SAFETY DATA SHEET

1. Identification

Product identifier FS ENG	FS ENGINE GUARD SYN BLEND SAE 5W-20		
Other means of identification	None.		
Recommended use	Engine oil		
Recommended restrictions	None known.		
Manufacturer/Importer/Supplier/Distributor			
information Manufacturer			
Company name	GROWMARK INC.		
Address	2200 South Avenue		
	Council Bluffs, IA 51503		
	United States		
Telephone	General Assistance	800-798-6457	
E-mail	Not available.		
Emergency phone number C	HEMTREC	800-424-9300	

2. Hazard(s) identification

Physical hazards	Not classified.
Health hazards	Not classified.
Environmental hazards	Not classified.
OSHA defined hazards	Not classified.
Label elements	
Hazard symbol	None.
Signal word	None.
Hazard statement	The mixture does not meet the criteria for classification.
Precautionary statement	
Prevention	Observe good industrial hygiene practices.
Response	Wash hands after handling.
Storage	Store away from incompatible materials.
Disposal	Dispose of waste and residues in accordance with local authority requirements.
Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Lubricating Oils (petroleum), C20-50, Hydrotreated Neutral Oil-based		72623-87-1	36.28
Distillates (petroleum), solvent-dewaxed heavy paraffinic		64742-65-0	20 - < 30
Lubricating Oils (petroleum), Hydrotreated Spent		64742-58-1	20 - < 30
Other components below reportable	levels		5 - < 10

Other components below reportable levels

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation

Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact	Wash off with soap and water. Get medical attention if irritation develops and persists.
Eye contact	Rinse with water. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. Get medical attention if symptoms occur.
Most important symptoms/effects, acute and delayed	Direct contact with eyes may cause temporary irritation.
Indication of immediate medical attention and special treatment needed	Treat symptomatically.
General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.
5. Fire-fighting measures	
Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
Unsuitable extinguishing	Do not use water jet as an extinguisher, as this will spread the fire.

Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.
	Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.
Environmental precautions	Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling	Avoid prolonged exposure. Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities	Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

Components	Туре	Value	Form
Distillates (petroleum), solvent-dewaxed heavy paraffinic (CAS 64742-65-0)	PEL	5 mg/m3	Mist.
		2000 mg/m3	
		500 ppm	
US. ACGIH Threshold Limit Values			
Components	Туре	Value	Form
Distillates (petroleum), solvent-dewaxed heavy paraffinic (CAS 64742-65-0)	TWA	5 mg/m3	Inhalable fraction.

Components	Туре	Value	Form
Lubricating Oils (petroleum), C20-50, Hydrotreated Neutral Oil-based (CAS 72623-87-1)	TWA	5 mg/m3	Inhalable fraction.
Lubricating Oils (petroleum), Hydrotreated Spent (CAS 64742-58-1)	TWA	5 mg/m3	Inhalable fraction.
US. NIOSH: Pocket Guide to C	o Chemical Hazards omponents	Туре	Value
Distillates (petroleum), solvent-dewaxed heavy paraffinic (CAS 64742-65-0)	Ceiling	1800 mg/m3	
	STEL	10 mg/m3	Mist.
logical limit values	No biological exposure limits note	ed for the ingredient(s).	
propriate engineering htrols	Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.		
dividual protection measures, Eye/face protection	such as personal protective equip If contact is likely, safety glasses	pment with side shields are recommended	L
Skin protection Hand protection	For prolonged or repeated skin co	ontact use suitable protective gloves	5
-			
Other Bospiratory protoction	Wear suitable protective clothing.		t
Respiratory protection		wear suitable respiratory equipment	ι.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.		
eneral hygiene nsiderations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.		
Physical and chemical	properties		
pearance			
Physical state	Liquid.		
Form	Liquid.		
Color	Not available.		
or	Not available.		
or threshold	Not available.		
	Not available.		
lting point/freezing point	Not available.		
tial boiling point and boiling nge	g Not available.		
sh point	359.6 °F (182.0 °C) estimated		
aporation rate	Not available.		
mmability (solid, gas)	Not applicable.		
per/lower flammability or exp			
Flammability limit - lower (%)	Not available.		
Flammability limit - upper (%)	Not available.		
Explosive limit - lower (%)	Not available.		
Explosive limit - upper (%)			
por pressure	Not available.		
	INUL AVAIIDUE.		

