



SAFETY DATA SHEET

SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: #890 Vari-Purpose Gear Lubricant (SAE 75, 80W/90, 90, 85W/140, 140)
PRODUCT IDENTIFIER CODE(S): 108442, 108443, 108445, 108446, 108447
PRODUCT RECOMMENDED/INTENDED USE: Lubricant
MANUFACTURER/SUPPLIER: Texas Refinery Corp.
ADDRESS: 500 Airport Drive, Mansfield, TX 76063
GENERAL INFORMATION: 817-332-1161
24 HR. EMERGENCY PHONE NUMBER: CHEMTREC 1-800-424-9300

SECTION 2 HAZARDS IDENTIFICATION

This material is not considered to be hazardous according to regulatory guidelines.

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS Number	Weight %
Petroleum Process Oil*	*	90-95
Olefin sulfide	Confidential	3.0-5.0
Phosphoric acid esters/amine salt	Confidential	0.1-2.0
Alkenyl amine	Confidential	0.1-1.0
Substituted thiadiazole	Confidential	0.1-1.0
Other non-hazardous components	N/A	0.1-1.0

* The petroleum process oil contained in this material may be described by one or more of the following CAS Nos.: 64742-54-7 (Hydrotreated heavy paraffinic distillates), 64742-52-5 (Petroleum process oil, <3.0% DMSO extractable material), or Materials defined as complex substance(s) (petroleum)

SECTION 4 FIRST AID MEASURES

PRINCIPAL ROUTES OF EXPOSURE: Eyes and Skin

EFFECTS OF EXPOSURE (ACUTE AND CHRONIC): Excessive exposure may result in mild eye, skin or respiratory irritation.

IF IN EYES: Flush eyes with water for at least 15 minutes or until irritation subsides.

IF SKIN IRRITATION OCCURS: Remove contaminated clothing. Wash skin thoroughly with soap and water. If persistent irritation occurs, obtain medical attention. Wash contaminated clothing before reuse.

IF SWALLOWED: DO NOT induce vomiting. Get immediate medical attention.

IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: None known.

NOTES TO PHYSICIAN: None.

SECTION 5 FIRE FIGHTING MEASURES

NFPA RATINGS: HEALTH: 0 FLAMMABILITY: 1 REACTIVITY: 0

SUITABLE EXTINGUISHING MEDIA: Use carbon dioxide, dry chemical or foam for extinction.

UNSUITABLE EXTINGUISHING MEDIA: Do not use water in a jet.

FIRE FIGHTING PROCEDURES: Use extinguishing methods that are appropriate to local circumstances and the surrounding environment.

PROTECTION OF FIRE FIGHTERS: Proper protective equipment including chemical resistant gloves are to be worn; chemical resistant suit is indicated if large contact with spilled material is expected. Self-contained breathing apparatus

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(SCBA) must be worn when approaching a fire in a confined space. Select firefighters clothing approved to relevant standards.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Do NOT store or mix with strong oxidants.

COMBUSTION PRODUCTS: Carbon monoxide, carbon dioxide, smoke, fumes and unidentified organic and inorganic compounds may be evolved from combustion and/or thermal decomposition.

SECTION 6 ACCIDENTAL RELEASE MEASURES

PERSONAL PROTECTION: Wear appropriate personal protective equipment when cleaning up spills (See Section 8). Keep unnecessary people away; isolate hazard area and deny entry.

PROCEDURES: Shut off source of leak if safe to do so. No flares, smoking or flames in hazard area. Shut off sources of ignition. Small spills: Take up with appropriate non-combustible absorbent material and place into appropriate container(s) for waste disposal. Large spills: Dike far ahead of liquid spill and contain spill to prevent it entering sewers and water courses. Recover free liquid; spread absorbent in spill area; pick up and place in containers, and dispose of in accordance with Federal, State and/or Local regulations. Do not flush to sewer or waterways. Prevent release into the environment if possible. Refer to section 15 for spill/release reporting information.

SECTION 7 HANDLING AND STORAGE

Avoid contact with eyes and prolonged or repeated contact with skin. Avoid breathing mist. Exercise ordinary care and observe good personal hygiene practices when handling this material. Keep container tightly closed in a cool, well-ventilated place. Use properly labeled and closable containers. Store away from strong oxidizers and at temperatures not exceeding 120 °F (49°C). This material has the potential to be a static accumulator.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Use only in a well-ventilated area.

PERSONAL PROTECTIVE EQUIPMENT: Wear personal protective equipment as follows:

EYE/FACE PROTECTION: Safety Glasses with side shields or goggles if splashing could occur.

