



Safety Data Sheet

Issuing Date 06-Jun-2014

Revision Date 21-Jul-2015

Version 5

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product name SeaStar Hydraulic Steering Fluid

Other means of identification

Product Code(s) HA5430H, HA5440H, HA5490H, HA5458H

Synonyms No information available

Recommended use of the chemical and restrictions on use

Recommended Use Power Steering Fluid. Transmission Fluid, Lubricant. Hydraulic Fluid, Lubricant.

Uses advised against No information available

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin sensitization	Category 1
Aspiration toxicity	Category 1

Label elements

EMERGENCY OVERVIEW

DANGER

Hazard statements

May cause an allergic skin reaction

May be fatal if swallowed and enters airways



Appearance Transparent, yellow tinted fluid

Physical state -

Odor Mild petroleum odor

Precautionary Statements - Prevention

Avoid breathing dust/fume/gas/mist/vapors/spray
 Contaminated work clothing should not be allowed out of the workplace
 Wear protective gloves

Precautionary Statements - Response

Specific treatment (see supplemental first aid instruction on this label)
 IF ON SKIN: Wash with plenty of soap and water
 If skin irritation or rash occurs: Get medical advice/attention
 Wash contaminated clothing before reuse
 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
 Do NOT induce vomiting

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)**Other information**

- May be harmful in contact with skin

Unknown Aquatic Toxicity

0% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Common Name Hydrocarbon Lubricating Fluid.
Chemical Family Petroleum hydrocarbon mixture.
Chemical nature of the preparation Petroleum Lubricating Fluid.

Chemical name	CAS-No	Weight %	Trade secret
Petroleum distillates, hydrotreated light paraffinic	64742-55-8	54.35	*
I-Decene, Dimer, Hydrogenated	68649-11-6	35.44-39.38	*
I-Decene, Homopolymer, Hydrogenated	68037-01-4	1.97-5.91	*
Methacrylate copolymer	Proprietary	0.79-1.57	*
Alkoxylated long-chain alkyl amine	Proprietary	0.05-0.27	*
Alkaryl amine	Proprietary	0.05-0.27	*

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

First aid measures

General advice No hazards which require special first aid measures.

Eye contact Flush eyes for 30 minutes with water. Get medical attention if irritation persists.

Skin contact Remove contaminated shoes and clothing and cleanse affected area(s) thoroughly by washing with mild soap and water or a waterless hand cleaner. If irritation or redness develops and persists, seek medical attention.

Inhalation Move exposed persons to fresh air. Consult medical personnel if breathing issues occur.

Ingestion Do NOT induce vomiting. Consult a physician.

Most important symptoms and effects, both acute and delayed

Symptoms No information available.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES**Suitable extinguishing media**

Carbon dioxide (CO₂). Dry chemical. Foam. Water can be used to keep surrounding materials cool.

Small Fires Always use personal safety equipment. Follow appropriate personal safety procedures, and extinguishing media.

Large Fires Contact emergency personnel.

Unsuitable extinguishing media Caution: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical

Combustible material.

Hazardous combustion products Carbon monoxide. Carbon dioxide (CO₂).

Explosion data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

Protective equipment and precautions for firefighters

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

6. ACCIDENTAL RELEASE MEASURES**Personal precautions, protective equipment and emergency procedures**

Personal protection Avoid contact with the skin and the eyes. Eye protection or face shield should be used if material is used under conditions that increase the chances of splattering. Wash skin with soap and water if contact occurs. Launder soiled clothing. If spilled, take caution, as material can cause surfaces to become very slippery.

Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for containment Cover with earth, sand, or other non-combustible material followed with plastic sheets to minimize spreading or contact with rain.

Methods for cleaning up Excess liquid material can be collected using a scoop or shovel and stored for recycling or disposal. Prevent material from entering drains or waterways.

7. HANDLING AND STORAGE**Precautions for safe handling**

Advice on safe handling Avoid contact with skin, eyes and clothing. Eye protection or face shield should be used if material is used under conditions that increase the chances of splattering. If contact is made, wash skin with soap and water. Launder soiled clothing. Maximum handling temperature is 70 degrees C (158 F). It is recommended to pump or transfer material at ambient temperature.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep away from heat and sources of ignition. Keep containers closed when not in use. Follow first aid measures if contact occurs, and spill procedures if spill occurs. For packaged material: Store in a cool dry area. For bulk material: store in cool dry area. Always follow local, state, and federal guidelines for storage of material for amount stored.

