

SAFETY DATA SHEET

700 SynShield® Durability Advantage 15W-40

Section 1. Identification

GHS product identifier	: 700 SynShield [®] Durability Advantage 15W-40
Code	: 183
Other means of identification	: Not available.
Product type	: Liquid.
Relevant identified uses o	f the substance or mixture and uses advised against
Identified uses	: Heavy Duty Diesel Engine Oil.
Supplier's details	: Schaeffer Mfg. Company 102 Barton Street Saint Louis, Missouri 63104 Tel: 314-865-4100 Fax: 314-865-4107 Toll Free: 1-800-325-9962 E-Mail: safety@schaefferoil.com Web: http://www.schaefferoil.com
Emergency telephone number (with hours of operation)	: +1 314 865-4105 (24-hour response number)

Section 2. Hazards identification

Standard (29 CFR 1910.1200), this SDS contains valuable information critical to		
substance or mixture GHS label elements Signal word : No signal word. Hazard statements : No known significant effects or critical hazards. Precautionary statements : Not applicable. Prevention : Not applicable. Response : Not applicable. Storage : Not applicable. Disposal : Not applicable. Other hazards which do not result in classification/ : None known.	OSHA/HCS status	: While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
Signal word: No signal word.Hazard statements: No known significant effects or critical hazards.Precautionary statements: Not applicable.Prevention: Not applicable.Response: Not applicable.Storage: Not applicable.Disposal: Not applicable.Other hazards which do not result in classification/: None known.		: Not classified.
Hazard statements: No known significant effects or critical hazards.Precautionary statements: Not applicable.Prevention: Not applicable.Response: Not applicable.Storage: Not applicable.Disposal: Not applicable.Other hazards which do not result in classification/: None known.	GHS label elements	
Precautionary statementsPrevention: Not applicable.Response: Not applicable.Storage: Not applicable.Disposal: Not applicable.Other hazards which do not result in classification/: None known.	Signal word	: No signal word.
Prevention: Not applicable.Response: Not applicable.Storage: Not applicable.Disposal: Not applicable.Other hazards which do not result in classification/: None known.	Hazard statements	: No known significant effects or critical hazards.
Response : Not applicable. Storage : Not applicable. Disposal : Not applicable. Other hazards which do not result in classification/ : None known.	Precautionary statements	
Storage : Not applicable. Disposal : Not applicable. Other hazards which do not result in classification/ : None known.	Prevention	: Not applicable.
Disposal : Not applicable. Other hazards which do not : None known. result in classification/ : None known.	Response	: Not applicable.
Other hazards which do not : None known. result in classification/	Storage	: Not applicable.
result in classification/	Disposal	: Not applicable.
	result in classification/	: None known.

Section 3. Composition/information on ingredients

Substance/mixture

Other means of identification

: Mixture

: Not available.

CAS number/other identifiers

CAS number

: Not applicable.

Ingredient name	%	CAS number
Base Oil(s)(*)	30 - 60	See below.
Dec-1-ene, homopolymer, hydrogenated Dec-1-ene, oligomers, hydrogenated	≥10 - ≤21	68037-01-4
Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts	≥1 - <2.5	68649-42-3

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.

Base Oil(s): 64742-54-7.

Section 4. First aid measures

Description of necessary 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. Get medical attention if irritation occurs.
Inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
Skin contact	: Flush contaminated skin with plenty of water. Get medical attention if symptoms occur.
Ingestion	: Wash out mouth with water. 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. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed

Potential acute health effe	<u>cts</u>
Eye contact	: No known significant effects or critical hazards.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: No known significant effects or critical hazards.
Ingestion	: No known significant effects or critical hazards.
<u>Over-exposure signs/sym</u>	<u>otoms</u>
Eye contact	: No known significant effects or critical hazards.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: No known significant effects or critical hazards.
Ingestion	: No known significant effects or critical hazards.
Indication of immediate me	dical 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.