SKIN PROTECTION: Use chemical-resistant gloves to avoid prolonged or repeated skin contact.

RESPIRATORY PROTECTION: Not required under normal conditions of use. If exposure limits are exceeded, NIOSH approved respiratory protection should be worn for mist.

OCCUPATIONAL EXPOSURE LIMITS:

Component	PEL	TLV
Hydrotreated heavy paraffinic distillates (petroleum)	5 mg/m ³	5 mg/m ³
Petroleum process oil, <3.0% DMSO extractable material	5 mg/m ³	5 mg/m ³
Materials defined as complex substance(s) (petroleum)	5 mg/m ³	5 mg/m ³

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE (Color and physical state): Red liquid

ODOR: Sulfur odor

ODOR THRESHOLD: Not determined

pH: Not Applicable

MELTING POINT/FREEZING POINT: Not determined

BOILING POINT (°F/C): >450/232

FLASH POINT (°F/C): >350/177 (COC)

AUTOIGNITION TEMPERATURE: Not determined

DECOMPOSITION TEMPERATURE: Not determined

EVAPORATION RATE (n-Butyl Acetate =1): < 1.0

UPPER/LOWER FLAMMABILITY OR EXPLOSIVE LIMITS: Lel: 0.9% Uel: 7.0%

VAPOR PRESSURE (mm Hg): < 1.0 @ 100°F (38°C)

VAPOR DENSITY (Air=1): > 1.0

SOLUBILITY (ies) in water: Negligible

SPECIFIC GRAVITY (H₂O=1): 0.887-0.8956

PARTITION COEFFICIENT (n-octanol/water): Not determined

PERCENT VOLATILE BY VOLUME: Negligible

SECTION 10**STABILITY AND REACTIVITY**

CHEMICAL STABILITY: This material is considered to be stable under specified conditions of use, shipment and storage.

INCOMPATIBILITY WITH OTHER MATERIALS: Strong oxidizing agents.

CONDITIONS TO AVOID: Extremes of temperature and direct sunlight.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide, smoke, fumes and unidentified organic and inorganic compounds may be evolved from combustion and/or thermal decomposition.

HAZARDOUS REACTION/ POLYMERIZATION: Hazardous reaction/polymerization will not occur.

SECTION 11**TOXICOLOGICAL INFORMATION**

ACUTE TOXICITY VALUES: There is no data available for this product as a whole.

Hydrotreated heavy paraffinic distillates (petroleum):

Oral LD₅₀ (Rat) = > 5000 mg/kg

Dermal LD₅₀ (Rabbit) = > 5000 mg/kg

Inhalation LC₅₀ (Rat) = > 5 mg/l;4H

Petroleum process oil, <3.0% DMSO Extractable material:

Oral LD₅₀ (Rat) = > 5000 mg/kg

Dermal LD₅₀ (Rabbit) = > 5000 mg/kg

Inhalation LC₅₀ (Rat) = > 5 mg/l;4H

Materials defined as complex substance(s) (petroleum):

Oral LD₅₀ (Rat) = > 5000 mg/kg

Dermal LD₅₀ (Rabbit) = > 2000 mg/kg

Inhalation LC₅₀ (Rat) = > 5000 mg/m³

IRRITANT EFFECT ON THE SKIN: Not irritating to skin. Prolonged or repeated skin contact without proper cleaning can clog the pores of the skin resulting in disorders such as oil acne/folliculitis. Prolonged or repeated skin contact may cause defatting of the skin which can lead to dermatitis.

IRRITANT EFFECT ON THE EYES: Expected to be slightly irritating to the eyes.

SENSITIZATION: Not expected to be a sensitizer as a whole.

Olefin sulfide: Classification: Sensitizer (measured). May cause sensitization by skin contact.

Phosphoric acid esters/amine salt: Classification: May cause sensitization by skin contact.

Alkenyl amine: Remarks: May cause sensitization to sensitive individuals.

Substituted thiadiazole: Classification: Not a skin sensitizer. (Literature).

MUTAGENICITY: Not expected to be mutagenic.

Phosphoric acid esters/amine salt, Alkenyl amine and Substituted thiadiazole: These components have not exhibited mutagenic or genotoxic potential in laboratory tests.

CARCINOGENICITY: No component of this product present at levels greater than or equal to 0.1% is identified as a probable, possible or confirmed carcinogen by IARC, ACGIH, OSHA or NTP.

REPROTOXICITY/TERATOGENICITY: Not expected to impair fertility. Not expected to be a developmental toxicant.

