



Giant Industries
 900 N Westwood Ave.
 Toledo, Ohio 43607

Product Code: TRO
 Revision Date: 1/1/97
 Print Date: 01/28/99

Giant Oil 01060, 01150, 01151, 01152
MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MANUFACTURER: AMSOIL, INC.
 925 Tower Ave., Superior, WI 54880

Transportation and
 Spill Emergency Telephone No.: (800) 424-9300 CHEMTREC
 In case of emergency: (715) 392-7101

PRODUCT NAME: 100% SYNTHETIC SERIES 2000 SAE 20W-50 RACING OIL
PRODUCT CODE: TRO
CHEMICAL NAME: SYNTHETIC HYDROCARBON-BASED LUBRICATING FLUID

2. COMPOSITION/INFORMATION ON INGREDIENTS

1-Decene, homopolymer, hydrogenated, mixture, CAS# Mixture; TLV & PEL: 5mg/m3 (mist); Appx. wt.: 70-85%
 Zinc, C1-C14 alkyl dithiophosphate, CAS#68649-42-3; TLV & PEL: NE; Appx. wt.: 1.0-3.0%

*No ingredient in excess of 0.1% volume is listed as hazardous.

HMIS Rating	<u>HEALTH</u>	<u>FLAMMABILITY</u>	<u>REACTIVITY</u>
	1	1	0
NFPA Rating	<u>HEALTH</u>	<u>FLAMMABILITY</u>	<u>REACTIVITY</u>
	1	1	0

3. HAZARDS IDENTIFICATION

Principal Hazards
WARNING: CAUSES MINOR EYE AND SKIN IRRITATION

- See Section 11 for complete health hazard information.

4. FIRST AID MEASURES

EYE CONTACT: If splashed into the eyes, flush with clear water for 20-30 minutes. Get immediate medical attention if irritation develops or persists.

SKIN CONTACT: Wash immediately with soap and water. Immediately remove contaminated clothing. Launder contaminated clothing before reuse and discard shoes and other leather articles saturated with the material. Obtain medical advice if irritation occurs or persists.

INGESTION: DO NOT INDUCE VOMITING. If conscious, give 2 glasses of water. If vomiting occurs, keep head below hips to reduce risk of aspiration. Give fluids again. Seek medical attention if health effects occur. Please note: Aspiration of material due to vomiting can cause chemical pneumonia which can be fatal. Get immediate medical attention.

INHALATION: Remove exposed person to fresh air if adverse effects are observed. If breathing is labored, administer oxygen. If breathing has stopped, apply artificial respiration, and seek immediate medical attention. If irritation persists or if toxic symptoms are observed, seek immediate medical attention.

ADDITIONAL: Note to Physician: Treat symptomatically.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES:

Flash Point:	464F (240C)
Method:	COC (ASTM D-92)
Upper Flammable Limit:	Not Determined
Lower Flammable Limit:	Not Determined
Autoignition Temperature:	Not Determined

Combustion Products: Thermal decomposition products may include toxic oxides of carbon, aldehydes and other products of incomplete combustion.

Extinguishing Media: Carbon dioxide, dry chemical, alcohol foam, and halon extinguishing agents. Water may be used to cool and protect exposed material. Water may cause spattering and frothing.

Fighting Instructions: Recommended wearing self-contained breathing apparatus. Toxic fumes, gasables, or vapors may evolve on burning. Container may rupture on heating.

Explosion Data: Material does not have explosive properties.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Recover free product. Add sand, earth or other suitable absorbent to spill area.

LARGE SPILL: Isolate hazard area. Keep unnecessary and unprotected personnel from spill area. Personal protection equipment must be worn. Ventilate area if spilled in confined space or other poorly ventilated areas. Prevent entry into sewers and waterways. Pick up free liquid for recycle and or disposal. Residual liquid can be absorbed on inter material. In its unused condition, this product is not considered to be a RCRA defined hazardous waste by characteristics or listings. However, check under Transportation and Labeling (DOT/CERCLA) and Other Regulatory Information Sections (SARA) for hazardous substances to determine regulatory reporting requirements.

7. HANDLING AND STORAGE

HANDLING: Keep containers closed. Avoid contact with eyes, skin or clothing. Wash hands after handling. Follow all MSDS/label precautions even after container is emptied because they may retain

product residues. Use product with caution near heat, sparks, electricity and open flames.

STORAGE: Keep away from heat or flame.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

VENTILATION: Good general ventilation should be sufficient to control vapors under ambient conditions. Additional ventilation or exhaust may be required to maintain air concentrations below recommended exposure limits.

RESPIRATORY: A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z288.2 requirements must be followed whenever work place conditions warrant a respirator's use.

SKIN: None required under normal use conditions. However, use chemical resistant gloves, such as Viton or Nitrile, to avoid prolonged or repeated skin contact.

