PRECISION LUBRICATION

MATERIAL SAFETY DATA SHEET

Product Name	HYDRAULIC OIL 68
Product Code	
Labeling for Transport	Not Classified

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name	HYDRAULIC OIL 68
Supplier	NONA INDUSTRIAL CC
Updated	Apr. 2021
Review	Apr. 2023
CAS Number	N/A
UN Number	N/A
Health Emergency Telephone	(011) - Red Cross Poison
Transport Emergency Telephone	(011) 331 2947 (Haxchem)

SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients considered hazardous to Health:

Chemical Names and Synonyms;	Petroleum Hydrocarbon
Substance Name:	Wt%
Paraffinic Extract	>70
Additives/Thickener	>15

SECTION 3. HAZARDOUS IDENTIFICATION

Note: Under normal conditions of intended use, this product does not pose a risk to health. Excessive exposure may result in eye, skin and respiratory irritation

See Section 11 for further health effects/toxicological data.

SECTION 4. FIRST AID MEASURES

Inhalation	Not expected to be a problem. However, if respiratory irritation occurs due to excessive vapour or mist exposure, seek immediate medical assistance. If breathing has stopped, assist ventilation with mechanical device or use mouth-to-mouth resuscitation.
Skin	Remove contaminated clothing. Dry wipe exposed skin and cleanse with hand cleaner, soap and water. Launder contaminated clothing before reuse. (See Section 16 - Injection Injury)
Eyes	Flush thoroughly with water. If irritation occurs call a doctor.
Ingestion	Not expected to be a problem. However, if discomfort occurs seek medical attention. Do not induce vomiting.

SECTION 5. FIRE FIGHTING MEASURES

Extinguishing media	Carbon dioxide, foam, dry chemical and water fog
Special Fire-fighting procedures	Water or foam may cause frothing. Use water to keep fire exposed containers cool. Water spray may be used to flush spills away from exposure. Prevent runoff from fire control or dilution from entering streams, municipal sewers, or drinking water supply.
Special protective equipment	For fires in enclosed areas, fire fighters must use Self-Contained Breathing Apparatus.
Unusual fire and explosion hazards	Avoid ingestion sources. Flash Point C: > 199 °C (ASTM D-92)
Products of decomposition	Products of decomposition: Fumes, smoke, carbon monoxide, sulphur oxides, aldehydes and other decomposition products, in the case of incomplete combustion.

NFPA Hazard ID:

Health	0
Flammability	1
Reactivity	0
Hazardous decomposition products	Carbon Dioxide Carbon Monoxide

SECTION 6. ACCIDENTAL RELEASE MEASURES

Notification procedures	Report spill as required to the appropriate authorities.
Procedures if the materials is released or spilled	LAND SPILL: Shut off source taking normal safety precautions. Take measures to minimize the effects on ground water. Recover by pumping using explosion-proof equipment or contain spilled liquid with sand or other suitable absorbent and remove mechanically into containers.
Environmental precautions	Prevent spills from entering storm sewers or drains and contact with soil.
Personal precautions	See Section 13

SECTION 7. HANDLING AND STORAGE

Handling	No special precautions are necessary beyond normal good hygiene practices.
Storage	Keep containers closed when not in use. Do not store in open or unlabelled containers. Do not store near heat sources, sparks, flames, strong oxidizing agents and combustible materials.
Storage and handling procedures	Prevent small spills and leakages to avoid slip hazard.

SECTION 8. EXPOSURE CONTROL/PERSONAL PROTECTION

Ventilation	If formation of fumes or vapours occurs ensure extensive ventilation.
Respiratory Protection	No special requirements under ordinary conditions of use and with adequate ventilation.
Eye Protection	Normal industrial eye protection when handling liquids should be worn.
Skin Protection	Use chemical-resistant apron and/or other clothing to avoid contact.

Occupational exposure limits:

	LTEL	STEL	NOTE
Substance name (CAS-No)	Long Term Exposure Limits - Time Weight Average (TWA) over 8 hours.	Short Term Exposure Limits - Time Weight Average (TWA) over 15 Minutes	Limits Shown for guidance only. Follow applicable regulations.

Personal Protection Equipment (PPE)

Engineering controls:
If mists are generated, use ventilation, local exhaust or enclosures to control below exposure limits.

Respiratory protection:
Approved respiratory equipment must be used when mist concentrations exceed the recommended exposure limits.

