



ZEP Manufacturing Company
 Acuity Specialty Products Group, Inc.
 P.O. Box 2015
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 1-877-I-BUY-ZEP (428-9937)
 www.zep.com

Material Safety Data Sheet and Safe Handling and Disposal Information

Section 1. Chemical Product and Company Identification

Product name ZEP 2000
Product Use Aerosol Penetrating Grease
Product Code 4164
Date of issue 12/30/04 **Supersedes** 02/18/04

Emergency Telephone Numbers For MSDS Information:
 Acuity Specialty Products Group, Inc.
 Compliance Services 1-877-I-BUY-ZEP

For Medical Emergency:
 INFOTRAC
 (877) 541-2016 Toll Free - All Calls Recorded

For a Transportation Emergency:
 CHEMTREC
 (800) 424-9300 - All Calls Recorded
 In the District of Columbia (202) 483-7616

Printing date: 12/30/04

Prepared by Compliance Services Group
 Acuity Specialty Products Group
 1420 Seaboard Industrial Blvd.
 Atlanta, GA 30318

Section 2. Composition, Information on Ingredients

Name of Hazardous Ingredients	CAS #	% by Weight	Exposure Limits
HEPTANE; n-heptane	142-82-5	20 - 30	ACGIH/OSHA (United States). TWA: 400 ppm 8 hour(s).
BLEND OF ISOBUTANE & PROPANE	74-98-6; 75-28-5	20 - 30	ACGIH/OSHA (United States). STEL: 500 ppm 15 minute(s). ACGIH TLV (United States). TWA: 800 ppm 8 hour(s). OSHA PEL (United States). TWA: 1000 ppm 8 hour(s).
HYDROTREATED LIGHT PETROLEUM DISTILLATES; paraffinic, naphthenic solvent	64742-47-8	<10	Supplier Suggested (United States). TWA: 100 ppm 8 hour(s).

Section 3. Hazards Identification

Acute Effects **Routes of Entry** Absorbed through skin. Inhalation.

Skin Hazardous in case of skin contact (irritant, permeator). Skin inflammation is characterized by itching, scaling, or reddening. Product may be dermal absorbed. Defatting properties, may aggravate an existing dermatitis.

Eyes Hazardous in case of eye contact (irritant). Inflammation of the eye is characterized by redness, watering, and itching.

Inhalation Hazardous in case of inhalation (lung irritant). Avoid breathing vapors or spray mists. Over-exposure by inhalation may cause respiratory irritation. Can cause central nervous system depression. Symptoms and signs include headaches, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Ingestion Harmful if swallowed. Aspiration hazard if swallowed- can enter lungs and cause damage. Vomiting increases risk of chemical pneumonia.

HMIS

Health	1
Fire Hazard	4
Reactivity	0
Personal Protection	B

NOTE: MSDS data pertains to the product as delivered in the original shipping container(s). Risk of adverse health effects are lessened by following all prescribed safety precautions, including use of proper personal protective equipment.

Carcinogenic Effects Ingredients: Not listed as carcinogen by OSHA, NTP or IARC.

Chronic Effects Prolonged or repeated contact may dry skin and cause irritation. Over-exposure by inhalation or absorption can cause central nervous system depression.
 See Toxicological Information (section 11)

Section 4. First Aid Measures

Eye Contact	Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.
Skin Contact	Wash affected area with soap or mild detergent and water. Remove contaminated clothing and shoes. Wash clothing before reuse. If irritation persists, get medical attention.
Inhalation	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Ingestion	Aspiration hazard if swallowed- can enter lungs and cause damage. Never give anything by mouth to an unconscious person. Do NOT induce vomiting unless directed to do so by medical personnel. Get medical attention immediately.

Section 5. Fire Fighting Measures

Flash Point	Closed cup: <-18°C (<0°F) Tagliabue.	Flammable Limits LOWER: 1.2% UPPER: 6.7%	
Flammability	Extremely flammable. (CSMA) Aerosol that may flashback.		
Fire Hazard	Vapor may cause fire. Vapors may accumulate in low or confined areas, travel considerable distance to source of ignition and flash back. Container explosion may occur under fire conditions or when heated.		
Fire-Fighting Procedures	Dry chemical, carbon dioxide, foam, water fog. Wear special protective clothing and positive pressure, self-contained breathing apparatus. Cool containing vessels with water jet in order to prevent pressure build-up, autoignition or explosion.		

Section 6. Accidental Release Measures

Spill Clean up	Large spills are unlikely due to packaging.
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Section 7. Handling and Storage

Handling	Extremely flammable liquid and vapor. Keep away from heat, sparks and flame. Use only with adequate ventilation. Avoid breathing vapors or spray mists. Avoid contact with eyes, skin and clothing. Wash contaminated clothing before reusing. Wash thoroughly after handling.
Storage	CONTENTS UNDER PRESSURE. Store and use away from heat, sparks, open flame, or any other ignition source. Keep away from heat and direct sunlight. Keep container in a cool, well-ventilated area. Do not store above 49°C (120.2°F). Do not puncture or incinerate. Keep out of the reach of children.

Section 8. Exposure Controls, Personal Protection

	Personal Protection	Protective Clothing (Pictograms)
Eyes	Safety glasses.	
Body	Neoprene gloves. Nitrile gloves. Rubber gloves.	
Respiratory	Use with adequate ventilation. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Wear appropriate respirator when ventilation is inadequate. Approved/certified respirator with organic vapor cartridges.	

Section 9. Physical and Chemical Properties

Physical State	Liquid. (Aerosol.)	Color	Amber.
pH	Not applicable.	Odor	Solvent-like.
Boiling Point	Not determined.	Vapor Pressure	Not determined.
Specific Gravity	0.75 (Water = 1)	Vapor Density	Not determined.
Solubility	Insoluble in cold water, hot water.	Evaporation Rate	>1 compared to Butyl acetate.
		VOC (Consumer)	50.0% 3.12 (lb/gal) 374 (g/l)

Section 10. Stability and Reactivity

Stability and Reactivity	The product is stable.
Incompatibility	Avoid contact with strong oxidizers, excessive heat, sparks or open flame.
Hazardous Polymerization	Will not occur.
Hazardous Decomposition Products	carbon oxides (CO, CO ₂) and sulfur oxides (SO ₂ , SO ₃ ...)

Section 11. Toxicological Information

Toxicity to Animals	Hydrotreated Light Petroleum Distillates :
	ORAL (LD50): Acute: >5000 mg/kg [Rat].
	DERMAL (LD50): Acute: >2000 mg/kg [Rabbit].

Section 12. Ecological Information**Ecotoxicity** Not available.**Biodegradable/OECD** Not available.**Section 13. Disposal Considerations**

Waste Information Waste must be disposed of in accordance with federal, state and local environmental control regulations. **Waste Stream** Code: D001
Classification: - (Hazardous waste.)
Origin: - (RCRA waste.)

Consult your local or regional authorities.

Section 14. Transport Information**Proper shipping name** Consumer Commodity**DOT Classification** ORM-D**UN number** Not available.

NOTE: DOT classification applies to most package sizes. For specific container size classifications or for size exceptions, refer to the Bill of Lading with your shipment.

Section 15. Regulatory Information**U.S. Federal Regulations** SARA 313 toxic chemical notification and release reporting:

No products were found.

Clean Water Act (CWA) 311: No products were found.

Clean air act (CAA) 112 regulated toxic substances: No products were found.

All Components of this product are listed or exempt from listing on TSCA inventory.

Section 16. Other Information

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.