

MATERIAL SAFETY DATA SHEET
Base Oil

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Base Oil

Section I. Product and Company Identification	
Material Name:	Base Oil
Synonyms:	SN-150, SN-300, SN-500.
Material Use:	Main product of the hydrotreater unit. Material for the production of lubricating oils.
Manufacturer:	
MSDS Version:	1.0
MSDS Date:	17 May 2013

Section II. Hazards Identification	
Classification according to Regulation (EC) No. 1272/2008 [CLP]	
Hazard statements	
None	
CLP Precautionary statements	
None	
Classification according to Directive 67/548/EEC or 1999/45/EC	
Not Classified as dangerous according to EC criteria.	

NFPA 704 HAZARD IDENTIFICATION				
Health	Fire Hazard	Reactivity	4	Extreme
			3	High
			2	Slight
			1	Least
Specific Hazard				

Summary of Hazards
Health Hazards
May cause irritation to eyes, skin and respiratory system. May be harmful if swallowed.
Physical Hazards
Combustible material. Spilled material may present a slipping hazard.
Health Effects: Eye Contact
May cause irritation to eyes on contact.
Health Effects: Skin Contact
May cause irritation to skin on prolonged contact, due to drying and degreasing.
Health Effects: Ingestion
May be harmful if swallowed. Ingestion may cause gastric disturbances and irritation of gastrointestinal tract.
Health Effects: Inhalation
High concentration of vapors or mists may cause irritation of the respiratory tract mucosa, headache, dizziness, nausea. Prolonged / repetitive exposure may cause breathing disturbances, central nervous system disorders, disturbances of coordination of movement, disorientation, loss of consciousness.

Section III. Composition/Information on Ingredients

Material Description:	Saturated and aromatic Hydrocarbons, with number of carbon atoms in the range from C10 to C50.
Reportable Quantity:	See Section XV, Regulatory Information.
Marine Pollutant:	Yes

Ingredients

Ingredient Name	CAS #	Concentration Range
Base Oils	64742-54-7	100%

Section IV. First Aid Measures**First Aid: Eye Contact**

Remove contact lenses if it can be done safely. Flush immediately with large amounts of water for at least 15 minutes, while holding eyelids open. Seek medical advice if pain or redness continues.

First aid: Skin Contact

Remove contaminated clothing and shoes. Wash skin with soap and water. Completely decontaminate clothing, shoes and protective equipment before reuse. Contaminated leather goods should be discarded.

In case of skin contact with hot product, immediately immerse or drench the affected are in water to assist cooling. Get immediately medical attention.

If irritation persists or symptoms develop, seek medical attention.

First Aid: Ingestion

Never give anything by mouth to an unconscious person. DO NOT induce vomiting. Aspiration of material into the lungs due to vomiting can cause chemical pneumonitis, which can be fatal. If spontaneous vomiting occurs, keep head below hips to prevent aspiration of liquid into lungs and monitor for breathing difficulty. SEEK IMMEDIATE MEDICAL ATTENTION. Keep person warm and quiet.

First Aid: Inhalation

Remove to fresh air. If breathing is difficult, ensure clear airway and administer oxygen. If not breathing, apply artificial respiration or cardiopulmonary resuscitation. Keep person warm, quiet and get medical attention.

Section V. Fire Fighting Measures**Fire & Explosion Hazards**

Flammable liquid with high ignition temperature. Burning forms smoke, carbon monoxide, carbon dioxide and decomposition products of heavy hydrocarbons. Vapors may be explosive in confined spaces. Mists or sprays may be flammable at temperatures below flash point.

Extinguishing Media

Dry chemical, halon, carbon dioxide. Foam, water spray or fog are effective but may cause frothing. Do not use a water jet since it may cause the fire to spread. Use water to cool fire exposed containers and to protect personnel.