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	: No specific fire or explosion hazard.
Hazardous thermal decomposition products	: No specific data.
Special protective actions for fire-fighters	: No special measures are required.
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, protec	ive equipment and emergency procedures
For non-emergency personnel	: No action shall be taken involving any personal risk or without suitable training. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
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. 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. U.S.A. regulations may require reporting spills of this material that could reach any surface waters. Report spills to all applicable Federal, State, Provincial and local authorities and/or the United States National Response Center at (800) 424-8802 as appropriate or required.
Methods and materials for co	ntainment and cleaning up
Small spill	: Stop leak if without risk. Move containers from spill area. Absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large spill	: 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 (see Section 13). Dispose of via a licensed waste disposal contractor. 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). 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. See also Section 8 for additional information on hygiene measures. Remove contaminated clothing and protective equipment before entering eating areas.

Section 7. Handling and storage

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

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United States
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Occupational exposure limits

Ingredient name	Exposure limits
Base Oil(s)(*)	NIOSH REL (United States, 10/2013). TWA: 5 mg/m³ 10 hours. Form: Mist STEL: 10 mg/m³ 15 minutes. Form: Mist ACGIH TLV (United States). TWA: 5 mg/m³ Form: Oil mist. STEL: 10 mg/m³ Form: Oil mist. OSHA PEL (United States). TWA: 5 mg/m³ Form: Oil mist. OSHA PEL (United States). TWA: 5 mg/m³ Form: Oil mist.

Canada

Occupational exposure limits

Ingredient name	Exposure limits
Base Oil(s)(*)	CA Quebec Provincial (Canada, 1/2014). TWAEV: 5 mg/m ³ 8 hours. Form: Mist STEV: 10 mg/m ³ 15 minutes. Form: Mist CA Ontario Provincial (Canada, 7/2015). TWA: 5 mg/m ³ 8 hours. Form: Mist STEL: 10 mg/m ³ 15 minutes. Form: Mist CA Alberta Provincial (Canada, 4/2009). 8 hrs OEL: 5 mg/m ³ 8 hours. Form: Mist 15 min OEL: 10 mg/m ³ 15 minutes. Form: Mist

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 meas	<u>ures</u>
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. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection	: Wear eye protection such as safety glasses, chemical goggles, or face shields if engineering controls or work practices are not adequate to prevent eye contact.
Skin protection Hand protection	: Use nitrile or oil resistant gloves.

Section 8. Exposure controls/personal protection

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Body protection	: Personal protective clothing such as gloves, aprons, boots and complete facial protection should be selected based on the task being performed and the risks involved. Users should determine acceptable performance characteristics of protective clothing. Consider physical requirements and other substances present when selecting protective clothing.
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	: If a risk assessment indicates that respiratory protection is required, use a properly fitted, air-purifying or supplied air respirator that complies with an approved standard. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

<u>Appearance</u>		
Physical state	: Liquid. [Clear.]	
Color	: Green.	
Odor	: Mild petroleum.	
Odor threshold	: Not available.	
рН	Not applicable.	
Melting point	: Not available.	
Boiling point	: Not available.	
Flash point	: Open cup: 243°C (469.4°F)	
Evaporation rate	: Not available.	
Flammability (solid, gas)	: Not available.	
Lower and upper explosive (flammable) limits	: Not available.	
Vapor pressure	: Not available.	
Vapor density	: >1 [Air = 1]	
Relative density	: 0.8666	
Solubility	: Not available.	
Partition coefficient: n- octanol/water	: Not available.	
Auto-ignition temperature	: Not available.	
Decomposition temperature	: Not available.	
Volatility	: Not available.	
Viscosity	: Kinematic @ 100°C: 12.5 to 16.29 cSt	

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: Stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: No specific data.

Section 10. Stability and reactivity

Incompatible materials : Strong acids, bases and oxidizers.

Hazardous decomposition	: Under normal conditions of storage and use, hazardous decomposition products should
products	not be produced.

