



## Safety Data Sheet

Prepared according to GHS

### 1. Identification

<b>Product Name</b>	Navi-Guard Turbine T Series (T 150, T 220)
<b>Product Code(s)</b>	7367, 7368
<b>Recommended Use</b>	Turbine-Hydraulic Oil
<b>Company</b>	American Refining Group, Inc. 77 North Kendall Avenue Bradford, PA 16701 www.amref.com msds@amref.com
<b>Emergency Telephone Number(s)</b>	Chemtrec 1-800-424-9300 (24 HRS) ARG: 814-368-1297 (24 HRS)
<b>Revision Date</b>	4/1/2015

### 2. Hazards Identification

<b>GHS Classification</b>	This product is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
<b>Signal Word</b>	Not applicable
<b>Hazard Statements</b>	Not applicable
<b>Other Hazard Information</b>	Not applicable
<b>GHS Pictogram</b>	Not applicable
<b>Precautionary Statements</b>	Not applicable

### 3. Composition / Information on Ingredients

CAS No.	Component	Common Name	Percent
<i>This product does not contain ingredients that are hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)</i>			

### 4. First Aid Measures

<b>Eyes</b>	Check for and remove any contact lenses. Flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Get medical attention if irritation develops.
<b>Skin</b>	In case of contact, flush skin with plenty of soap and water while removing contaminated clothing and shoes. Wash clothing before reuse. Get medical attention if irritation develops.
<b>Inhalation</b>	Move exposed person to fresh air. Get medical attention if irritation develops.

#### 4. First Aid Measures

**Ingestion**

First aid is normally not required. Get medical attention if discomfort develops.

**Note to Physicians**

No specific treatment. Treat symptomatically. Contact poison treatment specialist if large quantities have been ingested or inhaled.

#### 5. Fire Fighting Measures

**Suitable Extinguishing Media**

Use dry chemical, CO<sub>2</sub>, water spray (FOG) or foam

**Unsuitable Extinguishing Media**

Avoid solid water stream as it may scatter and spread fire.

**Specific Hazards Arising from Chemical**

Elevated temperatures can lead to the formation of irritating vapors. Decomposing products may include the following materials: Carbon dioxide and Carbon monoxide.

**Protective Equipment and Precautions for Firefighters**

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

#### 6. Accidental Release Measures

**Personal Precautions**

Put on appropriate personal protective equipment.

**Environmental Precautions**

Prevent product from entering drains. Prevent entry into waterways, sewers, basements or confined areas.

**Methods for Containment**

Stop leak if without risk.

**Methods for Cleanup**

Cover liquid spill with sand, earth or other noncombustible absorbent material. Cover powder spill with plastic sheet or tarp to minimize spreading. Pick up and transfer to properly labeled container

#### 7. Handling and Storage

**Handling Procedures**

Eating, drinking, and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist.

**Shipping and Storing Procedures**

Keep container tightly closed in a dry place. Keep away from heat. Protect from light. Keep in properly labeled containers. Keep out of the reach of children.

**Incompatibilities:**

Oxidizing Agents

#### 8. Exposure Controls / Personal Protection

**Component Exposure Limits\***

When mists/aerosols can occur the following are recommended: 5 mg/m<sup>3</sup> - ACGIH TLV (inhalable fraction), 5 mg/m<sup>3</sup> - OSHA PEL.

**8. Exposure Controls / Personal Protection**

\*Product has 0 kPa pressure at 68°F and is not expected to present any inhalation hazard at ambient conditions. Caution should be taken to prevent aerosolization or misting of this product. Oil mist, if generated, is considered hazardous according to the OSHA Hazard Communication Standard.

**Engineering Controls**

Material should be handled in enclosed vessels and equipment only if aerosolized and/or misted. Use only in adequate ventilation if this occurs. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

**Eye/Face Protection**

Safety glasses

**Skin Protection**

Normal work gloves are appropriate

**Respiratory Protection**

No special requirements under ordinary conditions of use and with adequate ventilation.

**General Hygiene**

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing.

