PURE GUARD XL R&O 46 TURBINE OIL



Safety Data Sheet Conforms to HCS 2012 (29 CFR 1910.1200)

Section 1. Identification

Product identifier	
Product Name:	PURE GUARD XL R&O 46 TURBINE OIL
Other names:	F143 – XL R&O ISO 46
Part/Product Number(s):	
Material Use:	R&O Turbine oil, multi-purpose lubricant
Uses advised against:	Not for internal engine use.
Manufacturer:	Omni Specialty Packaging, LLC 10399 Hwy 1 South Shreveport, LA 71115 1-318-524-1100
Issuing date:	May 8, 2015
Revision date:	October 15, 2015
Revision number:	001
Company contact:	OMNI EHS Department; E-Mail: <u>sds@osp.cc;</u> Contact phone: 318-524-1100 (Monday-Friday, 8:00 AM – 4:00 PM, CST)
In case of emergency:	CHEMTREC: Within USA and Canada: 1 (800) 424-9300 (24/7) CHEMTREC: Outside USA and Canada: +1 703-527-3887 (24/7)

Section 2. Hazards Identification

OSHA/HCS Status:	This product is not considered hazardous by the 2012 OSHA Hazard Communication Standard (2 CFR 1910.1200).			
Classification of the Substance or Mixture:	Not classified			
GHS Label Elements				
Hazard pictograms:	None			
Signal word:	None			
Hazard statement:	None			
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:	Not applicable			
Response:	Not applicable			
Storage:	Not applicable			
Disposal:	Not applicable			
Hazards not otherwise cla	ssified (HNOC): Defatting to the skin.			

Section 3. Composition/Information on Ingredients

Petroleum mineral oil lubricant base stock with proprietary performance additives mixture.

Substance/Mixture: Mixture		
Components Name	CAS number	<u>Weight %*</u>
Lubricant Base Oil (Petroleum) Highly refined mineral oils (C15-C50)	Various	90 – 99.9
R&O Fluid Additive Mixture	Proprietary	0.1-10

This product does not contain known hazardous materials at the \geq 1% level or known carcinogens at the \geq 0.1% level as defined by 29 CFR 1910.1200.

* The exact percentage of composition has been withheld as a trade secret.

Section 4. First Aid Measures

Description of necessary first aid measures

General Advice:	No specific first aid measures are required. Get medical attention if irritation develops and persists.
Eye contact:	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Check for and remove any contact lenses. Get medical attention if irritation develops and persists.
Skin contact:	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get medical attention if irritation or allergic reaction develops and persists.
Inhalation:	In case of inhalation of decomposition products in a fire, symptoms may be delayed. If inhaled, remove to fresh air. The exposed person may need to be kept under medical surveillance for 48 hours. Get medical attention if symptoms occur.
Ingestion:	Do NOT induce vomiting. Drink plenty of water. If symptoms persist, call a physician.
Protection of first-aiders:	No action shall be taken involving any personal risk or without suitable training. Remove all sources of ignition. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Wear personal protective clothing (see section 8).

Most important symptoms and effects, both acute and delayed

See Section 11 for more detailed information on health effects and symptoms.

Most Important Symptoms and Effects:	Personnel with pre-existing skin disorders should avoid contact with this product. Under normal use conditions, no adverse effects to health are known.
Eye contact:	Not expected to cause prolonged or significant eye irritation.
Skin contact:	Contact with skin is not expected to cause prolonged or significant irritation. Contact with skin is not expected to cause an allergic skin response. Not expected to be harmful to internal organs if absorbed through the skin.
Inhalation:	Not expected to be harmful if inhaled. Contains petroleum-based mineral oil. May cause respiratory irritation or other pulmonary effects following prolonged or repeated inhalation of oil mist at airborne levels above the recommended oil mist exposure limit. Symptoms of respiratory irritation may include coughing and difficult breathing.
Ingestion:	Not expected to be harmful if swallowed.
Note to physician:	Treat symptomatically.

