SAFETY DATA SHEET



Date Prepared : 06/08/2015 SDS No : 0210 Date Revised : 01/04/2017 Revision No : 3

ZEROL® HD46

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: ZEROL® HD46 **PRODUCT DESCRIPTION:** Premium Performance R1234yf Mobile Air Conditioning Compressor Lubricant

MANUFACTURER

Shrieve Chemical Products 1755 Woodstead Ct The Woodlands, TX 77380 Emergency Contact: Audris King Emergency Phone: (800)424-9300 Customer Service: (800) 367-4226 24 HR. EMERGENCY TELEPHONE NUMBERS Poison Control Center (Medical) : (877) 800-5553 CHEMTREC (US Transportation) : (800) 424-9300

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATIONS

Health:

Eye Irritation, Category 2B Skin Irritation, Category 2 Skin Sensitization, Category 1

Environmental:

Acute Hazards to the Aquatic Environment, Category 3 Chronic Hazards to the Aquatic Environment, Category 3

GHS LABEL



SIGNAL WORD: WARNING

HAZARD STATEMENTS

H315: Causes skin irritation.

H320: Causes eye irritation.

H317: May cause an allergic skin reaction.

H412: Harmful to aquatic life with long lasting effects.

H402: Harmful to aquatic life.

PRECAUTIONARY STATEMENTS

Prevention:

P264: Wash skin thoroughly after handling.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P261: Avoid breathing dust/fume/gas/mist/vapours/spray.

P272: Contaminated work clothing should not be allowed out of the workplace.

Response:

P302+P352: IF ON SKIN: Wash with plenty of water.

P333+P313: If skin irritation or rash occurs: Get medical advice/attention.

P362+P364: Take off contaminated clothing and wash it before reuse.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313: If eye irritation persists: Get medical advice/attention.

P321: Specific treatment (see first aid measures on this label).

P363: Wash contaminated clothing before reuse.

Disposal:

P501: Dispose of contents/container to a licensed contractor in accordance with local, state and federal regulations.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt. %	CAS
Dimethoxypropoxylate base fluid	*	Proprietary
Additive Package	*	Proprietary

COMMENTS: Ingredients and composition are withheld as trade secret in accordance with 29CFR1910.1200(i).

4. FIRST AID MEASURES

EYES: Immediately flush with plenty of water. After initial flushing, remove any contact lenses if present and continue flushing for at least 15 minutes. Get immediate medical attention if irritation persists.

SKIN: Immediately rinse skin with plenty of water. If irritation occurs, remove affected clothing. Get medical attention if irritation persists. Wash affected clothing separately before reuse.

INGESTION: Rinse mouth with water. Seek medical attention if you feel unwell. Never give anything by mouth to an unconscious person.

INHALATION: Remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get immediate medical attention if symptoms persist.

5. FIRE FIGHTING MEASURES

FLAMMABLE CLASS: Non-flammable.

GENERAL HAZARD: Do NOT use water stream or water jet.

EXTINGUISHING MEDIA: Dry Chemical, CO2, Foam. Water Spray.

HAZARDOUS COMBUSTION PRODUCTS: Oxides of carbon, irritating aldehydes, toxic vapors/fumes.

OTHER CONSIDERATIONS: Keep adjacent containers cool with water spray.

EXPLOSION HAZARDS: This material is not explosive and does not pose an explosion hazard. However, in a fire or if heated to high temperatures, a pressure increase can occur and cause the container to burst.

FIRE FIGHTING EQUIPMENT: In case of fire, wear a full-face positive pressure self contained breathing apparatus and protective suit.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Contain and soak up spill with absorbent material. Place residues in a suitable, sealed and labeled container. Avoid runoff into storm sewers and ditches which lead to waterways.

LARGE SPILL: Shut off leak if safe to do so. Remove all sources of ignition. Contain spill with inert, non-combustible absorbent material. Reclam into recovery or salvage drums or vacuum truck for proper disposal. Avoid mixing spilled material with other chemicals or debris. Avoid contact with skin and eyes. Do not breathe vapors. Evacuate area of all non-essential personnel. Avoid runoff into storm sewers and ditches which lead to waterways.

ENVIRONMENTAL PRECAUTIONS

WATER SPILL: Prevent contamination of water.

GENERAL PROCEDURES: Do not touch or walk through spilled material. Avoid contact with skin and eyes. Do not breathe vapors. Evacuate area of all non-essential personnel. Use appropriate personal protective equipment.

SPECIAL PROTECTIVE EQUIPMENT: Use protective equipment recommended in Section 8.

7. HANDLING AND STORAGE

GENERAL PROCEDURES: Handle in accordance with good industrial hygiene and safety practices.

