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

Safety Data Sheet

FS SPECTRA LUBE BLUE #2

Revision date 29-Apr-2015	Supersedes date 17-Mar-2015	
	1. IDENTIFICATION	
1.1. Product identifier		
Product name Synonyms	FS SPECTRA LUBE BLUE #2 None	
1.2. Relevant identified uses of the	substance or mixture and uses advised against	
Recommended use Uses advised against	Lubricating grease No information available	
1.3. Details of the supplier of the safety data sheet		
Manufacturer	AXEL Americas, LLC 150 Russell Crutcher Rd Rosedale, MS 38769 United States (662) 759-6808	
1.4. Emergency telephone numberChemTel Emergency telephone1-800-255-3924International Emergency telephone+01-813-248-0585		

2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

2.2. Label elements

Signal word None

Symbols/Pictograms None

2.3. Hazards not otherwise classified (HNOC) Causes mild skin irritation.

2.4. Other information

15.27288011% of the mixture consists of ingredient(s) of unknown toxicity.

Version 1.01

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Chemical name	CAS No	weight-%	
Bismuth tris(2-ethylhexanoat	,	<1.2	
The exact perce	ntage (concentration) of composition has been withhel	d as a trade secret.	
Ingredient comments	This product is a polyurea grease based on mineral oil with additives. The mineral oils in the product contain <3% DMSO-extract (IP 346).		
	4. FIRST AID MEASURES		
4.1. Description of first aid measu	res		
Inhalation	Move to fresh air in case of accidental inhalation of v	apors or decomposition products.	
Skin contact	Wash skin with soap and water.		
Eye contact	Rinse thoroughly with plenty of water, also under the	eyelids.	
Ingestion	Do not induce vomiting without medical advice. IF Slor doctor if you feel unwell.	WALLOWED: Call a POISON CENTER	
4.2. Most important symptoms and effects, both acute and delayed			
Symptoms	None known.		
4.3. Indication of any immediate medical attention and special treatment needed			
Note to physicians	Treat symptomatically.		
	5. FIRE-FIGHTING MEASURES		
5.1. Extinguishing media			
Suitable extinguishing media	Use CO2, dry chemical, or foam.		
Unsuitable extinguishing media	Do not use a solid water stream as it may scatter and	d spread fire.	
5.2. Special hazards arising from the substance or mixture Not flammable. Fire may produce irritating and/or toxic gases.			
Hazardous combustion products	Incomplete combustion and thermolysis may produc carbon monoxide, carbon dioxide, various hydrocarb		

5.3. Advice for firefighters As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

be highly dangerous if inhaled in confined spaces or at high concentration.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautionsExtremely slippery when spilled. Avoid contact with eyes and skin. Avoid breathing vapors
or mists. Use personal protection recommended in Section 8.

For emergency responders Use personal protection recommended in Section 8.

6.2. Environmental precautions

Do not allow into any sewer, on the ground or into any body of water. Prevent entry into waterways, sewers, basements or confined areas. See Section 12 for additional Ecological Information.

6.3. Methods and material for containment and cleaning up

Methods for containment	Prevent further leakage or spillage if safe to do so.
Methods for cleaning up	Use personal protective equipment as required. Take up with sand or other non- combustible absorbent material and place into containers for later disposal.

7. HANDLING AND STORAGE

7.1. Precautions for safe handling

Advice on safe handling	Extremely slippery when spilled. Avoid prolonged or repeated contact with skin. Avoid breathing vapors or mists.	
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice.	
7.2. Conditions for safe storage, including any incompatibilities		
Storage conditions	Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks and open flame. Keep at a temperature not exceeding 45°C.	
Incompatible materials	None known based on information supplied.	

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Exposure guidelines

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Limestone		TWA: 15 mg/m ³ total dust TWA: 5 mg/m ³ respirable fraction (vacated) TWA: 15 mg/m ³ total dust (vacated) TWA: 5 mg/m ³ respirable fraction	TWA: 10 mg/m ³ total dust TWA: 5 mg/m ³ respirable dust
2-Ethylhexanoic acid	TWA: 5 mg/m ³ inhalable fraction and vapor		
Silica	TWA: 0.025 mg/m ³ respirable fraction	 (vacated) TWA: 0.1 mg/m³ respirable dust (30)/(%SiO2 + 2) mg/m³ TWA total dust (250)/(%SiO2 + 5) mppcf TWA respirable fraction (10)/(%SiO2 + 2) mg/m³ TWA respirable fraction 	IDLH: 50 mg/m ³ respirable dust TWA: 0.05 mg/m ³ respirable dust

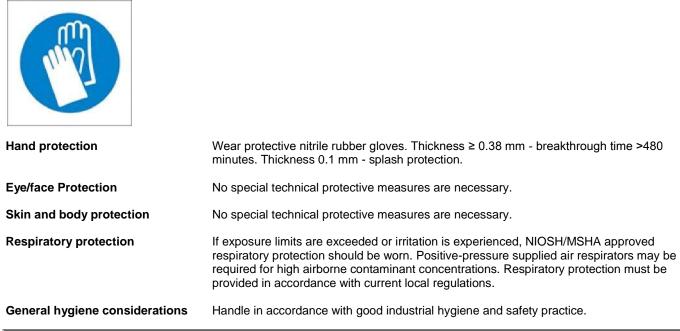
Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

