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# Material Safety Data Sheet

## Section 1. Chemical Product and Company Identification

**Product name** ZEP DRY GRAPHITE

**Product use** Aerosol Lubricant

**Product code** 0164

**Date of issue** 06/17/14 **Supersedes** 05/2/11

### Emergency Telephone Numbers

**For MSDS Information:**
Technical Services Group
Telephone (780) 453-8100
(Business Hours 8:00am - 5:00pm)

**For Medical or Transportation Emergency**
CANUTEC (24 Hours)
(613) 996-6666 - Call Collect

**Prepared By**
Technical Services Group
11627 178th Street
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## Section 2. Hazards Identification

### Emergency overview

WARNING

CAUSES EYE AND SKIN IRRITATION. VAPOR HARMFUL.
HARMFUL IF SWALLOWED.

CONTENTS UNDER PRESSURE.

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

**Acute Effects** **Routes of Entry** Dermal contact. Inhalation. Eye contact

**Eyes** Causes eye irritation. Liquid in eye may cause irritation with possible damage if not rinsed immediately. Inflammation of the eye is characterized by redness, watering and itching.

**Skin** Causes skin irritation. Product may be dermal absorbed. Skin inflammation is characterized by itching, scaling, or reddening.

**Inhalation** Avoid breathing vapors, spray or mists. Harmful by inhalation. Inhalation causes headaches, dizziness, drowsiness and nausea and may lead to unconsciousness. Inhalation of the spray or mist may produce severe irritation of respiratory tract, characterized by coughing, choking or shortness of breath.

**Ingestion** Harmful if swallowed. Aspiration hazard if swallowed. Can enter lungs and cause damage.

**Chronic effects** Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis. Contains material which may cause damage to the following organs: kidneys, liver, peripheral nervous system, central nervous system (CNS).

**Additional Information: See Toxicological Information (Section 11)**

## Section 3. Composition/Information on Ingredients

| Name of Hazardous Ingredients | CAS number | % by Weight |
|---|---|---|
| TRICHLOROETHYLENE; acetylene trichloride; 1-chloro-2,2-dichloroethylene | 79-01-6 | 40 - 70 |
| BLEND OF ISOBUTANE & PROPANE | 74-98-6; 75-28-5 | 10 - 30 |
| BLEND OF GRAPHITE, ISOPROPANOL, N-BUTYL ALCOHOL, HEXYLENE GLYCOL, PROPYLENE GLYCOL METHYL ETHER | 7782-42-5; 67-63-0; 71-36-3; 107-41-5; 107-98-2 | 7 - 13 |

## Section 4. First Aid Measures

**Eye Contact** Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention immediately.

**Skin Contact** Flush affected skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Wash clothing before reuse. Get medical attention if irritation develops.

**Inhalation** Move exposed person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

**Ingestion** Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If affected person is conscious, give plenty of water to drink. Get medical attention immediately.

## *Section 5. Fire Fighting Measures*

**Flash Point** Not applicable.

**Flammable Limits** Not applicable.

**Flammability** Non-flammable. (CSMA)

**Auto-ignition Temperature**

**Fire-Fighting Procedures** Use an extinguishing agent suitable for the surrounding fire. Fire-fighters should wear appropriate protective equipment.

**Fire hazard** CONTENTS UNDER PRESSURE. In a fire or if heated, a pressure increase will occur and the container may burst. Thermal decomposition may release toxic and/or hazardous gases. Do not allow vapor to accumulate in low or confined areas. Bursting aerosol containers may be propelled from a fire at high speed.

**Products of Combustion** carbon oxides (CO, $CO_2$) hydrogen chloride carbonyl halides and Phosgene gas.

**Explosion hazard**

## *Section 6. Accidental Release Measures*

**Spill Clean up** Large spills are unlikely due to packaging.

## *Section 7. Handling and Storage*

**Handling** Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wash thoroughly after handling.

**Storage** CONTENTS UNDER PRESSURE. Do not puncture or incinerate container. Do not store above the following temperature: 49°C (120.2°F). Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep out of the reach of children.

## *Section 8. Exposure Controls/Personal Protection*

| Product name | Exposure limits |
|---|---|
| Trichloroethylene | **ACGIH TLV (United States).**<br>TWA: 10 ppm 8 hour(s).<br>STEL: 25 ppm 15 minute(s).<br>**OSHA PEL (United States).**<br>TWA: 50 ppm 8 hour(s).<br>STEL: 200 ppm 15 minute(s). |
| Blend of Propane and Isobutane | **ACGIH TLV (United States).**<br>TWA: 800 ppm 8 hour(s).<br>**OSHA PEL (United States).**<br>TWA: 1000 ppm 8 hour(s). |

### Personal Protective Equipment (PPE)

**Eyes** Safety glasses.

**Hands and Body** Wear appropriate protective clothing to prevent skin contact. Recommended: Viton gloves.

**Respiratory** Use with adequate ventilation. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits. Wear appropriate respirator when ventilation is inadequate.

## *Section 9. Physical and Chemical Properties*

**Physical State** Liquid. [Aerosol.]

**pH** Not applicable

**Boiling Point** 82.2 - 87.8°C (180 - 190 °F)

**Specific Gravity** 1.32

**Solubility** Insoluble in the following materials: cold water and hot water.

**Freezing Point**

**Color** Gray. [Dark]

**Odor** Solvent-like.

**Vapor Pressure** 8 kPa (60 mm Hg)

**Vapor Density** Not determined.

**Evaporation Rate** >1 (butyl acetate = 1)

**VOC (Consumer)** 1158.28 (g/l). (87.9%)

## Section 10. Stability and Reactivity

**Stability and Reactivity** The product is stable.

**Incompatibility** Reactive or incompatible with the following materials: oxidizing materials, metals and alkalis.

**Hazardous Polymerization** Will not occur.

**Hazardous Decomposition Products** Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological Information

**Carcinogenicity** Contains material which can cause cancer. Risk of cancer depends on duration and level of exposure. Trichloroethylene: Classified + Proven by OSHA, Classified 2A Probable for human. by IARC, Category 2 Reasonably anticipated to be human carcinogens. by NTP

**Acute Toxicity**

| Product/ingredient name | Result | Species | Dose | Exposure |
|---|---|---|---|---|
| Trichloroethylene | LD50 Dermal | Rabbit | 10000 mg/kg | - |
| | LD50 Oral | Mouse | 2402 mg/kg | - |
| | LD50 Oral | Rat | 4920 mg/kg | - |

## Section 12. Ecological Information

**Environmental Effects** No known significant effects or critical hazards.

**Aquatic Ecotoxicity**

Not available.

## Section 13. Disposal Considerations

**Waste Information**

Waste must be disposed of in accordance with applicable regulations. Consult your local or regional authorities for additional information.

**Waste Stream** Code: D040
Classification: - [Hazardous waste.]
Origin: - [RCRA waste.]

## Section 14. Transport Information

| Regulatory information | UN number | Proper shipping name | Classes | PG* | Label | Additional information |
|---|---|---|---|---|---|---|
| TDG Classification | 1950 | Aerosols, non-flammable | 2.2 | | | Explosive Limit and Limited Quantity Index 1 |
| IMDG Class | Not determined. | | | | | |

**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. Limited Quantity: Small quantities of controlled goods are not regulated as Dangerous Goods according to TDG regulations.**

PG* : Packing group

## Section 15. Regulatory Information

**Canada**

**WHMIS (Canada)** Class A: Compressed gas.
Class D-1B: Material causing immediate and serious toxic effects (Toxic).

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

## *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.*