

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Synthetic TO-4 SAE 10

Product Code: 790

Product Use: Synthetic Transmission Fluid

Chemical Name: Petroleum Oil; Lube Oil, Petroleum Hydrocarbon, Lubricant

Manufacturer: Scot Lubricants LLC
6 Horwith Drive
Northampton, PA 18067

Emergency Telephone Numbers: 484-619-1393
Information: 484-275-7990 8am-5pm EST M-F

2. HAZARD IDENTIFICATION

This material is not considered hazardous by OSHA Hazard Communication Standard 29 CFR 1910.1200

Classification of the substance or mixture Not Classified.

GHS label elements

Signal word No Signal Word Not Hazardous
Hazard Statements No known significant effects or critical hazards

Precautionary statements

General Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.
Prevention P273 Avoid release into the environment.
Response P391 Collect Spillage
Storage Not Applicable
Disposal P501 Dispose of contents/container in accordance with local, regional, national and international regulations.

Other Hazards

The mixture consists of substances capable of producing an aspiration hazard. Aspiration may result in chemical pneumonia (fluid in the lungs), severe lung damage, respiratory failure, and even death.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Wt. Percent	Component	CAS#
20-29.9	Zinc aryldithiophosphate	Proprietary
1-4.9	Alkylated phenol	Proprietary
10-19.9	Mineral Oil	Mixture

4. FIRST AID MEASURES

EYE CONTACT: Flush with water at least 30 minutes. Get medical attention if eye irritation develops or persists..

SKIN CONTACT: Wash with soap and water. Remove contaminated clothing. Get medical attention if irritation develops. Launder contaminated clothing before reuse and discard leather articles saturated with the material.

INHALATION: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison center or doctor.

ORAL: DO NOT INDUCE VOMITING. Get immediate medical attention.

ADDITIONAL INFORMATION: If exposed or concerned; Get medical attention.

5. FIRE FIGHTING MEASURES

FLASHPOINT (METHOD): 130°C (266°F) PMCC (Minimum)

EXTINGUISHING MEDIA: CO2, dry chemical, or foam. Water can be used to cool and protect exposed material..

FIRE FIGHTING INSTRUCTIONS: Keep storage containers cool with water spray. A positive-pressure, self-

contained breathing apparatus (SCBA) and full- body protective equipment are required for fire emergencies.

6. ACCIDENTAL RELEASE MEASURES

Personal Protective Equipment must be worn, see Personal Protection Section for PPE recommendations. Take precautions to avoid release to the environment. Ventilate area if spilled in confined space or other poorly ventilated areas. Prevent entry into sewers and waterways, dispose of in accordance with all federal, state and local environmental regulation. Pick up free liquid for recycle and/or disposal. Residual liquid can be absorbed on inert material.

7. HANDLING AND STORAGE

PUMPING TEMPERATURE: 50° C, 122° F

MAXIMUM HANDLING TEMPERATURE: 70°C, 158° F

HANDLING PROCEDURES: Use with adequate ventilation. Open container in a well ventilated area. Avoid breathing vapors. Keep containers closed when not in use. Do not discharge into drains or the environment, dispose to an authorized waste collection point. Use appropriate containment to avoid environmental contamination. Avoid breathing dust, fume, gas, mist, vapors or spray. Use only outdoors or in a well-ventilated area. Wash thoroughly after handling. Empty container contains product residue which may exhibit hazards of product. Dispose of packaging or containers in accordance with local, regional national and international regulations.

MAXIMUM STORAGE TEMPERATURE: 45° C, 113° F

STORAGE PROCEDURES: Take precautions to avoid release to the environment. Store at cool ambient temperatures. Odorous and toxic fumes may form from the decomposition of this product if stored at temperatures in excel of 113 deg F (45 deg. C) for extended periods of time or if heat sources in excess of 250 deg. F (121 deg. C) are used. See Section 10 for incompatible materials.

MAXIMUM LOADING TEMPERATURES: 70° C, 158° F

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE LIMITS: None Established

OTHER EXPOSURE LIMITS: Contains mineral oil. Under conditions which may generate mists, observe the OSHA PEL of 5 mg per cubic meter, ACGIH TWA of 5 mg per cubic meter.

ENGINEERING CONTROLS: Material should be handled in enclosed vessels and equipment, in which case general (mechanical) room ventilation should be sufficient. Local exhaust ventilation should be used at points where dust, mist, vapors or gases can escape into the room air. Additional ventilation or exhaust may be required to maintain air concentrations below recommended exposure limits.