Advice for firefighters

Do not enter enclosed fire spaces without proper protective equipment. Fire fighters should wear full – face, self contained breathing apparatus and thermal protective clothing. Evacuate the area from unnecessary personnel. If a tank, tank truck or rail car is involved in fire evacuate a radius of ½ mile. Position firefighters upwind. Cool containers with water spray. If possible withdraw containers from fire area. Improper use of extinguishing media containing water may cause frothing and thus spread the fire to a larger area.

Section VI. Accidental Release Measures**Personnel precautions & protective equipment**

Personnel should wear suitable protective clothing, gloves, boots, eye and face protection, especially when handling hot material. Avoid contact with the eyes, skin and clothes. Avoid vapor and fog inhalation. No respiratory protection is needed under normal conditions with adequate ventilation. Eye protection should be worn, including chemical type goggles or face shield. Do not wear contact lenses. Provide eye wash water. In case of fire personnel should wear self – contained breathing apparatus.

Spills may result in slippery walking areas.

Eliminate all sources of ignition.

Environmental precautions

Do not discharge into drains. Do not discharge into environment. The material may be hazardous to aquatic life. The material may cause increase of chemical and biological oxygen demand of water.

Spills

Stop spill if possible. Absorb spills with inert material. Remove ignition sources. Use dikes and water booms to contain discharge. Use non – sparking tools and equipment (pumps etc). Prevent entry into sewers. Wear appropriate protective equipment.

Section VII. Handling and storage**Handling**

Provide adequate ventilation to minimize vapour concentrations. Avoid contact with skin, eye and clothing. Do not breathe dust/fume/gas/mist/vapours/spray. Keep containers closed when not in use. Avoid all unnecessary exposure. Do not eat, drink and do not smoke in areas where product is used. Remove contaminated clothing and wash before reuse. Handle in accordance with good industrial hygiene and safety procedures. Equipment handling the material should be steam cleaned prior to maintenance.

Storage

Store in grounded, tightly sealed, proper vessels away from heat, sparks, open flame and other ignition sources. Provide storage area with adequate extinguishing measures. Prevent soil and water contamination. Storage tanks should be diked.

Incompatible materials

Strong oxidizing agents. Strong acids.

Section VIII. Exposure Controls & Personal Protection**Exposure Limits Base Oil (64742-54-7)**

Mineral oil mist	ACGIH	TWA (inhalable fraction)	5 mg/m ³
DNEL / DMEL (Workers)			
Long – term systemic effects, dermal		2.9 mg /kg bodyweight / day	
Long – term systemic effects, inhalation		5.4 mg /m ³ /8h (aerosol)	
DNEL / DMEL (General Population)			
Long – term systemic effects, dermal		1.3 mg /kg bodyweight / day	
Long – term systemic effects, inhalation		1.2 mg /m ³ /day (aerosol)	

Exposure Controls

Provide storage area with adequate ventilation. Provide emergency eye wash fountains and safety showers. Use explosion proof electrical equipment. Personal protective equipment includes impermeable protective nitrile gloves, chemical goggles or face shield with safety glasses, fire retardant clothing. Use oil resistant anti slippery shoes. In case of insufficient ventilation combined gas / dust mask with filter type A/P2 should be used. In confined spaces self contained breathing apparatus should be used. Spills should be contained with dikes and / or absorbents. Entrance to sewers and streams should be prevented.

Section IX. Physical & Chemical Properties	
Physical State	Viscous Liquid
Appearance	Thick Liquid
Color	Colourless to yellow
Odour	Slight hydrocarbons
Odour threshold	No data available
pH	Not applicable
Boiling point range	600 – 1130 °F
Pour point	15 °F
Vapor Pressure	6 mm Hg at 68°F
Evaporation Rate (n-Butyl Acetate=1)	Slow – only partially volatile
Specific Gravity (water=1)	0.91 – 0.97 at 60°F
Viscosity	5 – 70 cSt at 122°F
Flash Point	356°F (Pensky – Martens, closed cup)
Auto Ignition Temperature	> 550°F
Upper Flammable Limit (UFL)	6.5% vol
Lower Flammable Limit (LFL)	0.5% vol
Relative Vapor Density (air=1)	> 1
Water Solubility	Negligible

Section X. Stability & Reactivity Information
Chemical Stability
Material stable under normal conditions.
Conditions to Avoid
Avoid ignition sources.
Incompatible materials
Strong Oxidizing Agents. Strong Acids. Heated vapors or mists may form explosive mixtures with air.
Hazardous Decomposition Products
Lower molecular weight hydrocarbons. Carbon Monoxide, Carbon Dioxide, Nitrogen Oxides, Sulfur Oxides. Thermal decomposition may produce low molecular weight gases.