HANDLING: Use only in a well ventilated area. Avoid breathing (dust, vapor, mist, gas). Avoid contact with eyes, skin, and clothing. Keep away from heat and flame. Wash thoroughly after handling.

STORAGE: Keep container tightly closed in a dry, well-ventilated place away from heat, open flame, or sources of ignition. Store away from incompatible materials (see section 10).

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: Provide adequate ventilation. Eye washes and showers for emergency use.

PERSONAL PROTECTIVE EQUIPMENT

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

SKIN: Use protective clothing, sleeves, boots, face protection and chemical resistant gloves.

RESPIRATORY: Under normal conditions, respiratory equipment is not necessary. Wear suitible respiratory equipment if risk of insufficient ventilation or risk of breathing mists or vapors from heated materials.

PROTECTIVE CLOTHING: Wear protective clothing appropriate to the risk of exposure.

WORK HYGIENIC PRACTICES: Wash hands, forearms and face before eating, drinking, smoking and using the restroom. Launder contaminated clothing before re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid

APPEARANCE: Clear to slightly hazy liquid

PHYSICAL STATE COMMENTS: Clear, bright, viscous.

pH: Not Available

FLASH POINT AND METHOD: > 230°C COC-ASTM D-92

POUR POINT: < -25°C

SPECIFIC GRAVITY: 0.99 g/cc at 20°C

VISCOSITY #1: 46 cSt at 40°C

VISCOSITY #2: 9.7 cSt at 100°C

10. STABILITY AND REACTIVITY

HAZARDOUS POLYMERIZATION: Will not occur.

STABILITY: Stable under normal conditions.

CONDITIONS TO AVOID: Avoid contamination with foreign materials, oxidizing materials, excessive heat, sparks, or open flames. **HAZARDOUS DECOMPOSITION PRODUCTS:** Smoke, toxic fumes, oxides of carbon and aldehydes.

INCOMPATIBLE MATERIALS: Strong oxidizers, strong acids.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY

NOTES: This product consists of ingredients of unknown acute toxicity.

SKIN CORROSION/IRRITATION: May cause irritation.

SERIOUS EYE DAMAGE/IRRITATION: Contact may cause eye irritation.

RESPIRATORY OR SKIN SENSITISATION: May be sensitizing to skin.

GERM CELL MUTAGENICITY: Not Available

CARCINOGENICITY

NOTES: Not Available

REPRODUCTIVE TOXICITY: Not

Available **STOT-SINGLE EXPOSURE:**

Not Available

STOT-REPEATED EXPOSURE: Not Available

ASPIRATION HAZARD: Not classified as an aspiration hazard.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: This product should be regarded as harmful to aquatic organisms, with the potential to cause long term adverse effects in the aquatic environment.

BIOACCUMULATION/ACCUMULATION: Not expected to bio-accumulate.

DISTRIBUTION: Insoluble in water.

Notes: Not Available

CHEMICAL FATE INFORMATION: Expected to be partially or slowly biodegradable.

COMMENTS: Ecotoxicological data have not been determined specifically for this product. The information given below is based on knowledge of the components.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Dispose of contents/container to a licensed contractor or facility in accordance with local, state and federal regulations.

PRODUCT DISPOSAL: Do not put product, spilled products or filled or partially filled containers into the trash or waste compactor. Do not allow product to reach sewage system.

EMPTY CONTAINER: Clean container thoroughly and dispose to licensed disposal contractor. Do not weld, cut, or braze empty containers, or allow product residue to come in contact with other sources of ignition as they may contain residue which could ignite.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Not regulated for transport

AIR (ICAO/IATA)

SHIPPING NAME: Not regulated for transport

VESSEL (IMO/IMDG)

SHIPPING NAME: Not regulated for transport

CANADA TRANSPORT OF DANGEROUS GOODS

SHIPPING NAME: Not regulated for transport

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

313 REPORTABLE INGREDIENTS: No ingredients at detectable levels.

TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA STATUS: All components listed or exempt.

CANADA

DOMESTIC SUBSTANCE LIST (INVENTORY): All components are listed or exempt.

16. OTHER INFORMATION

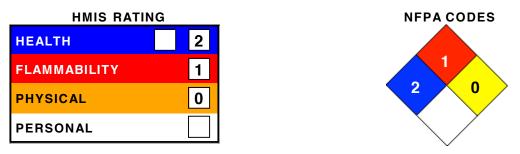
REASON FOR ISSUE: Updated composition and hazards.

APPROVED BY: Audris King TITLE: HS&E Manager

PREPARED BY: Shane Phelps **Date Revised:**

01/04/2017

REVISION SUMMARY: This SDS replaces the 12/20/2016 SDS. Revised: **Section 1:** 24 HR. EMERGENCY TELEPHONE NUMBERS, PREPARED BY, REASON FOR ISSUE.



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