1. Substance/Product Identification

Product Name: 280 Food Grade HTC ISO Grades 22, 32, 46, 68 and 100
(SAE Grades 5, 10, 20, and 30)
Company/Address: Schaeffer Mfg
102 Barton Street
Saint Louis, Missouri 63104
USA
Synonyms:
Preparation/Revision Date: 10/22/2011
Product Use/Type: Food grade lubricating oily
Emergency Phone Number: +1 314 865-4105 (24-hour response number)
+ 1 314 865-4100 (Business hours 8:30AM-5:00PM)
1-800-325-9962 (US & Canada)
Website: www.schaefferoil.com
MSDS Number: 280 Version 1.0

2. Hazards Identification

Appearance: White color
Odor: Mild petroleum odor
Principal Hazards: Eye, skin and upper respiratory irritation
Hazardous Materials Information System
(U.S.A) **Health: 0**
Fire: 1
Reactivity: 0:
National Fire Protection Agency System
(U.S.A.) **Health: 0**
Fire: 1
Reactivity: 0

See Section 11 for complete health hazard information

3. Composition and Information on Ingredients

Hazardous Ingredients

Ingredient Name	CAS No.	EU Number	Percentage (by wt.)
Technical White Mineral Oils	8042-47-5	232-455-8	0-99
N-phenylbenzenamine, reaction products with 2,4,4 Trimethylpentene	68411-46-1	270-128-1	<0.3
Diphenylamine	122-39-4	122-39-4	<0.1

4. First Aid Measures

Ingestion: If swallowed, do not induce vomiting. Give the person a glass of water or milk to drink and get immediate medical attention. Never give anything by mouth to an unconscious person.
Eyes: Flush eyes with running water immediately while holding the eyelids open. Remove contact lenses, if worn, after initial flushing, and continue flushing for at least 15 minutes. Get immediate medical attention.
Inhalation: Move the exposed person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if breathing difficulties continue.
Skin:. To remove the material from skin, use soap and water. Discard contaminated clothing and shoes or thoroughly clean before reuse. Get medical attention if any irritation or redness develops.
Additional Information: Ingestion of this product or subsequent vomiting may result in aspiration of light hydrocarbon liquid, which may cause pneumonitis.

5. Fire Fighting Measures:

Flash Point: 383°-459° (195°-237°C)
Extinguishing Media: Use water fog, foam, dry chemical or carbon dioxide (CO2) to extinguish flames.
Firefighting Procedures: This material will burn although it is not easily ignited. For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus
Unusual Fire & Explosion: Highly dependent on combustion conditions. A complex mixture of airborne solids, liquids, and gases including carbon monoxide, carbon dioxide, and unidentified organic compounds will be evolved when this material
undergoes combustion.

Hazards: None

6. Accidental Release Measures

Spill Procedures and Clean-up methods: Eliminate all sources of ignition in vicinity of spilled material. Stop the source of the release if you can do it without risk. Contain release to prevent further contamination of soil, surface water or groundwater. Clean up spill as soon as possible, observing precautions in Exposure Controls/Personal Protection. Use appropriate techniques such as applying non-combustible sorbent materials or pumping. Where feasible and appropriate, remove contaminated soil. Place contaminated materials in approved waste containers and dispose of in a manner consistent with applicable Federal, National, State, Provincial, and local laws regulations.
Personal Precautions: Wear appropriate personal protective equipment when cleaning up spills.
Environmental Precautions: U.S.A. regulations may require reporting spills of this material that could reach any surface waters. Report spills to all applicable National, International, Federal, State, Provincial and local authorities and/or the United States National Response Center at (800) 424-8802 as appropriate or required

7. Handling & Storage

Handling: Avoid all contact of product with eyes and skin. Wash thoroughly after handling and before eating, smoking or using toilet facilities. Do not swallow or inhale vapors. Do not eat, drink or smoke in work areas.

Storage: Do not store near heat, spark, flame and strong oxidizers. Food grade lubricants should be stored away from and segregated from non-food grade lubricants in their own separate storage area.