Section 11. Toxicological information

Information on toxicological	<u>effects</u>
Acute toxicity	
There is no data available.	
Irritation/Corrosion	
There is no data available.	
Sensitization	
There is no data available.	
Mutagenicity	
There is no data available.	
Carcinogenicity	
There is no data available.	
Reproductive toxicity	
There is no data available.	
Teratogenicity	
There is no data available.	
Specific target organ toxicit	t <u>y (single exposure)</u>
There is no data available.	
Specific target organ toxicit	t <u>y (repeated exposure)</u>
There is no data available.	
Aspiration hazard	
There is no data available.	
Information on the likely routes of exposure	: Dermal contact. Eye contact. Inhalation. Ingestion.
Potential acute health effects	2
Eye contact	: No known significant effects or critical hazards.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: No known significant effects or critical hazards.
Ingestion	: No known significant effects or critical hazards.
Symptoms related to the phy	vsical, chemical and toxicological characteristics
Eye contact	: No known significant effects or critical hazards.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: No known significant effects or critical hazards.
Ingestion	: No known significant effects or critical hazards.
	ts and also chronic effects from short and long term exposure
Short term exposure	
Potential immediate effects	: No known significant effects or critical hazards.
Potential delayed effects	: No known significant effects or critical hazards.

Section 11. Toxicological information

<u>Long term exposure</u>	
Potential immediate effects	: No known significant effects or critical hazards.
Potential delayed effects	: No known significant effects or critical hazards.
Potential chronic health effe	ects
General	: No known significant effects or critical hazards.
Carcinogenicity	: No known significant effects or critical hazards.
Mutagenicity	: No known significant effects or critical hazards.
Teratogenicity	: No known significant effects or critical hazards.
Developmental effects	: No known significant effects or critical hazards.
Fertility effects	: No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

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

Product/ingredient name	LogPow	BCF	Potential
Dec-1-ene, homopolymer, hydrogenated Dec-1-ene, oligomers, hydrogenated	>6.5	-	high

Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

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 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. 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

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	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.

Section 15. Regulatory information

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U.S. Federal regulations	: TSCA 8(a) PAIR: Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts; p- Dodecylphenol; Naphthalene
	TSCA 8(a) CDR Exempt/Partial exemption: Not determined
	United States inventory (TSCA 8b): Not determined.
	Clean Water Act (CWA) 307 : Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts; Naphthalene
	Clean Water Act (CWA) 311: Naphthalene
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
<u>SARA 302/304</u>	
Composition/information	on ingredients
No products were found.	
SARA 304 RQ	: Not applicable.

Section 15. Regulatory information

<u>SARA 311/312</u>

Classification : Not applicable.

Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
Phosphorodithioic acid, O,O-di- C1-14-alkyl esters, zinc salts	≥1 - <2.5	No.	No.	No.	Yes.	No.

SARA 313

	Product name	CAS number	%
Form R - Reporting requirements	Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts	68649-42-3	≥1 - <2.5
Supplier notification	Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts	68649-42-3	≥1 - <2.5

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations	
Massachusetts	 The following components are listed: Distillates (petroleum), hydrotreated heavy paraffinic; Distillates (petroleum), solvent-dewaxed heavy paraffinic
New York	: None of the components are listed.
New Jersey	 The following components are listed: Distillates (petroleum), hydrotreated heavy paraffinic; Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts; Distillates (petroleum), solvent-dewaxed heavy paraffinic
Pennsylvania	: The following components are listed: Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts

California Prop. 65

WARNING: This product contains less than 0.1% of a chemical known to the State of California to cause cancer.

Ingredient name	Cancer			Maximum acceptable dosage level
Naphthalene	Yes.	No.	Yes.	No.

Canada

<u>Canadian lists</u>	
Canadian NPRI	: The following components are listed: Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts
CEPA Toxic substances	: None of the components are listed.
Canada inventory	: All components are listed or exempted.

Section 16. Other information

Hazardous Material Information System (U.S.A.)

Health: 0 Flammability: 1 Physical hazards: 0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)

Section 16. Other information

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Health :

Flammability :

1

Instability : 0

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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

Procedure used to derive the classification

Classification		Justification
Not classified.		
US Tariff Heading Number	: 3403.19.0000	
Schedule B Code	: 3403.19.0000	
<u>History</u>		
Date of issue mm/dd/yyyy	: 01/15/2017	
Date of previous issue	: 10/15/2016	
Version	: 2	
Prepared by	: KMK Regulatory Services	Inc.
Although the information and recomm	andations ast forth horain (horaefter re-	arred to as information) are presented in good faith and believed to be

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