Phosphoric acid esters/amine salt: Based on available data this product is not expected to be classified as a reproductive hazard.

STOT- Single Exposure: Not expected to be a hazard.

STOT- Repeated Exposure: Not expected to be a hazard as a whole.

Phosphoric acid esters/amine salt: This material was evaluated in a 28-day oral gavage study (OECD 407) in rats.

Treatment related effects included microscopic changes in the adrenal glands of male and female rats and kidneys of male rats at 150 and 500 mg/kg/day. The NOAEL for this study was 150 mg/kg/day.

Alkenyl amine: Oral: Target Organ(s): Digestive organs.

FURTHER INFORMATION ON TOXICOLOGY: This product is not expected to be toxic based upon available data for the components. If material is misted or if vapors are generated from heating, exposure may cause irritation of mucous membranes and the upper respiratory tract.

SECTION 12**ECOLOGICAL INFORMATION**

ECOTOXICITY: Ecotoxicological data have not been determined specifically for this product. Information given is based on a knowledge of the components and the ecotoxicology of similar products (LL/EL/IL50 expressed as the nominal amount of product required to prepare aqueous test extract).

Toxicity to fish (acute toxicity) Remarks: Expected to be practically nontoxic.

LL/EL/IL50 > 100 mg/l

Toxicity to daphnia and other aquatic invertebrates (acute toxicity): Remarks: Expected to be practically nontoxic.

LL/EL/IL50 > 100 mg/l

Toxicity to algae (acute toxicity): Remarks: Expected to be practically nontoxic.

LL/EL/IL50 > 100 mg/l

Toxicity to fish (chronic toxicity): Remarks: NOEC/NOEL expected to be > 10 - ≤ 100 mg/l

Toxicity to daphnia and other aquatic invertebrates (chronic toxicity): NOEC/NOEL expected to be > 10 - ≤ 100 mg/l

Toxicity to bacteria (acute toxicity): Remarks: Expected to be practically nontoxic.

LL/EL/IL50 > 100 mg/l

Phosphoric acid esters/amine salt: LC₅₀ (Rainbow trout): 24 mg/L;4d
NOEC (Rainbow trout): 3.2 mg/L;4d
LC₅₀ (Fathead minnow): 8.5 mg/L;4d
EC₅₀ (Daphnia magna): 91.4 mg/L;2d
EC₅₀ (Daphnia magna): 0.66 mg/L;21d
NOEC (Daphnia magna): 0.12 mg/L;21d
EC₅₀ (Green algae): 6.4 mg/L;4d
NOEC (Green algae): 1.7 mg/L;4d
EC₅₀ (Sludge): 2,433 mg/L;0.1d

Alkenyl amine: LC₅₀ (Fathead minnow): 0.11 mg/L;4d
LC₅₀ (Rainbow trout): 1.3 mg/L;4d
LC₅₀ (Sheepshead minnow): 0.9 mg/L;4d
EC₅₀ (Daphnia magna): 0.011 mg/L;2d
EC₅₀ (Daphnia magna): 0.27 mg/L;21d
NOEC (Daphnia magna): 0.013 mg/L;21d
EC₅₀ (Algae): >0.1 mg/L;3d
EC₅₀ (Sludge): 15.5 mg/L;0.1d

Substituted thiadiazole: LC₅₀ (Fathead minnow): >1,000 mg/L;4d
NOEC (Fathead minnow): 1000 mg/L;4d
EC₅₀ (Daphnia magna): 41 mg/L;2d
NOEC (Daphnia magna): 32 mg/L;2d
EC₅₀ (Green algae): >100 mg/L;3d
NOEC (Green algae): 100 mg/L;3d
EC₅₀ (Pseudomonas putida): >8,000 mg/L;0.7d

Olefin sulfide: EC₅₀ (Daphnia magna): 63 mg/L;2d
EC₅₀ (Algae): >100 mg/L;3d
EC₅₀ (Sludge): >10,000 mg/L;0.1d

INFORMATION ON ELIMINATION (PERSISTENCE AND DEGRADABILITY)

BIODEGRADABILITY: Petroleum Process Oil*: Expected to be inherently biodegradable.

Olefin sulfide: OECD TG 301 B, 13%, 28d, Not readily biodegradable

Phosphoric acid esters/amine salt: OECD TG 301 B, 7.4%, 28d, Not readily biodegradable
Inherent sludge, 3.6%, 28d, Not readily biodegradable

Alkenyl amine: OECD TG 301 D, 44%, 28d, Readily biodegradable
OECD TG 301 D, 72%, 28d, Not readily biodegradable
OECD TG 301 B, 66%, 28d, Readily biodegradable

Substituted thiadiazole: OECD TG 301 C, 2%, 28d, Not readily biodegradable

BIOACCUMULATION: Has the potential to bioaccumulate.