8. Exposure Controls and Personal Protection

Occupational Exposure Limits

Ingredient	OSHA TWA	OSHA STEL	ACGIH TWA	ACGIH STEL
Technical White Mineral Oils	5 mg/m^3		5 mg/m^3	
N-phenylbenzenamine, reaction products with 2,4,4 Trimethylpentene	N/E	N/E	N/E	N/E
Diphenylamine	N/E	N/E	10 mg/m^3	

(s)-Skin exposure
(p) proposed limit
(c) – Ceiling limit
(l) Recommended exposure limit
(u) supplier limit
(N/E) – not established

Engineering Controls: If user operations generate an oil mist, determine if airborne concentrations are below the OSHA Permissible Limit (PEL) of 5 mg/m3 for mineral oil mist. If not, wear a NIOSH approved respirator that provides adequate protection from the measured concentrations of this material. For air-purifying respirators use a particulate cartridge.

Personal Protective Equipment

Gloves: Nitrile or oil resistant gloves

Protective Clothing: Wear impervious protective clothing to prevent skin contact. Selection of protective clothing may include gloves, apron, boots, and complete facial protection depending on operations conducted. Users should determine acceptable performance characteristics of protective clothing. Consider physical requirements and other substances present when selecting protective clothing.

Eye Protection: Wear eye protection such as safety glasses, chemical goggles, or faceshields if engineering controls or work practices are not adequate to prevent eye contact.

Skin Protection: Wear impervious protective clothing to prevent skin contact.

Respiratory Protection: If user operations generate an oil mist, determine if airborne concentrations are below the OSHA Permissible Limit (PEL) of 5 mg/m3 or other applicable standards for mineral oil mist. If not, wear a NIOSH approved respirator that provides adequate protection from the measured concentrations of this material. For air-purifying respirators use a particulate cartridge

9. Physical and Chemical Properties

Flash Point: 383°-459° (195°-237°C)
Specific Gravity: 0.85 – 0.88
Upper Flammable Limit (UEL): Not Determined
Lower Flammable Limit (LEL): Not Determined
Vapor Pressure: Not determined
Vapor Density (air =1): >10
Percent Volatile: Negligible
Evaporation Rate: Not Determined
pH: Not applicable
Boiling Point: >600°F (>300°C)
Melting Point: Not applicable
Appearance: White color
Odor: Mild odor
Solubility in Water: Insoluble

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

10. Stability and Reactivity

Stability: This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.
Materials to Avoid: Strong acids, bases and oxidizers
Polymerization: Not expected to occur during conditions of normal use.
Thermal Decomposition: Not determined
Conditions to Avoid: May react with oxygen and strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.

11. Toxicological Information:

Routes of Exposure: Skin, eyes, ingestion and inhalation
Target Organs: Skin, eyes, upper respiratory tract

Acute Exposure

Ingestion: Ingestion may cause a laxative effect. This material can directly enter the lungs, if swallowed, or if subsequently vomited. Once in the lungs it is very difficult to remove and can cause severe injury or death.
Eye Contact: Slight irritation and redness to eyes
Skin Contact: Contact with skin is not expected to cause prolonged or significant irritation
Inhalation: Contains synthetic hydrocarbon base oil. May cause respiratory irritation or other pulmonary effects following prolonged or repeated inhalation of oil mist at airborne levels above the recommended mineral oil mist exposure limit.
Dermal Sensitization: Not expected to be a dermal sensitizer
Inhalation Sensitization: Not expected to be a inhalation sensitizer.

11. Toxicological Information continued:

Carcinogenicity: This product does not contain any of the chemicals listed on the United States National Toxicology Program Annual Reports on Carcinogens, The International Agency for Cancer Research Monographs and United State's Occupational Safety and Health Administrations 29CFR 1910.10 Subpart Z List.
Ames Test: Negative

Additional Toxicological Information:
Technical White Mineral Oils CAS 8042-47-5
Acute Oral Toxicity: LD50 / rat / > 5000 mg/kg / based on data for a similar material.
Acute Dermal Toxicity: LD50 / rat / > 3000 mg/kg
Acute Inhalation Toxicity: LC50 / not known / based on data for a similar material.