EYE: None required under normal use conditions. Use splash goggles or face shield where splashing is expected or can occur.

EXPOSURE LIMITS: This product does not contain any components which have recognized exposure limits. However, a threshold limit value of 5.00 mg/m³ is suggested for oil mist.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE:	Liquid
BOILING POINT:	Not Determined
FREEZING/MELTING POINT:	-47F (-44C)
VAPOR PRESSURE:	Less than 0.01 mm Hg @ 68F (20C)
VAPOR DENSITY:	(Air=1) Greater than 5
SOLUBILITY IN WATER:	@1 Atm. And 77F (25C) Negligible
SPECIFIC GRAVITY:	(Water=1) 0.893
DENSITY, lb./gal.:	7.44
VOLATILITY (VOLUME):	Negligible from open container in 4 hrs. @ 100F (38C)
VISCOSITY GRADE:	20W-50
VISCOSITY, cSt	
100C	15.0-19.0
40C	130.0-135.0
EVAPORATION RATE:	Not Determined
pH:	Essentially Neutral
ODOR:	Mild, Bland, Hydrocarbon Odor
APPEARANCE:	Red, Transparent, Semi-Viscous Fluid

10. STABILITY AND REACTIVITY

CHEMICAL: Stable under moderately elevated temperatures and pressures.

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INCOMPATIBILITY: Avoid contact with strong oxidants such as liquid chlorine, concentrated oxygen, sodium hypochlorite, or calcium hypochlorite.

HAZARDOUS DECOMPOSITION OF PRODUCTS: None.

HAZARDOUS POLYMERIZATION: Hazardous polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

—ACUTE EXPOSURE—

Oral Toxicity: The LD50 in rats is >5000 mg/kg. Based on data from components or similar materials.

Eye Irritation: Moderate to strong 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 we with material may cause dermatitis. Symptoms may include redness, edema, drying, defatting, and cracking of the skin.

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.

Respiratory Irritation: If material is misted or if vapors are generated from heating, exposure may cause irritation of membranes and the upper respiratory tract similar to that observed with mineral oil. Based on components or similar materials. Under good industrial hygiene practices where all exposure limits are observed, respiratory irritation should not be a problem.

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 a respiratory sensitizer.

—CHRONIC EXPOSURE—

Chronic Toxicity: No data available to indicate product or components present at greater than 0.1% may present a carcinogenic hazard.

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

Reproductive Toxicity: No data available to indicate either product or components present at greater than 0.1% that may cause reproductive toxicity.

Teratogenicity: No data available to indicate either product or components present at greater than 0.1% that may cause reproductive toxicity.

—ADDITIONAL INFORMATION—

Product Code: TRO **Effective Date:** 1/1/97 **Date Printed:** 01/28/99

Other: No other health hazards known.

Exposure Limits: Under conditions which may generate mists, observe the OSHA PEL of 5 mg per cubic meter, ACGIH STEL of 10 mg per cubic meter.

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL: No data are available on the adverse effects of this material on the environment.

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL: Material, if disposed, is expected to be hazardous waste. Consult federal, state, or local authorities for proper disposal and reporting procedures. All disposals must comply with federal, state and local regulations.

14. TRANSPORTATION INFORMATION

This product is not classified as hazardous material for DOT shipping. For further information relative to spills resulting from transportation incidents, refer to the latest DOT Emergency Response Guidebook for Hazardous Materials Incidents, DOT 5800.3.

15. REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS:

OSHA: Zinc alkyl dithiophosphate and zinc compounds are considered hazardous if present in more than trace amounts.

CERCLA: Not applicable.

SARA (Section 313): 1.0-3.0% Zinc compounds
0.05-0.1 Zinc

SARA EXTREMELY HAZARDOUS LIST: This product does not contain greater than 0.1% of any chemical substance on the SARA Extremely Hazardous Substance list.

TSCA INVENTORY: All components of this material are on the U.S. TSCA Inventory.

OTHER TSCA REG.: None.

CALIFORNIA PROP 65: This product does not contain any chemical known to the State of California to cause cancer.

INTERNATIONAL REGULATIONS:

CANADA: All components are in compliance with the Canadian Environmental Protection Act. This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the

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information required by the CPR.

JAPAN MITI: All components have MITI and MOL numbers in Japan.

AUSTRALIA: All components are in compliance with chemical notification requirements in Australia.

SWITZERLAND: All components are in compliance with the Environmentally Hazardous Substances Ordinance in Switzerland.

16. OTHER INFORMATION

The information and recommendations contained herein are, to the best of AMSOIL's knowledge and belief accurate and reliable as of the date issued. AMSOIL makes no warranty or guarantee, expressed or implied, of their accuracy or reliability, and AMSOIL shall not be liable for any loss or damage based upon the criteria supplied by the developers of these rating systems, together with AMSOIL's interpretation of the available data.