



SAFETY DATA SHEET

Section 1. Identification

CHS Inc.	Transportation Emergency (CHEMTREC)	:	1-800-424-9300
P.O. Box 64089	Technical Information	:	1-651-355-8443
Mail station 525	SDS Information	:	1-651-355-8445
St. Paul, MN 55164-0089			

Product name	: (FO) FUEL SAVER PLUS DIESEL ENGINE OIL 10W-30, 15W-40	SDS no.	: 1304-A1A0
Common name	: Diesel Engine Oil 10W-30, 15W-40	Revision date	: 03/27/2015
Chemical name	: Lubricating oil.	Chemical formula	: Mixture
Chemical family	: Hydrocarbon.		

Relevant identified uses of the substance or mixture and uses advised against

Lubricant.

Section 2. Hazards identification

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture : SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A

GHS label elements

Hazard pictograms :



Signal word : Warning

Hazard statements : Causes serious eye irritation.

Precautionary statements

General : Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.

Prevention : Wear eye or face protection. Wash hands thoroughly after handling.

Response : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

Storage : Not applicable.

Disposal : Not applicable.

Hazards not otherwise classified (HNOC) : None known.

Hazardous Material Information System (U.S.A.) **Health** : 1 **Flammability** : 1 **Physical hazards** : 0

National Fire Protection Association (U.S.A.) **Health** : 1 **Flammability** : 1 **Instability** : 0

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Chemical name : Lubricating oil.

Other means of identification : Diesel Engine Oil 10W-30, 15W-40

Ingredient name	%	CAS number
Distillates (petroleum), hydrotreated heavy paraffinic	60 - 100	64742-54-7
Phosphorodithioic acid, mixed O,O-bis(sec-Bu and isoocetyl) esters, zinc salts	1 - 5	113706-15-3

(*) This (These) above ingredient(s) is (are) non-hazardous and are not contributing to the hazard and classification of the final mixture. They are disclosed for information only.

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 necessary first aid measures

- Eye contact** : If material comes in contact with the eyes, immediately wash the eyes with large amounts of water for 15 minutes, occasionally lifting the lower and upper lids. Get medical attention.
- Inhalation** : If person breathes in large amounts of material, move the exposed person to fresh air at once. If breathing has stopped, perform artificial respiration. Keep the person warm and at rest. Get medical attention as soon as possible.
- Skin contact** : If the material comes in contact with the skin, wash the contaminated skin with soap and water promptly. If the material penetrates through clothing, remove the clothing and wash the skin with soap and water promptly. If irritation persists after washing, get medical attention immediately.
- Ingestion** : If material has been swallowed, do not induce vomiting. Get medical attention immediately.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : Irritating to mouth, throat and stomach.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following: pain or irritation, watering, redness.
- Inhalation** : Adverse symptoms may include the following: respiratory tract irritation, coughing.
- Skin contact** : Adverse symptoms may include the following: irritation, redness.
- Ingestion** : No known significant effects or critical hazards.

Indication of immediate medical 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.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

- Suitable extinguishing media** : Use water spray to cool fire exposed surfaces and to protect personnel. Foam, dry chemical or water spray (fog) to extinguish fire.
- Unsuitable extinguishing media** : None known.
- Specific hazards arising from the chemical** : Toxic fumes gases or vapors may evolve on burning.
- Hazardous thermal decomposition products** : No specific data.
- Special protective actions for fire-fighters** : When fighting fires wear full turnout gear and self contained breathing apparatus. Water may cause splattering. Material floats on water.
- Special protective equipment for fire-fighters** : Not applicable.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : Keep unnecessary and unprotected personnel from entering. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

Methods and materials for containment and cleaning up

- Spill** : Contain with dikes or absorbent to prevent migration to sewers/streams. Take up small spill with dry chemical absorbent; large spills may require pump or vacuum prior to absorbent. May require excavation of severely contaminated soil.

Section 7. Handling and storage

Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate.
- 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.
- Conditions for safe storage, including any incompatibilities** : Do not store above the following temperature: 113°C (235.4°F). Odorous and toxic fumes may form from the decomposition of this product if stored at excessive temperatures for extended periods of time. Store in accordance with local regulations. Store in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

None.

- Appropriate engineering controls** : Use only with adequate ventilation.
- 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. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Recommended: Splash goggles and a face shield, where splash hazard exists.
- Skin protection**
- Hand protection** : 4 - 8 hours (breakthrough time): Nitrile gloves.
- Body protection** : Recommended: Long sleeved coveralls.
- Other skin protection** : Recommended: Impervious boots.
- Respiratory protection** : If ventilation is inadequate, use a NIOSH-certified respirator with an organic vapor cartridge and P95 particulate filter.

