



Anti-wear Hydraulic ISO 10, ISO 220, ISO 320

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
Date of issue: 10/28/2015 Version: 1.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Identification

Product form : Mixture
Product name : Anti-wear Hydraulic ISO 10, ISO 220, ISO 320

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

Use of the substance/mixture : Lubricant

1.3. Details of the supplier of the safety data sheet

SC Fuels
2075 Alum Rock Ave.
San Jose, California 95116 - United States
T 1.888.723.8357
www.scfuels.com

1.4. Emergency telephone number

Emergency number : 1.866.559.4473

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

Not classified

2.2. Label elements

GHS-US labelling

No labelling applicable

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS US)

0.04 percent of the mixture consists of ingredient(s) of unknown acute toxicity (Oral)
0.04 percent of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal)
0.01 percent of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Dust/Mist))

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	GHS-US classification
Distillates (petroleum), solvent-dewaxed heavy paraffinic (DMSO < 3%)	(CAS No) 64742-65-0	0 - 85	Asp. Tox. 1, H304
Lubricating oils, petroleum, hydrotreated spent	(CAS No) 64742-58-1	0 - 40	Acute Tox. 4 (Inhalation:dust,mist), H332
Phosphorodithioic acid, -alkyl esters, zinc salts	(CAS No) trade secret	< 0.5	Flam. Liq. 4, H227 Eye Irrit. 2A, H319 Aquatic Acute 1, H400 Aquatic Chronic 3, H412

*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret
Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person.
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact : Gently wash with plenty of soap and water.
First-aid measures after eye contact : In case of contact, immediately flush eyes with plenty of water.
First-aid measures after ingestion : Do NOT induce vomiting. Get medical advice/attention.

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4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation : Inhalation of vapours may cause respiratory irritation.
Symptoms/injuries after eye contact : May cause slight irritation.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Carbon dioxide. Foam. Dry powder. Water spray.
Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : No particular fire or explosion hazard.
Reactivity : No dangerous reactions known.

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Do not allow run-off from fire fighting to enter drains or water courses.
Protection during firefighting : Wear a self contained breathing apparatus. Wear fire/flame resistant/retardant clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Avoid all eye and skin contact and do not breathe vapour and mist.

6.1.1. For non-emergency personnel

Protective equipment : Wear suitable gloves.
Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Wear suitable gloves.
Emergency procedures : Ventilate area. Stop leak if safe to do so.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Do not allow minor leaks or spills to accumulate on walking surfaces.
Methods for cleaning up : Absorb and/or contain spill with inert material, then place in suitable container.

6.4. Reference to other sections

Section 7: safe handling. Section 8: personal protective equipment.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Avoid all eye and skin contact and do not breathe vapour and mist.
Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep container closed when not in use.
Incompatible products : Strong oxidizers.
Heat and ignition sources : Keep away from heat, sparks and flame.
Prohibitions on mixed storage : Incompatible materials.
Storage area : Store in dry, cool, well-ventilated area.

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Lubricating oils, petroleum, hydrotreated spent (64742-58-1)		
ACGIH	ACGIH TWA (mg/m ³)	5 mg/m ³
Distillates (petroleum), solvent-dewaxed heavy paraffinic (DMSO < 3%) (64742-65-0)		
ACGIH	ACGIH TWA (mg/m ³)	5
OSHA	OSHA PEL (TWA) (mg/m ³)	5 mg/m ³

8.2. Exposure controls

Appropriate engineering controls	: Ensure good ventilation of the work station.
Personal protective equipment	: Avoid all unnecessary exposure.
Hand protection	: Use rubber gloves. nitrile rubber gloves.
Eye protection	: In case of splashing or aerosol production: protective goggles.
Respiratory protection	: In case of inadequate ventilation wear respiratory protection. NIOSH. Approved respirator.
Other information	: Do not eat, drink or smoke when using this product.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: amber
Odour	: odourless
Odour threshold	: No data available
pH	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: > 315.56 °C
Flash point	: 212.78 - 257.22 °C
Relative evaporation rate (butyl acetate=1)	: No data available
Relative evaporation rate (ether=1)	: > 1
Flammability (solid, gas)	: No data available
Explosive limits	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Vapour pressure	: No data available
Relative density	: 0.87 - 0.9
Relative vapour density at 20 °C	: No data available
Density	: 7.2 - 7.4 lb/gal
Solubility	: insoluble in water.
Log Pow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	: No data available
Viscosity, kinematic	: 10 - 320 cSt @ 40 °C
Viscosity, dynamic	: No data available

9.2. Other information

VOC content	: 0 %
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SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known.

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10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Heat.

10.5. Incompatible materials

Strong oxidizers.

10.6. Hazardous decomposition products

Carbon oxides (CO, CO₂).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Likely routes of exposure : Inhalation; Skin and eye contact

Acute toxicity : Not classified

Lubricating oils, petroleum, hydrotreated spent (64742-58-1)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rat	> 2000 mg/kg
LD50 dermal rabbit	> 4480 mg/kg
LC50 inhalation rat (mg/l)	2.18 mg/l
ATE US (dust,mist)	2.180 mg/l/4h

Distillates (petroleum), solvent-dewaxed heavy paraffinic (DMSO < 3%) (64742-65-0)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg

Skin corrosion/irritation : Not classified
Serious eye damage/irritation : Not classified
Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
Specific target organ toxicity (single exposure) : Not classified
Specific target organ toxicity (repeated exposure) : Not classified
Aspiration hazard : Not classified
Symptoms/injuries after inhalation : Inhalation of vapours may cause respiratory irritation.
Symptoms/injuries after eye contact : May cause slight irritation.