Section XI. Toxicological Information
Vacuum Gasoil (64742-54-7)
LD50 oral rat > 5000 mg/kg
LD50 dermal rabbit > 5000 mg/kg
LC50 inhalation rat (mg/l) 5.53
Acute toxicity : Harmful if inhaled.
Aspiration hazard : Not classified.
Skin corrosion/irritation : Causes skin cracking due to drying and degreasing. Irritation or inflammation possible at prolonged or frequent contact.
Serious eye damage/irritation : Not classified / Not irritating
Respiratory or skin sensitisation : Not classified / Not sensitizing
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated exposure): Repeated or prolonged exposure may cause skin irritation. Prolonged exposure to vapors may cause neurotoxic disorders.

Potential Adverse human health effects and symptoms: Accidental ingestion may cause gastric disturbances and irritation of gastrointestinal tract. High concentration of vapors or mists may cause irritation of the respiratory tract mucosa, headache, dizziness, nausea. Prolonged / repetitive exposure may cause breathing disturbances, central nervous system disorders, disturbances of coordination of movement, disorientation, loss of consciousness. Prolonged/repetitive skin contact may cause skin defatting or dermatitis.

Section XII. Ecological Information

Ecotoxicity

General

Material is insoluble to water. Material is lighter than water. Spills may form a film on the surface of water which can diminish dissolved oxygen levels, harming aquatic organisms. Limited dispersion in soil.

Harmful Exposure Limits

LC50 fish > 100 mg/l 96 hours

EC50 algae > 100 mg/l, 72 hours

EC50 Daphnia > 10,000 mg/l 48 hours

NOEC Daphnia (chronic) 100 mg/l 21 days

NOEC (fish) chronic >1000 mg/l, 28 days

NOEC (mammals) 9.33 mg/ kg food

Biodegradability

Material is not easily biodegradable. Rates depend on soil moisture, bacteria and other conditions. Not likely to produce short term degradation hazardous products.

Section XIII. Disposal Considerations

Disposal must be done according to local regulations. Dispose of this material at approved waste recycling facilities. Disposal of packaging according to local regulations.

Section XIV. Transportation Information

UN

UN Number: Not Applicable

Proper Shipping Name: Not Applicable

Environmental Hazards

Not Applicable

Overland transport

Not classified as dangerous according to ADR regulations.

Not classified as dangerous according to RID regulations.

IATA / ICAO Information

Not regulated as dangerous goods for transportation.

IMDG Information

Not regulated as dangerous goods for transportation.

ADNR Information

Not classified as dangerous according to ADNR regulations.

US DOT Information

Not regulated.

Section XV. Regulatory Information

EU

EINECS: This material is listed.

US

TSCA: All components listed or exempted.
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CERCLA: No components of this product are subject to reporting requirements

SARA 302/304/311/313: No components are listed
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Section XVI. Other Information

<p>The information presented in this Material Safety Data Sheet is based on current knowledge and is believed to be complete and accurate at the time of preparation of this document. It describes the material for the purposes of health, safety and environment requirements only and shall, therefore, be used only as a guide. The data refers to a specific product and may not be valid for combined uses with other products. It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. GIT shall not be responsible for any damage or injury resulting from abnormal use or from any failure to adhere to recommended practices. Unless specifically agreed otherwise GIT does not take responsibility for use, transportation, storage, handling or disposal of the material described herein.</p>
