SAFETY DATA SHEET

FOODSAFE® FMO 220

GEAR & FOOD MACHINERY OIL NSF H-1 ISO 220

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name:	FOODSAFE® FMO 220
Trade name:	FOODSAFE® FMO 220
Supplier contact information:	PETROCHEM, INC. 333 North Randall Road St. Charles, IL 60174 Tel: 630-513-6360 Fax: 630-513-8324 Email: info@petrochem1.com www.petrochem1.com
Emergency Contact Information:	CHEMTREC (800)-424-9300 International (703) 527-3887
Chemical Family / Use:	Technical Grade, Food Grade Gear & Food Machinery Lubricant
Date Prepared:	03/26/2015
Revision Date/Version:	06/01/2022 Rev. 3

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture	Not classified as hazardous.
Classification according to Regulation (EC) No.1272/2008 [CLP]:	Not Classified
Classification according to Directive 67/548/EEC or 1999/45/EC:	Not Classified
Adverse effects:	At high temperatures, vapors may be generated which may be considered hazardous at concentrations exceeding 5 mg/m3.
OSHA Regulatory Status	This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200) Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)
2.2. Label Elements:	
NFPA Code:	Health-0, Flammability-1, Reactivity-0
HMIS Code:	Health-0, Flammability-1, Reactivity-0
2.3 Other hazards:	These substances/mixtures do not meet the PBT/vPvB criteria of REACH, annex XIII. Prolonged/repetitive skin contact may cause skin defatting or dermatitis; ingestion may have laxative effect. No other significant health hazards identified.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS	EC No.	Weight %	HS Tariff Classification No.
Mineral Oil	8042-47-5	232-45-9	99%	2710.00.4530
Polybutene	9003-29-6	500-004-7	1%	3902.90.0010

Antioxidant, Antiwear, Antirust Additives

4. FIRST AID MEASURES

4.1 General Information	
Ingestion:	If uncomfortable or symptomatic, seek medical assistance promptly.
Skin:	Wash exposed area of skin with water. If burned by contact with hot material, cool material as quickly as possible with water. See a physician for burn treatment, irritation or allergic reaction.
Inhalation:	If adverse effects occur, remove to uncontaminated area. Get medical attention if symptoms persist.
Eyes:	Flush immediately with large amounts of water. If irritation occurs, call a physician
Notes to Physician:	Treatment based on sound judgment of physician and individual reactions of patients.
4.2 Most important symptoms and effects, acute and delayed	
Symptoms/injuries:	High vapor concentration may induce headache, nausea, dizziness and respiratory irritation. Prolonged/repetitive skin contact may cause skin defatting or dermatitis.

5. FIRE FIGHTING MEASURES

5.1 Extinguishing media:	Dry chemical, carbon dioxide, foam, steam or water fog, agents approved for Class B hazards.
Unsuitable extinguishing media:	Water streams will scatter liquid and spread fire, but may be used to keep fire-exposed containers and surroundings cool.
5.2 Special hazards:	
Fire Hazard:	May create dense smoke during combustion Mild fire hazard when heated above its flash point; material must be preheated before ignition will occur (OSHA Class IIIB). Incomplete burning can produce carbon monoxide and/or carbon dioxide and other harmful products.
5.3 Advise for firefighters:	
Firefighting instruction:	May create dense smoke during combustion
Firefighting protection:	Mild fire hazard when heated above its flash point; material must be preheated before ignition will occur (OSHA Class IIIB). Incomplete burning can produce carbon monoxide and/or carbon dioxide and other harmful products. Firefighters should wear full bunker gear, including a positive pressure self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures	
Personnel:	Wear appropriate breathing apparatus, protective clothing gloves and eye/face protection. No smoking. Refer to section 8.
Emergency procedures:	Remove all sources of ignition. Keep away from heat/sparks/open flames/hot surfaces.
6.2 Environmental precautions	Prevent spills from entering sewers and public waters. Treat as oil spill.
6.3 Containment/ Cleanup	
Containment:	Dike around spill; have oil-absorbent materials readily available.
Cleanup:	Remove mechanically or contain on an absorbent material such as dry sand or vermiculite and dispose of in accordance with current applicable regulations.

7. HANDLING AND STORAGE

7.1 Handling	No special requirements; observe good industrial hygiene practices.
7.2 Storage	Do not store in open or unlabeled containers. Store away from strong oxidizing agents or combustible material.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters						
Limits:	**CAS**	**ACGIH TLV-TWA**	**ACGIH TLV-STEL**	**OSHA PEL**	**OSHA PEL-STEL**	**Units**
Mineral Oil	8042-47-5	5 mg/m3 (oil mist)	n/a	5 mg/m3 (oil mist) (1989) (1971)	n/a	Ppm