Not available.

Vapor density

Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Explosive properties	Not explosive.
Flammability class	Combustible IIIB estimated
Oxidizing properties	Not oxidizing.
10. Stability and reactivity	,
Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Prolonged inhalation may be harmful.
Skin contact	No adverse effects due to skin contact are expected.
Eye contact	Direct contact with eyes may cause temporary irritation.
Ingestion	Expected to be a low ingestion hazard.
Symptoms related to the physical, chemical and toxicological characteristics	Direct contact with eyes may cause temporary irritation.

Information on toxicological effects

Acute toxicity

Species	Test Results
0, Hydrotreated Neutral Oil-based (CAS 72623-87-1)	
Rabbit	> 2000 mg/kg
Rat	> 5530 mg/l
Rat	> 5000 mg/kg
e based on additional component data not shown.	
Prolonged skin contact may cause temporary irritation	on.
Direct contact with eyes may cause temporary irritat	ion.
Not a respiratory sensitizer.	
This product is not expected to cause skin sensitizat	ion.
No data available to indicate product or any compon mutagenic or genotoxic.	ents present at greater than 0.1% are
	50, Hydrotreated Neutral Oil-based (CAS 72623-87-1) Rabbit Rat Rat e based on additional component data not shown. Prolonged skin contact may cause temporary irritation Direct contact with eyes may cause temporary irritation Direct contact with eyes may cause temporary irritation Direct contact with eyes may cause temporary irritation Not a respiratory sensitizer. This product is not expected to cause skin sensitizat No data available to indicate product or any compon

Carcinogenicity

Carcinogenicity	
•	Evaluation of Carcinogenicity
Not available.	
OSHA Specifically Regulate 1050) Not listed.	d Substances (29 CFR 1910.1001-
US. National Toxicology Pro	gram (NTP) Report on Carcinogens
Not available.	
Reproductive toxicity	This product is not expected to cause reproductive or developmental
Specific target organ toxicity - single exposure	effects. Not classified.
Specific target organ toxicity - repeated exposure	Not classified.
Aspiration hazard	Not an aspiration hazard.
Chronic effects	Prolonged inhalation may be harmful.
Further information	This product has no known adverse effect on human health.
12. Ecological information	
Factoriaity	The product is not classified as any ironmontally bezardous. However, this does not evaluate

Ecotoxicity	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
Persistence and degradability	No data is available on the degradability of this product.
Bioaccumulative potential	No data available.
Mobility in soil	No data available.
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions Local disposal regulations	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

Not regulated as dangerous goods.

ΙΑΤΑ

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Not established. Annex II of MARPOL 73/78 and the IBC Code

15. Regulatory information

US federal regulations

This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050) Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Immediate Hazard -No Delayed Hazard -No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous No

chemical

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act Not regulated.

(SDWA)

US state regulations

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100) Not listed.

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd.

(a))

Distillates (petroleum), solvent-dewaxed heavy paraffinic (CAS 64742-65-0) Lubricating Oils (petroleum), C20-50, Hydrotreated Neutral Oil-based (CAS 72623-87-1) Lubricating Oils (petroleum), Hydrotreated Spent (CAS 64742-58-1)

US. Massachusetts RTK - Substance List

Distillates (petroleum), solvent-dewaxed heavy paraffinic (CAS 64742-65-0)

US. New Jersey Worker and Community Right-to-Know Act

Not listed.

US. Pennsylvania Worker and Community Right-to-Know Law

Not listed.

US. Rhode Island RTK

Not regulated.

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No

Country(s) or region Inventory name

No

United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory

*A 'Yes' indicates that all components of this product comply with the inventory requirements administered by the governing country(s) A 'No' indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date	05-14-2015
Revision date	10-16-2015
Version #	02
Disclaimer	GROWMARK INC. cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.
Revision information	Hazard(s) identification: Hazard statement Hazard(s) identification: Disposal Hazard(s) identification: Prevention Hazard(s) identification: Response Hazard(s) identification: Storage First-aid measures: Indication of immediate medical attention and special treatment needed Physical and chemical properties: Oxidizing properties Physical and chemical properties: Explosive properties Toxicological information: Further information Ecological information: Persistence / degradability Regulatory information: US federal regulations Other information, including date of preparation or last revision: Further information GHS: Classification