Diphenylamine CAS 122-39-4
Acute Oral Toxicity: LD50 / rat / 1120 mg/kg
Acute Dermal Toxicity: LD50 / rat / > 2000 mg/kg
Acute Inhalation Toxicity: LC50 / not known

N-phenylbenzeneamine, reaction products with 2, 4, 4 trimethylpentene CAS 68411-46-11
Acute Oral Toxicity: LD50 / rat / > 5000 mg/kg / based on data for a similar material.
Acute Dermal Toxicity: LD50 / rat / > 2000 mg/kg
Acute Inhalation Toxicity: LC50 / not known / based on data for a similar material.

12. Environmental and Ecological Information

Ecotoxcity

Technical White Oils CAS 8042-47-5
-96 hours/LC50/Fish, fresh water (Lepomis macrochirus)/ >10, 000 mg/

Diphenylamine CAS 112-39-4

-72 hours EC50/scenedesmus subspicatus/1.5 mg/l
-24 hours LC50/water flea (Daphina magna) 2.3 mg/l

Environmental Fate

Biodegradation: This material is not expected to be readily biodegradable
Bioaccumulation: Not established
Water Class Hazard (Germany): Water Hazard Class 1

13. Disposal Considerations

Waste Handling and Disposal: This product in its neat state when discarded or disposed of is not a hazardous waste according to United States Federal Regulations 40CFR 261.4 (b)(4). Dispose of product in accordance with all applicable Federal, National, State, Provincial and local laws and regulations. Under RCRA, it is the responsibility of the user of this product to determine at the time of disposal, whether the product meets RCRA criteria for hazardous waste. Do not re-use empty containers

14. Transport Information

US DOT Classification Non-Bulk/Bulk: Not regulated as a hazardous material or dangerous good for transportation.

IATA/ICAO/ IMDG Classification: Not regulated as a hazardous material or dangerous good for transportation.

15. Regulatory Information

Hazard Symbols

GHS Symbol: 

Health Hazards: May be fatal if swallowed and enters airways.

US Regulations

TSCA Inventory: All of the components in this material are on the US TSCA Inventory or are exempt.
State of California Proposition 65: This product does not contain any of the chemical listed on the State of California's Proposition 65 List for chemicals classified as potential reproductive or cancer causing agents.

US EPA SARA Title III and CERCLA Listings and Reportable Quantities
This product does not contain any of the chemicals listed on the US EPA's SARA Title III and CERCLA Lists.
US EPA Section 311/313 Classifications
None
US EPA Section 313 Chemicals
This product does not contain any of the chemicals listed on the US EPA's Section 313 List.

US Tariff Heading Number: 2710.19.3070
Schedule B Number: 2710.19.3070

Other Regulations:
Canada: All of the ingredients of this product are in compliance with the Canadian Environmental Protection Act and are present on the Domestic Substance List
Canadian WHMIS Classifications and Symbols:
This product is not a WHMIS hazardous material

EEC: All components are in compliance with the EC Seventh Amendment Directive 92/32/EEC. This material is not classified as hazardous under EU Criteria.

16. Other Information

For additional information call +1 314-865-4100 (outside the US and Canada) or 1-800-325-9962 inside the United States and Canada.

Although the information and recommendations set forth herein (hereafter referred to as information) are presented in good faith and believed to be accurate and factual as of the date hereof, Schaeffer Mfg. Company makes no representation as to the completeness or accuracy thereof. Information is supplied upon the condition that the person receiving the same will make their own determination as to its safety and suitability for their purposes prior to use. In no event will Schaeffer Mfg. Company be responsible for damages of any natures whatsoever resulting from the use or reliance upon information. **No representation or warranty, either expressed or implied, of merchantability or fitness for a particular purpose is made with respect to information of the product to which the information refers. Compliance with all applicable federal, state, and local regulations remains the responsibility of the user.**