8.2 Exposure Controls	Control airborne concentrations below the exposure guidelines. Provide local exhaust or general room ventilation to minimize vapor concentrations. Provide emergency eye wash fountains and safety showers.
Eye:	Wear protective goggles or face shield if splashing is possible.
Skin:	Wear protective gloves/clothing
Inhalation:	Avoid breathing mist. If ventilation is inadequate, use NIOSH/MSHA certified respirator to protect against mist.
Environmental controls:	Avoid release to the environment. Notify authorities if product enters sewers or public waters.
Engineering Controls:	None required under normal conditions.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Colorless oily viscous liquid
Odor	Slight odor
Color	Clear
Odor threshold	No information available

Property	**Values**
pH	Not applicable
Melting point/freezing point	Not applicable
Boiling pint	N/A
Flash point (Cleveland Open Cup)	430°F (221°C)
Evaporation rate	No information available
Flammability (solid, gas)	No information available
Upper/lower flammability or explosive limits	No information available
Vapor pressure	< 1.0 mmHg @ 20°C (68°F)
Vapor density	>1
Relative density	No information available
Specific Gravity	0.855 - 0.894 @ 25°C/25°C (77°F)

Property	**Values**
Auto ignition temperature	No information available
Decomposition temperature	No information available
Kinematic viscosity cSt @ 40°C	220
Dynamic viscosity	No information available
Explosive properties	No information available
Oxidizing properties	No information available
Partition coefficient: n-octanol/water	No information available
Other information	
Softening point	No information available
Molecular weight	No information available
VOC Content (%)	No information available

Water solubility (20°C)	Negligible in water (below 0.1%); soluble in hydrocarbons	**Density**	No information available
Solubility in other solvents	No information available	**Bulk density**	No information available
Pour Point:	< 32°F		

10. STABILITY AND REACTIVITY

10.1 Reactivity	Unknown
10.2 Chemical Stability	Generally stable
10.3 Hazardous reactions	Hazardous polymerization will not occur
10.4 Conditions to avoid	Extreme heat; contact with chlorine, fluorine, and other strong oxidizers and acids.
10.5 Incompatible materials	Chlorine, fluorine, and other strong oxidizers and acids
10.6 Hazardous decomposition products	None identified
10.7 Hazardous polymerization	Will not occur

11. TOXICOLOGICAL INFORMATION

11.1 Toxicity	Data following is based on information from similar products, the ingredients, technical literature, and/or professional experience; Avatar Corporation does not do testing on animals. No component of these products present at levels > 0.1% is identified as a carcinogen by the U.S. National Toxicology Program, U.S. Occupational Safety and Health Act, or the International Agency on Research on Cancer (IARC).
Dermal (rabbits):	Testing not conducted
Oral (rats):	Testing not conducted
Eye Irritation (rabbits):	Testing not conducted
Skin Irritation:	Testing not conducted

12. ECOLOGICAL INFORMATION

12.1 Ecological Information	No definitive information available on ecological impact if product is released to the environment.

13. DISPOSAL INFORMATION

13.1 Waste treatment methods	Disposal must be in accordance with applicable federal, state, or local regulations. "Empty" drums should not be given to individuals.

14. TRANSPORT INFORMATION

14.1 General Information	Not regulated by U.S. DOT, Canadian TODG, IMO/IMDG, ICAO/IATA, ADR/RID

15. REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

TSCA Inventory Status:	All components of this product are listed on the TSCA chemical inventory.
EA REACH	Pre-registered
DSL/NDSL	Complies
AICS	Complies
China	Complies
Korean (ECL) Inventory Status:	Listed on SCL
Japanese (MITI) Inventory Status:	Not Available

Philippines (PICCS) Inventory Status:	All components are listed on PICCS
EINECS Inventory Status:	All components are listed on EINECS

Legend:
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

Federal Regulatory Status:	
CERCLA Sections 102A/103 Hazardous Substances:	Not reportable
SARA Title III Section 302 Extremely Hazardous Substances	Not regulated
SARA Title III Sections 311/312 Hazardous Categorization:	
SARA Title III Section 313:	No hazardous by OSHA under 29 CFR Part 1910.1200(d).
FOOD CONTACT STATUS	Compliant
FDA 21 CFR 178.3570:	Compliant
USDA: H1 Status	Compliant
Kosher Certification	Compliant
California Proposition 65:	NONE: This product does not contain detectable amounts of any chemical known to the State of California to cause cancer; nor birth defects or other productive harm.

15.2 Chemical Safety Assessment	No information available.

16. OTHER INFORMAION

Issue Date: 03/26/2015
Revision Date: 06/01/2022
Version: 3
Revision Note: Not applicable

General Disclaimer

This material safety data sheet and the information it contains are offered in good faith as accurate. We have reviewed any information contained in this data sheet, which we received from sources outside our company. We believe that information to be correct but cannot guarantee its accuracy or completeness. Health and safety precautions in this data sheet may not be adequate for all individuals and/or situations. It is the user's obligation to evaluate and use product(s) safely and to comply with all applicable laws and regulations. No statement made in this data sheet shall be construed as a permission or recommendation for the use of any product in a manner that might infringe existing patents. No warranty is made, either expressed or implied.