**9. Physical and Chemical Properties**

*Note: Physical and chemical properties are provided for safety, health and environmental considerations only and may not fully represent product specifications. Please see the Product Specification Sheet for further information.*

<b>Appearance</b>	Light yellow – Amber	<b>Flammability</b>	Not available
<b>Physical State</b>	Liquid	<b>Upper/Lower Flammability Limits</b>	Not available
<b>Odor</b>	Mild	<b>Vapor Pressure (kPa at 20°C)</b>	0
<b>Odor Threshold</b>	Not available	<b>Vapor Density</b>	Not available
<b>pH</b>	Not available	<b>Relative Density (lbs/gal)</b>	7.1-7.45
<b>Melting/Freezing Point (°F)</b>	Not available	<b>Water Soluble</b>	No
<b>Initial Boiling Point (°F)</b>	Not available	<b>Partition Coefficient: n-octanol/water</b>	Not available
<b>Boiling Range (°F)</b>	Not available	<b>Auto-ignition Temperature (°F)</b>	Not available
<b>Flash Point (°F)</b>	385-550	<b>Decomposition Temperature (°F)</b>	Not available
<b>Evaporation Rate</b>	Not available	<b>Viscosity (40°C mm<sup>2</sup>/s)</b>	20-506

**10. Chemical Stability & Reactivity Information**

**Reactivity**

Polymerization will not occur

**Chemical Stability**

Stable under normal conditions

**Hazardous Reactions**

None, under normal processing.

**Conditions to Avoid**

High temperatures

**Incompatibility**

Strong acids and oxidizing materials

**Hazardous Decomposition**

Smoke, carbon monoxide, carbon dioxide, aldehydes and other products of incomplete combustion.

**Products**

### 11. Toxicological Information

#### Acute Exposure

##### Respiratory Irritation

Not expected to pose respiratory irritation. An inhalation hazard may only arise if product is aerosolized or if heated up. If material is misted or if vapors are generated from heating, exposure may cause irritation of mucous membranes and upper respiratory tract. Based on data from similar materials.

##### Eye Irritation

Not expected to cause irritation under normal use.

##### Skin Irritation

Not expected to cause irritation under normal use.

##### Sensitization

Not expected to cause skin or respiratory sensitization.

##### Aspiration Hazards

Not expected to pose an aspiration hazard if swallowed.

#### Chronic Exposure

##### Target Organ Effects

No data available to indicate product or components at greater than 1% are chronic health hazards.

##### Carcinogenicity

No data available to indicate product or any components present at greater than .1% are carcinogenic.

##### Mutagenicity

No data available to indicate product or any components present at greater than .1% are mutagenic or genotoxic.

##### Reproductive Toxicity

No data available to indicate either product or components present at greater than .1% that may cause reproductive toxicity.

##### Teratogenicity

No data available to indicate product or any components contained at greater than .1% may cause birth defects.

#### Component Analysis – LD50 / LC50

Inhalation LC50 Rat	>20 mg/L 4h
Oral LD50 Rat	>5000 mg/kg
Dermal LD50 Rabbit	>2000 mg/kg

### 12. Ecological Information

#### Component Analysis- Ecotoxicity – Aquatic Life

Duration/Test/Species  
96 Hr LC50  
Pimephales promelas

Concentration/Conditions  
Not available mg/L

Persistence & Degradability	Not determined
Bioaccumulation Potential	Not determined
Soil Mobility	Not determined
Other Adverse Effects	Not determined

**13. Disposal Considerations**

**Disposal Instructions**

The generation of waste should be avoided or minimized wherever possible. Treatment, storage, transportation and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations.

**14. Transportation Information**

<b>Emergency Response Guide No.</b>		171		<i>North American Emergency Response Guide Book</i>	
	UN Number	Shipping Name (technical name)	Hazard Class	Packing Group	
<b>U.S. DOT Bulk</b>		Not Regulated			
<b>U.S. DOT Non-Bulk</b>		Not Regulated			
<b>IATA</b>		Not Regulated			
<b>IMDG</b>		Not Regulated			

**15. Regulatory Information**

**SARA Extremely Hazardous Substances (Sections 302 & 304)**

This product does not contain greater than 1% of 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 Section 313**

This product does not contain greater than 1.0% of the substances subject to the reporting requirements of Section 313 of Title III of the

Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

**SARA Section 311 & 312 Classifications**

**Health Hazard** No  
**Physical Hazard** No

**CERCLA**

This product does not contain any “hazardous substances” listed under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) in 40 CFR Part 302, Table 302.4.

**California Prop 65**

This product is not routinely tested to determine chemical(s) known to the state of California to cause cancer and/or birth defects based on maximum impurity levels of components.

**Global Chemical Inventories**

<b>Inventory</b>	
US TSCA	Listed

Revision #:0

EU	Listed
Japan	Not available
Australia	Listed
New Zealand	Not available
Canada	Listed
Switzerland	Not available
Korea	Listed
Philippines	Listed
China	Listed
Taiwan	Not available

**16. Other Information**

**US NFPA Ratings**

Health	Fire	Reactivity
0	1	0

**HMIS Ratings**

Health	Fire	Physical Hazards
0	1	0

**Revision Date**

17 July 2018

**Revision Reason**

New SDS

*The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.*

**End of SDS**