Section 5. Fire-Fight	ing measures
Uniform Fire Code:	Class IIIB
Flash Point:	>137.8°C (>280°F)
Extinguishing Media	
Suitable Media:	In case of fire, use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use water fog, alcohol resistant foam, dry chemical, carbor dioxide (CO2) extinguisher or spray.
Unsuitable Media:	CAUTION: Use of water spray when fighting fire may be inefficient.
Specific Hazards Arising from	
the Chemical:	Keep product and empty container away from heat and sources of ignition as product will burn. Contact with strong oxidizers may cause fire. In the event of fire, cool tanks with water spray. Fire residues and contaminated fire extinguishing water must be contained, prevented from being discharged to any waterway, sewer or drain and disposed of in accordance with local regulations.
Hazardous Combustion Products:	Combustion products may include the following: Carbon dioxide (CO2) Carbon monoxide (CO), and Nitrogen oxides.
Protection of Fire Fighters:	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

Section 5. Fire-Fighting Measures

Section 6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel:	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Do not touch or walk through spilled material. Put on appropriate personal protective equipment. Floors may be slippery; use care to avoid falling.
For emergency responders:	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. See also the information in "For non-emergency personnel".
Environmental precautions:	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). See Section 12 for ecological information.

Methods and materials for containment and cleaning up

- Small Spills: Stop leak if without risk. Move containers from spill area. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large Spills: Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Contain and collect spillage with non- combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor.

NOTE: If RQ (Reportable Quantity) is exceeded or if spills enter a body of water, report immediately to the USEPA's National Response Center at (800) 424-8802. Check with your local and state regulators regarding their reporting requirements.

Section 7. Handling and Storage

Precautions for safe handling

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Protective measures:
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Eye protection and face shield should be used if material is used under conditions that

Advice on general	increase the chances of splattering. Put on appropriate personal protective equipment (see Section 8). Keep out of reach of children.
occupational hygiene:	Do not get in eyes, on skin or on clothing. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Wash thoroughly after handling. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Conditions for safe storage,	
Including any incompatibilities:	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials, strong oxidizing agents (see Section 10) and food and drink. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Use appropriate containment to avoid environmental contamination. Avoid contaminating soil or releases into sewage or drainage systems and bodies of water.
Bulk material handling:	Static Hazard: Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding may be necessary but may not, by themselves, be sufficient.

Section 8. Exposure Controls/Personal Protection

Control parameters

Chemical name		ACGIH		OSHA		NIOSH	
		TLV	STEL	PEL	STEL	TWA	Ceiling
Lubricant Base Oil (Petroleum)		5 mg/m3	10 mg/m3	5 mg/m3			
Highly refined mineral oils (C15-C50)		(mist)	(mist)	(mist)	_	_	-
Appropriate engineering controls:	Good general ventilation should be sufficient to control worker exposure to airborne contaminants. Emergency shower and eyewash station.						
Environmental exposure controls:	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.					n. In some	
Individual protection measures							
Hygiene measures:	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. Wash contaminated clothing before reusing.						
Eye/Face Protection:	Wear safety glasses with side shields. A face shield may be necessary under some conditions.						
Skin and Body Protection							
Hand protection:	Wear protective gloves if prolonged or repeated contact is likely. Wear chemical resistant gloves. Recommended: Nitrile gloves. Consult your supervisor or Standard Operating Procedure (SOP) for special handling instructions.						
Body protection:	No protective equipment is needed under normal use conditions. For non-routine tasks, personal protection equipment for the body should be selected based on the task being performed and the risks involved.						
Other skin protection:	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved.						
Respiratory protection:	No respiratory protection is normally required. If user operation generates an oil mist, determine if airborne concentrations are below the occupational exposure limit for mineral oil mist. If not, wear an approved respirator that provides adequate protection from measured concentrations of this material. The correct choice of						

respiratory protection depends upon the chemicals being handled, the conditions of work and use, and the condition of the respiratory equipment. For air-purifying respirators use a particulate cartridge. Use a positive pressure air-supplying respirator in circumstances where air-purifying respirators may not provide adequate protection.

adequate protection. **Section 9. Physical and Chemical Properties** Appearance (Typical or Target) Liquid **Physical State:** Color: Amber Petroleum like Odor: **Odor threshold:** Not available pH: Not applicable **Boiling Point:** Not available Flash Point (Closed cup): >137.8°C (>280°F) (Typical or Target) Evaporation rate (Butyl acetate = 1): Not available Flammability (solid, gas): Not applicable. Based on - Physical state Flammable) Limit in Air Not available Not available Vapor pressure: Vapor density (Air = 1): >1 **Relative density:** 0.86 - 0.91 g/l at 15°C (Typical or Target) **Solubility:** In soluble in water Partition coefficient (n-Octanol/water): Not available Auto-ignition temperature: Not available **Decomposition temperature:** Not available Viscosity – Kinematic (cSt (mm2/s)@ 40°C): 28.8 - 242 Viscosity - Kinematic (cSt (mm2/s) @ 100°C): 5.2 - 30 VOC %: 0 %