Eye protection:
If splash with liquid is possible, chemical type goggles should be worn.

Skin and body protection:
No special equipment required. However, if frequent splashing or liquid contact is likely to occur, wear oil impervious gloves and clothing. Good personal hygiene practices should always be followed.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Liquid
Colour	Light Amber
Solubility in water	Negligible
Odour	Mild
pH	N/A
Boiling Point (Celsius)	> 306 °C
Flash Point°C	> 199 °C (ASTM D-92)
Flammability	Flammable
Auto Flammability	N/E
Explosive Properties	N/A
Oxidizing Properties	N/A
Vapor pressure mmHg 200C	< 0.1 hPa
Density at 20°C	0.870 g/cm3 @ 20 °C (ASTM D-4052)
Pour Point	-10 °C
Viscosity, kinematic	68 mm2/s @ 40 °C (ASTM D-445)

N/A = Not Applicable, N/E = Not Established, D = Decomposes
For further technical information, contact your marketing representative

SECTION 10. STABILITY AND REACTIVITY

Reactivity	No specific test data related to reactivity available for this product or 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	Extreme heat and high energy sources of ignition, such as sparks and static electricity.
incompatible materials	Strong oxidizers
Hazardous decomposition products	Fumes, smoke, carbon monoxide, sulphur oxides, aldehydes and other decomposition products, in the case of incomplete combustion

SECTION 11. TOXICOLOGICAL INFORMATION

Oral toxicity	Practically non-toxic (LD50: Greater than 2000 mg/kg). Based on testing of similar products and/or components.
Dermal toxicity	Practically non-toxic (LD50: greater than 2000 mg/kg). Based on testing of similar products and/or the components.
Inhalation toxicity	Practically non-toxic (LC50: greater than 5mg/l). Based on testing of similar products and/or the components.
Eye irritation	Practically non-irritating. (Draize score: greater than 6 but 15 or less). Based on testing of similar products and/or the components.
Skin irritation	Practically non-irritating. (Primary Irritation Index: greater than 0.5 but less than 3). Based on testing of similar products and/or the components.
Other acute toxicity data	Although an acute inhalation study was not performed with this product, a variety of mineral and synthetic oils, such as those in this product, have been tested. These samples had virtually no effect other than a nonspecific inflammatory response in the lung to the aerosolized mineral oil. The presence of additives in other tested formulations (in approximately the same amounts as in the present formulation) did not alter the observed effects. Overexposure to oil mist may result in oil droplet deposition and/or granuloma formation.
Sensitization	Not expected to be sensitizing based on tests of this product, components, or similar products.
Repeated dose toxicity	No significant adverse effects were found in studies using repeated dermal applications of similar formulations to the skin of laboratory animals for 13 weeks at doses significantly higher than those expected during normal industrial exposure. The animals were evaluated extensively for effects of exposure (hematology, serum chemistry, urinalysis, organ weights, microscopic examination of tissues etc.). Repeated and/or prolonged exposure may cause irritation to the skin, eyes or respiratory tract.
Teratogenicity	No teratogenic effects would be expected from dermal exposure, based on laboratory developmental toxicity studies of major components in this formulation and/or materials of similar composition.
Carcinogenicity	Chronic mouse skin painting studies of severely solvent refined mineral base oils showed no evidence of carcinogenic effects. Synthetic base oils have been tested in the Ames assay and other tests of mutagenicity with negative results. These base oils are not expected to be carcinogenic with chronic dermal exposures.

SECTION 12. ECOLOGICAL INFORMATION

Environmental fate and effects:

Biodegradability:
This product is expected to be inherently biodegradable.

Physico-chemical Removability:
Absorption to sediment and soil will be the predominant behaviour.

Bioaccumulation:
Minimal owing to low water solubility.

Ecotoxicity effects

Toxicity to aquatic organisms: This substance is practically non-toxic to aquatic organisms (LL50: >1000 mg/l).

Further information on ecology
Remarks: In the absence of specific environmental data for this product, this assessment is based on information for representative substances.

SECTION 13. DISPOSAL INFORMATION

Waste disposal: Product is suitable for burning in an enclosed, controlled burner for fuel value or disposal by supervised incineration. Such burning may be limited pursuant to the Resource Conservation and Recovery Act. In addition, the product is suitable for processing by an approved recycling facility or can be disposed of at any government approved waste disposal facility. Use of these methods is subject to user compliance with applicable laws and regulations and considerations of product characteristics at time of disposal.