BIOCONCENTRATION FACTOR (BCF): Alkenyl amine: 500 (Calculated)

PARTITION COEFFICIENT (n-octanol/water) (Log Kow): Olefin sulfide: Log Kow: 6 (Measured)

Alkenyl amine: Log Kow: 7.5 (Calculated)

Substituted thiadiazole: Log Kow: 9.4 (Measured)

MOBILITY: Liquid under most environmental conditions. If it enters soil, it will adsorb to soil particles and will not be mobile.

FURTHER INFORMATION ON ECOLOGY: Product is a mixture of non-volatile compounds, which are not expected to be released into the air in any significant quantities. Not expected to have ozone depletion potential, photochemical ozone creation potential or global warming potential based upon available data for the components. Films formed on water may affect oxygen transfer and damage organisms. May cause physical fouling of aquatic organisms. Mineral oil is not expected to cause any chronic effects to aquatic organisms at concentrations less than 1 mg/L. Do not allow to contaminate the soil, waterways or waste water.

SECTION 13**DISPOSAL CONSIDERATIONS**

PROCEDURES: Federal, State and/or Local approved disposal for waste oils. Avoid land filling of liquids. Reclaim where possible. Waste product should not be allowed to contaminate soil or ground water, or be disposed of into the environment.

CONTAINER CLEANING AND DISPOSAL: Federal, State and/or Local approved disposal for waste oils.

SECTION 14**TRANSPORT INFORMATION**

U.S. DEPARTMENT OF TRANSPORTATION (DOT) SHIPPING DESCRIPTION: Non-regulated material.

INTERNATIONAL MARITIME ORGANIZATION (IMDG) SHIPPING DESCRIPTION: Non-regulated material.

FREIGHT CLASSIFICATION: Petroleum, Lubricating Oil (NMFC 155250 SUB 2 CLASS 65)

SECTION 15**REGULATORY INFORMATION**

THE COMPONENTS OF THIS PRODUCT ARE REPORTED IN THE FOLLOWING INVENTORIES:

TSCA: All hazardous components of this product are listed on or exempted from the TSCA inventory.

EINECS: All components listed or polymer exempt.

DSL: All components listed or exempt.

CERCLA REPORTABLE QUANTITY: This material does not contain any components with a CERCLA RQ.

SARA 302 EXTREMELY HAZARDOUS SUBSTANCES REPORTABLE QUANTITY: This material does not contain any components with a section 302 EHS RQ.

SARA 311/312 HAZARDS: None

SARA 304: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 304.

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De minimis) reporting levels established by SARA Title III, Section 313.

CLEAN WATER ACT (CWA): If spilled into waters of the U.S., this product may be reportable under the Clean Water Act.

CLEAN AIR ACT (CAA): This product is not considered a hazardous substance under the Clean Air Act.

OSHA HAZARD COMMUNICATION STANDARD: When used for its intended purposes, this material is not classified as hazardous in accordance with OSHA 29 CFR 1910.1200.

SECTION 16**OTHER INFORMATION**

REVISION INDICATOR: New SDS compliant with GHS AND OSHA.

DATE OF REVISION: 03/23/2017

SUPERSEDES: 04/07/2016

DISCLAIMER: THIS INFORMATION IS BEING SUPPLIED TO YOU UNDER OSHA "RIGHT TO KNOW" REGULATION 29 CFR 1910.1200 AND IS OFFERED IN GOOD FAITH. THE INFORMATION CONTAINED HEREIN IS BASED ON THE DATA AVAILABLE TO US AND IS BELIEVED TO BE TRUE AND ACCURATE TO THE BEST OF OUR KNOWLEDGE. TEXAS REFINERY CORP. MAKES NO WARRANTY, EXPRESSED OR IMPLIED, REGARDING THE ACCURACY OF THIS DATE, THE HAZARDS CONNECTED WITH THE USE OF THE MATERIAL, OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF. TEXAS REFINERY CORP. MAKES NO WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, CONCERNING THE SAFE USE OF THIS MATERIAL IN YOUR PROCESS OR IN COMBINATION WITH OTHER SUBSTANCES. TEXAS REFINERY CORP. ASSUMES NO RESPONSIBILITY FOR DAMAGE OR INJURY FROM THE USE OF THE PRODUCT DESCRIBED HEREIN.