Section 9. Physical and chemical properties

Appearance

Physical state	: Liquid.	Relative density	: 0.88 to 0.89
Color	: Amber.	Evaporation rate	: <1 (Butyl acetate = 1)
Odor	: Mild.	Solubility	: Insoluble in the following materials: cold water and hot water.
Odor threshold	: Not available.	Solubility in water	: Insoluble
pH	: Not available.	Partition coefficient: n-octanol/water	: Not available.
Melting point	: Not available.	Auto-ignition temperature	: >260°C (>500°F)
Boiling point	: Not available.	Decomposition temperature	: Not available.
Flash point	: Closed cup: >205°C (>401°F)	SADT	: Not available.
Flammability	: Not available.	Viscosity	: Not available.
Lower and upper explosive (flammable) limits	: Not available.	Vapor pressure	: <0.13 kPa (<1 mm Hg) (68°F)
		Vapor density	: 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.

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

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Phosphorodithioic acid, mixed O,O-bis(sec-Bu and isooctyl) esters, zinc salts	LD50 Dermal	Rat	>3160 mg/kg	-
	LD50 Oral	Rat	2600 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Phosphorodithioic acid, mixed O,O-bis(sec-Bu and isooctyl) esters, zinc salts	Skin - Irritant	Rabbit	-	4 hours	-
	Eyes - Severe irritant	Rabbit	-	336 hours	-

Sensitization

Skin : There is no data available.

Respiratory : 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 toxicity (single exposure)

There is no data available.

Specific target organ toxicity (repeated exposure)

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.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Phosphorodithioic acid, mixed O,O-bis(sec-Bu and isooctyl) esters, zinc salts	EC50 5.4 mg/L	Daphnia	48 hours
	LC50 4.5 mg/L	Fish	96 hours

Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
Phosphorodithioic acid, mixed O,O-bis(sec-Bu and isooctyl) esters, zinc salts	-	1.5 % - Not readily - 28 days	10 mg/L	-

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Phosphorodithioic acid, mixed O,O-bis(sec-Bu and isooctyl) esters, zinc salts	-	-	Not readily

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
Phosphorodithioic acid, mixed O,O-bis(sec-Bu and isooctyl) esters, zinc salts	0.9	-	low

Mobility in soil

Soil/water partition coefficient (K_{oc}) : There is no data available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : 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.

Section 14. Transport information

DOT IDENTIFICATION NUMBER Not applicable. **DOT proper shipping name** Not applicable.

DOT Hazard Class(es) Not applicable. **PG** Not applicable. **DOT EMER. RESPONSE GUIDE NO.** Not applicable

Section 15. Regulatory information

U.S. Federal regulations : **TSCA 8(a) PAIR:** Diphenylamine
TSCA 8(a) CDR Exempt/Partial exemption: Not determined
United States inventory (TSCA 8b): At least one component is not listed.
Clean Water Act (CWA) 307: Phosphorodithioic acid, mixed O,O-bis(sec-Bu and isooctyl) esters, zinc salts; Benzene; antimony tris[O,O-dipropyl] tris(dithiophosphate)
Clean Water Act (CWA) 311: Ethylenediamine; Vinyl acetate; Benzene

Clean Air Act Section 602 Class I Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs) : Not listed

SARA 302/304**Composition/information on ingredients**

Name	%	EHS	SARA 302 TPQ		SARA 304 RQ	
			(lbs)	(gallons)	(lbs)	(gallons)
Ethylenediamine	0 - 0.01	Yes.	10000	1337.1	5000	668.5
Vinyl acetate	0 - 0.01	Yes.	1000	129	5000	644.8

SARA 304 RQ : 84780249.6 lbs / 38490233.3 kg [11489315.2 gal / 43491789.1 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
Phosphorodithioic acid, mixed O,O-bis(sec-Bu and isooctyl) esters, zinc salts	1 - 5	No.	No.	No.	Yes.	No.

SARA 313 : This product (does/not) contain toxic chemicals subject to the reporting requirements of SARA Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372.

Product name	CAS number	%
Zinc compounds	Mixture	0.13 as Zinc

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 light paraffinic

New York : None of the components are listed.

New Jersey : The following components are listed: Phosphorodithioic acid, mixed O,O-bis(sec-Bu and isooctyl) esters, zinc salts; Distillates (petroleum), hydrotreated heavy paraffinic; Distillates (petroleum), hydrotreated light paraffinic

- Pennsylvania** : The following components are listed: Phosphorodithioic acid, mixed O,O-bis(sec-Bu and isooctyl) 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.
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
Vinyl acetate	Yes.	No.	No.	No.
Benzene	Yes.	Yes.	6.4 µg/day (ingestion) 13 µg/day (inhalation)	24 µg/day (ingestion) 49 µg/day (inhalation)

Section 16. Other information

Revision date : 03/27/2015 **Supersedes** : 03/11/2009
Revised Section(s) : 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16. **Prepared by** : KMK Regulatory Services Inc.

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