GLOVE PROCEDURES: Use nitrile or neoprene gloves.

EYE PROECTION: Chemical goggles or face shield.

RESPIRATORY PROTECTION: Use NIOSH/MSHA approved full face respirator with a combination organic vapor and high efficiency filter cartridge if the recommended exposure limit is exceeded. Use self-contained breathing apparatus for entry into confined space, for other poorly ventilated areas and for large spill clean-up sites. Consult with an industrial hygienist to determine the appropriate respiratory protection for your specific use of this material. A respiratory protection program compliant with all applicable regulations must be followed whenever workplace conditions require the use of a respirator.

CLOTHING RECOMMENDATION: Gloves, coveralls, apron, boots as necessary to minimize contact. Use chemically protective boots when necessary to avoid contaminating shoes. Do not wear rings, watches or similar apparel that could entrap the material and cause a skin reaction. Launder contaminated clothing before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Flash Point: $\geq 130^{\circ}$ C, 266°F PMCC (Minimum)

Lower Flammable Limit: N/D

Upper Flammable Limit: N/D

Auto ignition Point: N/D

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Explosion Data:	Material does not have explosive properties		
Vapor Pressure:	0.0027 psi (Calc.) (20°C)	0.0245 psi (Calc.) (77°C)	
pH:	N/D	Specific Gravity:	1.03 (15.6°C)
Bulk Density:	8.6Lb/gal. 1.03Kg/L	Water solubility:	Insoluble
Percent Solid:		Percent Volatile:	N/D
Volatile Organic Compound:	N/D	Vapor Density:	N/D
Evaporation Rate:	N/D	Odor:	Mild petroleum
Appearance:	Dark Color Liquid		
Viscosity:	@100°C 7.3	Boiling Point:	N/D
	@40°C 40.8	Pour Point Temp:	-15°C, 5°F
		Melting/Freezing Point:	N/D

The above data are typical values and do not constitute a specification. Vapor pressure data are calculated unless otherwise noted.

10. STABILITY AND REACTIVITY

STABILITY: Material is normally stable at moderately elevated temperatures and pressures..

INCOMPATIBLE MATERIALS: Acids. Oxidizing agents.

REACTIVITY: Polymerization is not known to occur under normal temperatures and pressures. Not reactive with water.

DECOMPOSITION TEMPERATURE: N/D

POLYMERIZATION: Will not occur.

THERMAL DECOMPOSITION: Smoke, carbon monoxide, carbon dioxide, aldehydes and other products of incomplete combustion. Hydrogen sulfide and alky mercaptans and sulfides may also be released. Under combustion conditions, oxides of the following elements will be formed: calcium, phosphorus, sulfur, zinc.

CONDITIONS TO AVOID: Not determined.

11. TOXICOLOGICAL INFORMATION

EYE IRRITATION: Not expected to cause eye irritation. Based on data from components or similar materials.

SKIN IRRITATION: Not expected to be a primary skin irritant. Based on data from components or similar materials. Prolonged or repeated skin contact as from clothing wet with material may cause dermatitis. Symptoms may include redness, edema, drying, and cracking of the skin.

RESPIRATORY IRRITATION: Nose, throat and lung irritant. Based on data from components or similar materials.

DERMAL TOXICITY: The LD50 in rabbits is >2000 mg/Kg. Based on data from components or similar materials.

INHALATION TOXICITY: No data available to indicate product or components may be a toxic inhalation hazard.

ORAL TOXICITY: The LD50 in rats is >10,000 mg/Kg. Based on data from components or similar materials.

Materials can be aspirated into the lungs during the act of swallowing or vomiting. This could result in pulmonary edema and chemical pneumonitis.

DERMAL SENSITIZATION: No data available to indicate product or components may be a skin sensitizer.

INHALATION SENSITIZATION: No data available to indicate product or components may be respiratory sensitizer.

CHRONIC TOXICITY: This product contains para-dodecylphenol. Rats given high, repeated daily doses of para-dodecylphenol by oral intubation experienced effects on a number of organs including adrenal, thyroid, liver, ovary, testes, bone marrow and blood cell formation. The relevance of these effects to humans is uncertain.

CARCINOGENICITY: This product contains mineral oils which are considered to be severely refined and not considered to be carcinogenic under IARC. All of the oils in this product have been demonstrated to contain less than 3% extractable by the IP 346 test.