Section 10. Stability and Reactivity

Reactivity:	Not reactive under normal storage conditions			
Chemical stability:	Stable under normal storage conditions			
Possibility of hazardous reactions:	None under normal processing.			
Hazardous polymerization:	Hazardous polymerization does not occur.			
Conditions to avoid:	Heat, flames and sparks.			
Incompatible materials:	Oxidizing agents and open flames.			
Hazardous decomposition products:	May include: Fumes, Oil vapors, Smoke, Carbon Oxides (including carbon monoxide and carbon dioxide), Aldehydes, Nitrogen oxides, and incomplete combustion products.			

Section 11. Toxicological Information

Information on toxicological effects

Substance/Mixture

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Acute Toxicity	Oral LD50	Dermal LD50	Inhalation LC50		
Lubricant Base Oil (Petroleum)	>2000 mg/Kg (rat)	>2000 mg/Kg (rabbit)	>2.18 mg/L (rat) 4h (mist)		
Highly refined mineral oils (C15-					
C50) Mixture - Typical					
Aspiration hazard:	Not expected to be an aspi	ration hazard.			
Skin Corrosion/Irritation:	No known significant effects or critical hazards.				
Serious Eye Damage/Irritation:	No known significant effects or critical hazards.				
Skin Sensitization:	No known significant effects or critical hazards.				
Respiratory Sensitization:	No known significant effects or critical hazards.				
Specific Target Organ Toxicity					
(Single Exposure) - STOT-SE:	No known significant effects or critical hazards.				
Specific Target Organ Toxicity					
(Repeated Exposure) – STOT-RE:	No known significant effects or critical hazards.				

Carcinogenicity:	No known significant effects or critical hazards.
Germ Cell Mutagenicity:	No known significant effects or critical hazards.
Reproductive Toxicity:	No known significant effects or critical hazards.

Information on Toxicity Effects of Compounds

Lubricant Base Mineral Oil (Petroleum)

Mineral oils are known to cause cancer because of carcinogenic components (e.g. Benzene). The lubricant base mineral oils in this product have been highly refined by a variety of processes including severe solvent extraction, severe hydro cracking or severe hydro treating to reduce aromatics and improve performance characteristics. The oils in this product meet the IP-346 criteria of less than 3 percent PHA's and are not considered to be a carcinogen by the International Agency for Research on Cancer.

None of the oils in this product require a cancer warning under the OSHA Hazard Communication Standard (29 CFR 1910.1200). These oils have not been listed in the National Toxicology Program (NTP) Annual Report nor have they been classified by the International Agency for Research on Cancer (IRAC) as: carcinogenic to humans (Group 1), probably carcinogenic to humans (Group 2A), or possibly carcinogenic to humans (Group 2B). These oils have not been classified by the American Conference of Governmental Industrial Hygienists (ACGIH) as: confirmed human carcinogen (A1), suspected human carcinogen (A2), or confirmed animal carcinogen with unknown relevance to humans (A3).

Section 12. Ecological Information

The information is based on data available for the material, the components of the material, and similar materials.

Ecotoxicity: No testing has been performed by the manufacturer. Ecotoxicity hazard is based on an evaluation of data for the components or a similar material. Not expected to be harmful to aquatic organisms.

Mobility:	Base oil component – Low solubility and floats and is expected to migrate from water to land. Expected to partition to sediment and wastewater solids.
Soil/water partition coefficient (Koc):	Not available.
Persistence and degradation Biodegradation:	The material is not expected to be readily biodegradable. The biodegradability of this material is based on an evaluation of data for the components or a similar material.
Bioaccumulative potential Bioaccumulation:	This product is not expected to bioaccumulate through food chain in the environment.
Other adverse effects:	No known significant effects or critical hazards.
Other ecological information:	Spills may form a film on water surfaces causing physical damage to organisms. Oxygen transfer could also be impaired.