Contaminated packaging: Empty containers retain residue (liquid and/or vapour) and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Do not attempt to refill or clean container since residue is difficult to remove. Empty drums should be completely drained, properly bunged and promptly returned to a drum reconditioner. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations.

Other regulations: The unused product, in our opinion, is not specifically listed by the EPA as a hazardous waste (40 CFR, Part 261D), nor is it formulated to contain materials which are listed hazardous wastes. It does not exhibit the hazardous characteristics of ignitability, corrosivity, or reactivity and is not formulated with contaminants as determined by the Toxicity Characteristic Leaching Procedure (TCLP). However, used product may be regulated.

Flash Point: > 189 °C (ASTM D-92)

SECTION 14. TRANSPORT INFORMATION

Note: This product is not regulated by the following: U.S. DOT (CFR), ADR, IATA and IMDG.

SECTION 15. REGULATORY INFORMATION

US OSHA Hazard
Communication Standard: When used for its intended purposes, this product is not classified as hazardous in accordance with OSHA 29 CFR 1910.1200.

Governmental Inventory

Status: All components comply with TSCA, EINECS/ELINCS, AICS, METI, DSL, KECI, ENCS, PICCS and IECSC.

EU Labelling: Product is not dangerous as defined by the European Union Dangerous Substances/ Preparations Directives. EU labelling not required.

SARA

U.S. Superfund This product contains no "EXTREMELY
Amendments and HAZARDOUS SUBSTANCES".
Reauthorization Act SARA

Title III:
SARA (311/312) Reportable
Hazard Categories: None

The following product ingredients are cited on the lists below

Chemical Name	CAS Number	List Citations
Paraffinic Extract	64742-04-7	7,17

Regulatory list searched	
1 = ACGIH ALL	**14 = TSCA 6**
2 = ACGIH A1	**15 = TSCA 12b**
3 = ACGIH A2	**16 = CA P65**
4 = NTP	**17 = CA RTK**
5 = NTP A	**18 = FL RTK**
6 = IAC 1	**19 = IL RTK**
7 = IAC 2A	**20 = LA RTK**
8 = IARC 2B	**21 = MI 293**
9 = OSHA	**22 = MN RTK**
11 = TSCA 4	**23 = NJ RTK**
12 = TSCA 5a2	**24 = PA RTK**
13 = TSCA 5e	**25 = RI RTK**

Code Key;
CARC = Carcinogen
SUS = Suspected Carcinogen

SECTION 16. OTHER INFORMATION

Use	Lubricant

Ingredient	**Percent**	**CAS Number**
Paraffinic Extract	>60	63161-02-6
Additives/Thickener	>30	61516-01-6

SECTION 17. DISCLAIMER

Note: products do not contain PCBs.

Health studies have shown that many hydrocarbons pose potential human health risks which may vary from person to person. Information provided on this MSDS reflects intended use. This product should not be used for any other applications. In any case, the following advice should be considered:

FIRST AID: Wash skin with soap and water. Flush eyes with water. If overcome by fumes or vapour, remove to fresh air. If ingested do not induce vomiting. If symptoms persist seek medical attention. Read and understand the MSDS before using this product.

INJECTION INJURY WARNING: If product is injected into or under the skin, or into any part of the body, regardless of the appearance of the wound or its size, the individual should be evaluated immediately by a doctor as a surgical emergency. Even though initial symptoms from high-pressure injection may be minimal or absent, early surgical treatment within the first few hours may significantly reduce the ultimate extent of injury.

SAFETY: Under normal conditions of intended use, this product does not pose a risk to health. Excessive exposure may result in eye, skin or respiratory irritation. Always observe good hygiene measures

DISCLAIMER

Information given herein is offered in good faith as accurate, but without guarantee. Conditions of use and suitability of the product for particular uses are beyond our control; the user therefore assumes all risks of use of the product and we expressly disclaim all warranties of every kind and nature, including warranties of merchantability and fitness for a particular purpose in respect to the use or suitability of the product.

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Nothing is intended as a recommendation for uses, which infringe valid patents, or as extending license under valid patents. Appropriate warnings and safe handling procedures should be provided to handlers and use

Prepared by	NONA INDUSTRIAL CC Product Technical Services

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