Incompatible Products Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure guidelines This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Appropriate engineering controls

Engineering Controls Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

- Eye/face Protection** If splashes are likely to occur, wear: Goggles. Eye/face Protection.
- Skin and body protection** Long sleeved clothing. Protective gloves can be worn, if material comes in contact with skin wash with soap and water.
- Respiratory protection** If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

General Hygiene Considerations Remove and wash contaminated clothing before re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	-	Odor	Mild petroleum odor
Appearance	Transparent, yellow tinted fluid	Odor threshold	No information available
Color	light yellow		
<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>	
pH	No information available	Cleveland open cup (COC)	
Melting point/freezing point	No information available		
Boiling Point/Range	No information available		
Flash point	164 °C / 327 °F		
Evaporation rate	No information available		
Flammability (solid, gas)	No information available		
Flammability Limit in Air	No information available		
Upper flammability limit:	No information available		
Lower flammability limit:	No information available		
Vapor pressure	No information available		
Vapor density	No information available		
Specific gravity	0.844		
Water solubility	No information available		
Solubility in other solvents	No information available		
Partition coefficient	No information available		
Autoignition temperature	No information available		
Decomposition temperature	No information available		

Kinematic viscosity	14.1-15.1 @40C mm ² /s
Dynamic viscosity	No information available
Explosive properties	No information available
Oxidizing properties	No information available

Other information

Softening point	No information available
VOC Content	No information available
Density	No information available
Bulk density	No information available

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under normal conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous polymerization	Hazardous polymerization does not occur.
---------------------------------	--

Conditions to avoid

Excessive heat. High energy sources of ignition.

Incompatible materials

Strong oxidizing agents.

Hazardous decomposition products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information	No data available
Inhalation	Inhalation of vapors in high concentration may cause irritation of respiratory system.
Eye contact	Avoid contact with eyes. May cause slight irritation.
Skin contact	May cause eye/skin irritation. Prolonged skin contact may defat the skin and produce dermatitis.
Ingestion	Do NOT taste or swallow. Potential for aspiration if swallowed.

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Petroleum distillates, hydrotreated light paraffinic 64742-55-8	-	-	= 3900 mg/m ³ (Rat) 4 h

Information on toxicological effects

Symptoms	No information available.
-----------------	---------------------------

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization	May cause sensitization by skin contact.
Germ cell mutagenicity	No information available.
Carcinogenicity	No information available.

Chemical name	ACGIH	IARC	NTP	OSHA
Petroleum distillates, hydrotreated light paraffinic	-	Group 1	-	X

64742-55-8				
------------	--	--	--	--

Reproductive toxicity	No information available.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Aspiration hazard	May be fatal if swallowed and enters airways.

Numerical measures of toxicity - Product Information

Unknown Aquatic Toxicity 0% of the mixture consists of ingredient(s) of unknown toxicity
The following values are calculated based on chapter 3.1 of the GHS document .

12. ECOLOGICAL INFORMATION**Ecotoxicity**

1.57% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical name	Algae/aquatic plants	Fish	Crustacea
Petroleum distillates, hydrotreated light paraffinic 64742-55-8	-	5000: 96 h Oncorhynchus mykiss mg/L LC50	1000: 48 h Daphnia magna mg/L EC50
I-Decene, Homopolymer, Hydrogenated 68037-01-4	>1000: 72 h Alga mg/L EL50	-	>1000: 48 h Daphnia magna mg/L EL50

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS**Waste treatment methods**

Waste Disposal Method	Disposal should be in accordance with applicable regional, national and local laws and regulations.
Contaminated packaging	Do not reuse container.

14. TRANSPORT INFORMATION

DOT Not regulated

IATA PETROLEUM LUBRICATING OIL; NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT UNDER ICAO TI OR IATA DGR

15. REGULATORY INFORMATION

International Inventories

TSCA	Does not comply
DSL/NDSL	Does not comply
EINECS/ELINCS	Does not comply
ENCS	Does not comply
IECSC	Does not comply
KECL	Does not comply
PICCS	Does not comply
AICS	Does not comply

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 Commercial Chemical Substances/EU 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

U.S. 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

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)

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

U.S. State Regulations**California Proposition 65**

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Petroleum distillates, hydrotreated light paraffinic 64742-55-8	-	X	-

U.S. EPA Label Information

EPA Pesticide registration number Not Applicable

16. OTHER INFORMATION

<u>NFPA</u>	Health hazards 0	Flammability 1	Instability 0	Physical and Chemical Hazards -
<u>HMIS</u>	Health hazards 0	Flammability 1	Physical hazards 0	Personal protection X

Issuing Date 06-Jun-2014
Revision Date 21-Jul-2015

Revision Note
SDS sections updated 1

Disclaimer

The information provided on this SDS 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

End of MSDS