₅₀ (rat)
Toluene	636 mg/kg	14100 mg/kg	49000 mg/m ³ /4h
Xylene	4300 mg/kg	>4350 mg/kg	5000 ppm/4h
Solvent naphtha (petroleum) light aromatic	4700 mg/kg	> 4000 mL/kg (rat)	> 3600 ppm/8h
Acetone	5800 mg/kg	20000 mg/kg	50100 mg/m ³ /8h

EYE EFFECTS: Moderate eye irritant.

SKIN EFFECTS: Moderate skin irritant.

CARCINOGENICITY

IARC: Not classified as a carcinogen.

NTP: Not classified as a carcinogen.

OSHA: Not classified as a carcinogen.

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION:

 $\label{eq:constraint} \begin{array}{l} \underline{\text{Toluene:}} \\ \underline{\text{EC}}_{50} \left(\text{Daphnia magna} \right) 6.56 \text{ mg/L} \left(48 \text{ hours} \right) \\ LC_{50} \left(\text{Bluegill} \right) 17 \text{ mg/L} \left(24 \text{ hours} \right) \\ LC_{50} \left(\text{Fathead minnow} \right) 36.2 \text{ mg/L} \left(96 \text{ hours} \right) \\ LC_{50} \left(\text{Shrimp} \right) 4.3 \text{ ppm} \left(96 \text{ hours} \right) \\ \text{TLm} \left(\text{Sunfish, fresh water} \right) 1180 \text{ mg/L} \left(96 \text{ hours} \right) \end{array}$

GENERAL COMMENTS: No testing for product as a whole.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Disposal should be in accordance with local, state, provincial or national regulations.

EMPTY CONTAINER: Empty containers retain product residue and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind or expose such containers to heat, flame, sparks, static electricity or any other source of ignition.

RCRA/EPA WASTE INFORMATION: If discarded in its purchased form, this material is a hazardous waste under RCRA (40 CFR 261).

GENERAL COMMENTS: The generation of waste should be avoided or minimized whenever possible. Chemical waste, even small quantities, should never be poured down drains, sewers or waterways.



14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Flammable Liquids, N.O.S.

TECHNICAL NAME: Toluene, Acetone

PRIMARY HAZARD CLASS/DIVISION: 3

UN/NA NUMBER: UN1993

PACKING GROUP: II

REPORTABLE QUANTITY (RQ) UNDER CERCLA: 1250 lbs

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HAZARD CATEGORIES: Immediate health hazard. Delayed health hazard. Fire hazard.

EPCRA SECTION 313 SUPPLIER NOTIFICATION

Chemical Name	Wt.%	CAS
Toluene	75 - 80	108-88-3
Xylene	4 - 8	1330-20-7

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

Chemical Name	Wt.%	CERCLA RQ
Toluene	75 - 80	1000 lbs
Xylene	4 - 8	100 lbs
Acetone	3 - 6	5000 lbs

REPORTABLE SPILL QUANTITY: 1250 lbs

TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA REGULATORY: All components are on TSCA inventory.

RCRA STATUS: This product is a hazardous waste if discarded in its purchased form. Under RCRA, it is the responsibility of the product user to determine at the time of disposal whether a material containing the product or derived from the product should be classified as a hazardous waste.

OSHA HAZARD COMM. RULE: This product is classified as a hazardous material under the criteria outlined in the OSHA Hazard Communication Standard 29 CFR 1910.1200.

NATIONAL RESPONSE CENTER: Any spill or release above the RQ must be reported to the National Response Center (800-424-8802).

16. OTHER INFORMATION

PREPARED BY: L. Priest





NFPA STORAGE CLASSIFICATION: Rating system: 0 = low hazard to 4 = high hazard

HMIS RATINGS NOTES:

If present, the asterisk signifies a chronic health hazard. Rating system: 0 = 1 ow hazard to 4 = 1 high hazard

COMMENTS:

Key Legend Information:ACGIH - American Conference of Governmental Industrial HygienistsEPA - Environmental Protection AgencyIARC - International Agency for Research on CancerNTP - National Toxicology ProgramOEL - Occupational Exposure LimitOSHA - Occupational Safety and Health AdministrationPEL - Permissible Exposure LimitSTEL - Short Term Exposure LimitTLV - Threshold Limit ValueTWA - Time Weighted Average

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