8.2. Exposure controls

Engineering controls

Eyewash stations Ventilation systems

8.3. Individual protection measures, such as personal protective equipment



9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Smooth
Physical state	Semi-solid
Color	blue
Odor	No information available
Odor threshold	No information available

<u>Property</u> pH Melting point/freezing point Boiling point/boiling range	Values	Remarks • Method Not applicable No information available Not applicable
Flash point	> 150 °C / > 302 °F	Based on base oils
Evaporation rate Flammability (solid, gas)		Not applicable No information available
Flammability limits in air		No information available
Upper flammability limit		
Lower flammability limit		
Vapor pressure		Not applicable
Vapor Density		Not applicable
Relative density		No information available
Water solubility		No information available
Solubility in other solvents		No information available
Partition coefficient		No information available
(n-octanol/water)		
Autoignition temperature		No information available
Decomposition temperature		No information available
Kinematic viscosity		No information available
Dynamic viscosity		No information available
Other information		

Density

< 1000 kg/m³ @ 25 °C / 77 °F

10. STABILITY AND REACTIVITY

10.1. Reactivity

Stable.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

None under normal processing.

10.4. Conditions to avoid Heat.

10.5. Incompatible materials Strong oxidizing agents.

10.6. Hazardous decomposition products

None under normal processing.

11. TOXICOLOGICAL INFORMATION

11.1. Information on likely routes of exposure		
Inhalation	Inhalation of oil mist may cause irritation, headaches, nausea and breathing difficulties.	
Ingestion	Malaise (vague feeling of discomfort).	
Skin contact	May be harmful in contact with skin.	
Eye contact	May cause slight irritation.	
11.2. Information on toxicological	effects	
Symptoms	No information available.	
11.3. Delayed and immediate effects as well as chronic effects from short and long-term exposure		
Skin corrosion/irritation	Not hazardous based on component data.	
Serious eye damage/eye irritation Not hazardous based on component data.		
Sensitization	Not hazardous based on component data.	
Germ cell mutagenicity	Not hazardous based on component data.	
Carcinogenicity	Not hazardous based on component data.	
Reproductive toxicity	Not hazardous based on component data.	
STOT-single exposure	Not hazardous based on component data.	
STOT-repeated exposure	Not hazardous based on component data.	
Aspiration hazard	Not hazardous based on component data.	
11.4. Numerical measures of toxic	ity	

Acute toxicity

15.27288011% of the mixture consists of ingredient(s) of unknown toxicity.

The following values are calculated based on chapter 3.1 of the GHS document ATEmix (oral) 6238 mg/kg ATEmix (dermal) 5658 mg/kg

12. **ECOLOGICAL INFORMATION**

12.1. Ecotoxicity

Not regarded as dangerous for the environment. Occasional major emissions or frequently recurring minor emissions may have a harmful or disturbing effect.

12.2. Persistence and degradability

Not readily biodegradable.

12.3. Bioaccumulative potential

Material does not bioaccumulate.

12.4. Mobility in soil

After release, adsorbs onto soil.

12.5. Results of PBT and vPvB assessment

No information available

12.6. Other adverse effects

No information available

DISPOSAL CONSIDERATIONS 13.

13.1. Waste treatment methods

Disposal of wastes	Dispose of in accordance with federal, state and local regulations. Use personal protection recommended in Section 8.
Contaminated packaging	Dispose of in accordance with federal, state and local regulations.
US EPA waste number	No information available
Other information	Waste codes should be assigned by the user based on the application for which the product was used

TRANSPORT INFORMATION 0.

14.1. UN number

Not regulated

14.2. UN proper shipping name Not regulated

14.3. Transport hazard class(es) Not regulated

14.4. Packing group Not applicable

14.5. Environmental hazards None

14.6. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code No information available

14.7. Special precautions for user

None

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

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)

International Inventories

TSCA DSL/NDSL	Complies Complies
EINECS/ELINCS	-
ENCS	-
IECSC	-
KECL	Complies
PICCS	-
AICS	Complies
NZIoC	-

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

NZIOC - New Zealand Inventory of Chemicals

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute Health Hazard	No
Chronic Health Hazard	No
Fire Hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals

Chemical name	California Proposition 65
2-Ethylhexanoic acid - 149-57-5	Developmental
Silica - 14808-60-7	Carcinogen

U.S. State Right-to-Know Regulations

US State Regulations						
Chemical name	New Jersey	Massachusetts	Pennsylvania			
Limestone 1317-65-3	Х	Х	X			
Solvent naphtha (petroleum), medium aliph. 64742-88-7	Х					

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

<u>HMIS</u>	Health hazards 1	Flammability 1	Physical hazards 0	Personal protection p
	FPA Health hazards 1		Instability 0	Special Hazard -
	>			
Revision date	29-Apr-201	29-Apr-2015		
Revision note	SDS section	ns updated, 1		

Disclaimer

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 a 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.

End of Material Safety Data Sheet