MANUFACTURED FOR: GROWMARK, Inc. 2200 SOUTH AVE. COUNCIL BLUFFS, IA 51503 800-798-6457

FS SYN EP INDUSTRIAL GEAR OIL ISO150, 220, 320, 460, 680

Section 1. Identification Date Version		: 10/30/2016 : 7	
GHS product identifier	: FS SYN EP INDUSTRIAL GEAR OIL ISO150, 220, 320, 46	80, 660	
Code Product type	: SEP150, SEP220, SEP320, SEP460, SEP 680 : Liquid.		
Identified uses	: Lubricating Fluid. Not to be misted.		
Manufacturer	 SEVERUS INC. 1101 Susquehanna Ave Superior, WI 54880 Tel: +1 715-395-0946 		
Initial Supplier (Canada)	: AMSOIL INC. Bordner, Ladner, Gervais Scotia Plaza, 40 King St W Toronto, ON, Canada M5H 3Y4 Tel: +1 416-367-6547		
Emergency telephone number (with hours of operation)	: CHEMTREC: Within USA and Canada: 1-800-424-9300;		

Section 2. Hazards identification

OSHA!HCS status Classification of the substance or mixture	 This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200). SKIN SENSITIZATION - Category 1
GHS label elements Hazard pictograms	
Signal word Hazard statements <u>Precautionary statements</u>	: Warning : May cause an allergic skin reaction.

Prevention	Wear protective gloves. Avoid breathing vapor. Contaminated work clothing must not be allowed out of the workplace.
Response	: IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical attention.
Storage	Not applicable.
Disposal	Dispose of contents and container in accordance with all local, regional, national and international regulations.
Hazards not otherwise clas	ssified (HNOC)
Physical hazards not otherwise classified (PHNOC)	: None known.
Health hazards not otherwise classified (HHNOC)	: None known.

Section 3. Composition/information on ingredients

Substance/mixture	: Mixture
Other means of	: Not available.
identification	

CAS number/other identifiers

CAS number	: Not applicable.	
Product code	: SEP150, SEP220, SEP320, SEP460, SEP 680	
Ingredient name	%	CAS number
Long-chain alkyl amine	0.1 - 1	-

I Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessa	ry first aid measures
Eye contact	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20 minutes. Get medical attention if irritation occurs.
Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin contact	Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 20 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and

delayed Potential acute he	ealth effects
Eye contact	: No known significant effects or critical hazards.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: May cause an allergic skin reaction.
Ingestion	: No known significant effects or critical hazards.
Over-exposure signs/sym	nptoms
Eye contact	: No known significant effects or critical hazards.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: Adverse symptoms may include the following: irritation redness
Ingestion	: No known significant effects or critical hazards.
Indication of immediate me	edical attention and special treatment needed, if necessary
Notes to physician	 Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	: No specific treatment.
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media	
Suitable extinguishing media	: Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media	: None known.
Specific hazards arising from the chemical	: In a fire or if heated, a pressure increase will occur and the container may burst.
Hazardous thermal decomposition products	: No specific data.
Special protective actions for 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.
Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, pro-	tective 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. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responde	rs : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non- emergency personnel".
Environmental precaution	s : 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).
Methods and materials for	containment and cleaning up
Spill	: Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. 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 (see Section 13). Dispose via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling		
Protective measures	: Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Avoid contact with used product. Do not reuse container.	
Advice on general occupational hygiene	: 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. 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 (see Section 10) and food and drink. 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. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.	

Section 8. Exposure controls/personal protection

Control parameters							
Occupational exposure limits							
Under conditions which may generate mists, the following exposure limits are recommended: ACGIH TLV TWA: 5 mg/m ³ ; STEL: 10 mg/m ³ .							
United States							
None known.							
<u>Canada</u>							
Occupational exposure limit	<u>is</u>						
None.							
Appropriate engineering controls	: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.						
Environmental exposure controls	: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.						

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. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves can not be accurately estimated.

Body protection	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Other skin protection	: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

Appearance	
Physical state	: Liquid.
Color	: Yellow.
Odor	: Sulfur. [Slight]
Odor threshold	: Not available.
рН	: Not available.
Melting point	: -46 to -30°C (-50.8 to -22°F)
Boiling point	: Not available.
Flash point	: Open cup: 234 to 244 °C (453.2 to 471.2 °F) [Cleveland.]
Evaporation rate	: Not available.
Flammability (solid, gas)	: Not available.
Lower and upper explosiv (flammable) limits	re: Not available.
Vapor pressure	: Not available.

Vapor density Relative density	Not available. : 0.8473 to 0.854
Solubility	: Not available.
Partition coefficient: n- octanol/water	: Not available.
Auto-ignition temperature	: Not available.
Decomposition temperature :	Not available.
Viscosity	: Kinematic: 0.208 to 0.718 cm ² /s (20.8 to 71.8 cSt) (100°C) Kinematic: 1.514 to 6.796 cm ² /s (151.4 to 679.6 cSt) (40°C)
Volatility	: Not available.

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: No specific data.
Incompatible materials	: Reactive or incompatible with the following materials: oxidizing materials.