Section 13. Disposal Considerations

Disposal recommendations based on material supplied.

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Waste treatment methods:	This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). Consult the appropriate state, regional, or local regulations for additional requirements. The generation of waste should be avoided or minimized wherever possible.
Product waste:	Significant quantities of waste product residues should not be disposed of via the sanitary sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Incineration or landfill should only be considered when recycling is not feasible. Oil collection services are available for used oil recycling.
Contaminated packaging:	Empty containers or liners may retain some product residues and could pose a potential fire and explosion hazard. Do not cut, puncture, or weld containers.

Other information: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

eneral information: Petroleum lubricating oil - Not regulated.					
	DOT Classification	IMDG	ΙΑΤΑ		
Hydraulic Fluid	Not Regulated	Not Regulated	Not Regulated		
Special precautions for use	secure. Ensure that pers accident or spillage.		osed containers that are upright a now what to do in the event of an		
Section 15. Regulations	atory Information				
Jnited States Inventory (TS	CA 8b): All components	are listed or exempted.			
ARA 302/304: No products	were found.				
Fire Hazard: Sudden Rele Reactivity Ha SARA 313:	ronic) Health Effects: ase of Pressure Hazard:	No No No No he EPCRA 313 list:			
Supplier notification:	This product does not contain any hazardous ingredients at or above regulated thresholds.				
CWA (Clean Water Act):	This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)				
<u>CERCLA</u> :	This material, as supplied, does not contain any substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability A (CERCLA) (40 CFR 302).				
<u>State Regulations</u> Massachusetts: New Jersey: Pennsylvania: California Proposition 65:	None of the components are at or above regulated thresholds. Petroleum Oil (Motor Oil) None of the components are at or above regulated thresholds. WARNING: This product contains a chemical known to the State of California to cause canc None				
<u>Canada</u> WHMIS Hazard Class:	Not classified. This Product Is Not Controlled Under WHMIS (Canada)				

International Chemical Inventories:

All components comply with the following chemical inventory requirements: DSL (Canada)

Section 16. Other Information

NFPA Rating:	Health Hazard – 1	Flammability – 1	Instability/Reactivity – 0
HMIS Rating:	Health Hazard – 1	Flammability – 1	Physical Hazards – 0

(NFPA & HMIS Hazard Rating Key: 0 - Minimum Hazard; 1 - Slight Hazard; 2 - Moderate Hazard; 3 - High Hazard; 4 - Extreme Hazard; * - Chronic Hazard Indicator, & PPE - Personal Protective Equipment Index A to L. These values are obtained using the guidelines or

published evaluations prepared by the National Fire Protection Association (NFPA) or the National Paint and Coating Association (for HMIS or Hazardous Material Identification System).

Key to abbreviations:

OSHA = Occupational Safety and Health Administration

- ACGIH= American Conference of Industrial Hygienists
- ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor
- CAS = Chemical Abstracts Service Registry Number
- cSt = Centistroke (mm2/s)
- GHS = Global Harmonized System of Classification and Labeling Of Chemicals.
- IATA = International Air Transport Association
- IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient OEL = Occupational Exposure Limit SDS = Safety Data Sheet STEL = Short term exposure Limit UN = United Nations UN Number = United Nations Number, a four digit number assigned by the United Nations Committee of Experts on the Transportation of Dangerous Goods

Prepared By: **OMNI Specialty Packaging EH&S Department**

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Status: Final

Revision Note: Revision 001 - CHEMTREC phone number update.

Consumer Product Improvement Act of 2008, General Conformity Certification

For Consumer Product Packages: This product has been evaluated and is certified to be labeled and packaged in compliance with the applicable provisions of the Federal Hazardous Substance Act as stated in 16 CFR 1500 and enforced by the Consumer Product Safety Commission. Where applicable the products that require Child Resistant Closures are packaged in accordance with the Poison Prevention Packaging Act as stated in 16 CFR 1700 and enforced by the Consumer Product Safety Commission. All closures have been tested in accordance with the latest protocols. No testing is required to certify compliance with the provisions. The date of the manufacturing is stamped on the product container.

Disclaimer

All reasonably practicable steps have been taken to ensure the information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text. This information is furnished upon condition that the person receiving it shall make their own determination of the suitability of the material for their particular purpose.

End of Safety Data Sheet