MUTAGENICITY: No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

REPRODUCTIVE TOXICITY: This product contains para-dodecylphenol. Rats given high, repeated daily doses of para-dodecylphenol by oral intubation experienced adverse reproductive effects. The relevance of these effects to humans is uncertain. Repeated oral gavage dosing of laboratory animals with aryl thiophosphate in a reproductive/development toxicity screening study resulted in letter loss and decreases in number of implantation sites at high doses. The relevance of this to human workplace exposure has not been established.

TERATOGENICITY: This product contains para-dodecylphenol. Pregnant rats given high, repeated daily doses of

para-dodecylphenol by oral intubation gave birth to pups with cleft palate and skeletal malformations. The relevance of these effects to humans is uncertain. Repeated oral gavage dosing of laboratory animals with aryl thiophosphate in a reproductive/developmental toxicity screening study resulted in stillbirths and decreased offspring survivability at doses that also produced maternal toxicity. The relevance of this to human workplace exposure has not been established.

OTHER: No other health hazards known.

12. ECOLOGICAL INFORMATION

ECOTOXICITY: Material expected to be harmful to aquatic organisms. May cause long term adverse effects in the aquatic environment.

PERSISTENCE/DEGRADABILITY: Not readily biodegradable.

BIOACCUMULATIVE POTENTIAL: No information available for the product.

MOBILITY IN ENVIRONMENTAL MEDIA: Base oil component(s) – Low solubility and floats; expected to migrate from water to the land.

OTHER ADVERSE EFFECTS: Not available.

OCTANOL/WATER PARTITION COEFFICIENT: Not available

VOLATILE ORGANIC COMPOUNDS: Negligible

AQUATIC RELEASE: Advise authorities if product has entered or may enter watercourses or sewer drains

13. DISPOSAL INFORMATION

DISPOSAL: Dispose in accordance with federal, state, provincial and local regulations. Regulations may also apply to empty containers. The responsibility for proper waste disposal lies with the owner of the waste.

USEPA WASTE CODES: This product, if discarded, is not expected to be a characteristic or listed hazardous waste. If recycled in the USA, it must be managed in accordance with 40 CFR Part 279. Processing, use or contamination by user may change the waste code(s) applicable to the disposal of these products.

14. TRANSPORTATION INFORMATION

DOT

PROPER SHIPPING NAME: Petroleum Lubricating Oil – Not regulated as a hazardous material for Land Transport

HAZARD CLASS: Not regulated

ID NUMBER: Not regulated

LABEL REQUIRED: Not regulated

EMERGENCY RESPONSE GUIDE NUMBER: Not applicable. Reference North American Emergency Response Guidebook.

IATA: Not regulated

15. REGULATORY INFORMATION

TSCA: All components of this product are listed in **Section 3** are exempted from the TSCA requirements.

SARA SECTIONS 302 304: Based on the ingredients listed in **Section 3**, this product does not contain any “extremely hazardous substances” listed pursuant to Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) Section 302 or Section 304 as identified in 40 CFR Part 355, Appendix A and B.

SARA SECTIONS 311 AND 312 REPORTING: This product poses the following health hazard(s) as defined in 40 CFR Part 370 and is subject to the requirements of Sections 311 and 312 of Title III of Superfund Amendments and Reauthorization Act of 1986 (SAEA):

Immediate (Acute) Health Hazard	Yes
Delayed (Chronic) Health Hazard	Yes
Physical Fire	No
Physical Reactive	No

SARA Section 313: This product contains from 20 to 29.9 percent zinc compounds: contains 1.5% as Zn.

CALIFORNIA: This product contains a component that list the following ingredient for which the state of California has found to cause cancer, birth defects based on maximum impurity levels of components: <0.01 ppm Ethyl benzene, CAS no. 100-41-4 <0.01 ppm Naphthalene, CAS No. 91-20-3 <0.1pppm cadmium <0.5 ppm lead <0.5 ppm arsenic <0.5 ppm Ethylene oxide, CAS no. 75-21-8 5 ppm Ethyl acrylate, CAS no. 140-88-5 10 ppm Benzene, CAS no 71-43-2 0.001% 1,4 Dioxane, CAS no. 123-91-9 0.001% Acetaldehyde, CAS no. 75-07-0 0.007% Sulfur dioxide, CAS no. 7445-09-5.

16. OTHER INFORMATION

DATE ISSUED: April 8, 2015
SUPERSEDES:
REVISION NO.
REVISION INFORMATION: GHS Compliance
SDS #: CODE 790

**SCOT LUBRICANTS LLC
6 HORWITH DRIVE
NORTHAMPTON, PA 18067
484-275-7990**

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