Section 11. Toxicological information

Information on toxicological effects Acute toxicity There is no data available. Irritation/Corrosion There is no data available. Sensitization There is no data available. Carcinogenicity There is no data available. Specific target organ toxicity (single exposure) There is no data available. Specific target organ toxicity (repeated exposure)

Name		Category	Target organs
Long-chain alkyl amine		Category 2	Not determined
Aspiration hazard			
There is no data available.			
nformation on the likely routes of exposure	: Dermal contact. Eye co	ontact. Inhalation. Inc	gestion.
Potential acute health effects	<u>5</u>		
Eye contact	: No known significant e	ffects or critical haza	rds.
Inhalation	: No known significant e	ffects or critical haza	rds.
Skin contact	: May cause an allergic	skin reaction.	
Ingestion	: No known significant e	ffects or critical haza	ards.
Symptoms related to the ph	ysical, chemical and toxi	cological characteri	stics
Eye contact	: No known significant e	ffects or critical haza	rds.
Inhalation	: No known significant e	ffects or critical haza	rds.
Skin contact	: Adverse symptoms ma irritation redness	ay include the following	ng:
Ingestion	: No known significant e	effects or critical haza	ards.
Delayed and immediate effe	ects and also chronic effe	cts from short and lo	ong term exposure
Short term exposure			
Potential immediate effects	: No known significant e	ffects or critical haza	ards.
Potential delayed effects Long term exposure	: No known significant ef	fects or critical hazar	ds.
Potential immediate effects	: No known significant e	ffects or critical haza	ards.
Potential delayed effects	: No known significant ef	fects or critical hazar	ds.
Potential chronic health eff	<u>ects</u>		
eneral	: Once sensitized, a set to very low levels.	vere allergic reaction	may occur when subsequently exposed
Carcinogenicity	: No known significant ef	fects or critical hazar	ds.
Mutagenicity	: No known significant ef	fects or critical hazar	ds.
Teratogenicity	: No known significant ef	fects or critical hazar	ds.
Developmental effects	: No known significant ef	fects or critical hazar	ds.
Fertility effects	: No known significant ef	fects or critical hazar	ds.
Numerical measures of toxic	ity		
Acute toxicity estimates	<u></u>		
There is no data system			

There is no data available.

Section 12. Ecological information

Toxicity

There is no data available.

Persistence and degradability

There is no data available.

Bioaccumulative potential	
There is no data available.	
Mobility in soil	
Soil/water partition coefficient (Koc)	: There is no data available.
Other adverse effects	: No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT	TDG	IMDG	ΙΑΤΑ
UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-	-
Transport hazard class(es)	-	-	-	-
Packing group	-	-	-	-
Environmental hazards	No.	No.	No.	No.
Additional information	-	-	-	-

AERG : Not applicable.

Special precautions for user : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according : Not available. to Annex II of MARPOL and the IBC Code

Section 15. Regulatory information

U.S. Federal regulations	 United States inventory (TSCA 8b): All components are listed or exempted. Clean Water Act (CWA) 307: Naphthalene; Benzene; Ethylbenzene 			
	Clean Water Act (CWA) 311: Naphthalene; Propylene oxide; Phosphoric acid; Benzene; Ethylbenzene			
Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)	: Listed			
Clean Air Act Section 602 Class I Substances	: Not listed			
Clean Air Act Section 602 Class II Substances	: Not listed			
DEA List I Chemicals (Precursor Chemicals)	: Not listed			
DEA List II Chemicals (Essential Chemicals)	: Not listed			
SARA 302/304				

Composition/information on ingredients

		SARA 302 TPQ		SARA 304 RQ	
Name	EHS	(lbs)	(gallons)	(lbs)	(gallons)
Ethylene oxide Propylene oxide	Yes. Yes.	1000 10000	- 1444.3	10 100	- 14.4

SARA 304 RQ

: 4000000 lbs / 18160000 kg [5670308.5 gal / 21464452.5 L]

SARA 311/312 Classification

: Immediate (acute) health hazard

Composition/information on ingredients

Name	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
Long-chain alkyl amine	No.	No.	No.	Yes.	Yes.

SARA 313

No products were found.

State regulations

Massachusetts

New York : None of the components are listed.

New Jersey : None of the components are listed.

Pennsylvania

: None of the components are listed.

: None of the components are listed.

California Prop. 65

WARNING: This product contains less than 0.1% of a chemical known to the State of California to cause cancer. WARNING: This product contains less than 1% of a chemical known to the State of California to cause birth defects or other reproductive harm.

Ingredient name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
Naphthalene		No.	Yes.	No.
Ethylbenzene	Yes.		41 μg/day (ingestion) 54 μg/day (inhalation)	No.
Benzene	Yes.	Yes.	6.4 μg/day (ingestion) 13 μg/day (inhalation)	24 μg/day (ingestion) 49 μg/day (inhalation)
2-Propenoic acid, ethyl ester	Yes.	Yes.	No.	No.
Ethylene oxide	Yes.	Yes.	Yes.	Yes.
Propylene oxide	Yes.	No.	No.	No.
1,4-Dioxane	Yes.	No.	Yes.	No.
Ethyl acrylate	Yes.	No.	No.	No.

Canada

Canadian lists

Canadian NPRI CEPA Toxic substances None of the components are listed.None of the components are listed.

Canada inventory

: All components are listed or exempted.

Section 16. Other information

History

Date of issue mm/dd/yyyy	y : 10/30/2016
Date of previous issue	: 01/30/2015
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Prepared by	: SEVERUS INC.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.