SECTION 12: Ecological information

12.1. Toxicity

Lubricating oils, petroleum, hydrotreated spent (64742-58-1)	
LC50 fish 1	3.2 - 79.6 mg/l

Phosphorodithioic acid, -alkyl esters, zinc salts (trade secret)	
LC50 fish 1	10 (10 - 35) mg/l Pimephales promelas
EC50 Daphnia 1	1 (1 - 1.5) mg/l
NOEC (acute)	10 mg/l Pimephales promelas
NOEC (chronic)	< 1 mg/l crustacea

12.2. Persistence and degradability

Distillates (petroleum), solvent-dewaxed heavy paraffinic (DMSO < 3%) (64742-65-0)	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

Distillates (petroleum), solvent-dewaxed heavy paraffinic (DMSO < 3%) (64742-65-0)	
Bioaccumulative potential	Not established.

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12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Sewage disposal recommendations : Do not dispose of waste into sewer.

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Not considered a dangerous good for transport regulations

TDG

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

Lubricating oils, petroleum, hydrotreated spent (64742-58-1)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Distillates (petroleum), solvent-dewaxed heavy paraffinic (DMSO < 3%) (64742-65-0)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Phosphorodithioic acid, -alkyl esters, zinc salts (trade secret)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA

Lubricating oils, petroleum, hydrotreated spent (64742-58-1)

Listed on the Canadian DSL (Domestic Substances List) inventory.

Distillates (petroleum), solvent-dewaxed heavy paraffinic (DMSO < 3%) (64742-65-0)

Listed on the Canadian DSL (Domestic Substances List) inventory.

Phosphorodithioic acid, -alkyl esters, zinc salts (trade secret)

Listed on the Canadian DSL (Domestic Substances List) inventory.

EU-Regulations

Lubricating oils, petroleum, hydrotreated spent (64742-58-1)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Distillates (petroleum), solvent-dewaxed heavy paraffinic (DMSO < 3%) (64742-65-0)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Phosphorodithioic acid, -alkyl esters, zinc salts (trade secret)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

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National regulations

Lubricating oils, petroleum, hydrotreated spent (64742-58-1)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on KECI (Korean Existing Chemicals Inventory)
Listed on Taiwan National Chemical Inventory
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Not listed on the Japanese ENCS (Existing & New Chemical Substances) inventory

Distillates (petroleum), solvent-dewaxed heavy paraffinic (DMSO < 3%) (64742-65-0)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on KECI (Korean Existing Chemicals Inventory)
Listed on Taiwan National Chemical Inventory
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory

15.3. US State regulations

No additional information available

SECTION 16: Other information

Indication of changes	: Original Document.
Data sources	: ACGIH (American Conference of Government Industrial Hygienists). European Chemicals Agency (ECHA) C&L Inventory database. Accessed at http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database . European Chemicals Agency (ECHA) Registered Substances list. Accessed at http://echa.europa.eu/ . Krister Forsberg and S.Z. Mansdorf, "Quick Selection Guide to Chemical Protective Clothing", Fifth Edition. National Fire Protection Association. Fire Protection Guide to Hazardous Materials; 10th edition. NIOSH Occupational Health Guide for chemical Substances - Vol. II, September, 1978. OSHA 29CFR 1910.1200 Hazard Communication Standard. TSCA Chemical Substance Inventory. Accessed at http://www.epa.gov/oppt/existingchemicals/pubs/tscainventory/howto.html .
Abbreviations and acronyms	: ACGIH (American Conference of Government Industrial Hygienists). ATE: Acute Toxicity Estimate. CAS (Chemical Abstracts Service) number. CFR: Code of Federal Regulations. EC50: Environmental Concentration associated with a response by 50% of the test population. GHS: Globally Harmonized System (of Classification and Labeling of Chemicals). LD50: Lethal Dose for 50% of the test population. OSHA: Occupational Safety & Health Administration. STEL: Short Term Exposure Limits. TSCA: Toxic Substances Control Act. TWA: Time Weighted Average.
Other information	: None.

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Full text of H-statements:

Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
Asp. Tox. 1	Aspiration hazard, Category 1
Eye Irrit. 2A	Serious eye damage/eye irritation, Category 2A
Flam. Liq. 4	Flammable liquids, Category 4
H227	Combustible liquid
H304	May be fatal if swallowed and enters airways
H319	Causes serious eye irritation
H332	Harmful if inhaled
H400	Very toxic to aquatic life
H412	Harmful to aquatic life with long lasting effects

NFPA health hazard

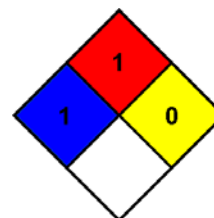
: 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.

NFPA fire hazard

: 1 - Must be preheated before ignition can occur.

NFPA reactivity

: 0 - Normally stable, even under fire exposure conditions, and not reactive with water.



Redstone SDS US GHS for SC Fuels

SDS Prepared by:

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This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product