PRECISION LUBRICATION

MATERIAL SAFETY DATA SHEET

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

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name	Hydraulic 68
Supplier	NONA INDUSTRIAL CC
Updated	April 2021
Review	April 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

Mixtures Distillates (petroleum) solvent-dewaxed heavy paraffinic
60-100%
CAS number: 64742-65-0
EC number: 265-169-7
REACH registration number: 01-2119471299-27-XXXX

A petroleum product. DMSO extract < 3 % weight (IP 346)
Classification (67/548/EEC or 1999/45/EC)
Not Classified

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

Composition comments: If REACH registration numbers do not appear the substance is either exempt from registration, does not meet the minimum volume threshold for registration, the registration date has not yet come due or this information is proprietary.

SECTION 3. HAZARDOUS IDENTIFICATION

US OSHA Hazard communication Standard	Product assessed in accordance with OSHA 29 CFR 1910.1200 and determined not to be hazardous.
Note	Keep good personal hygiene and avoid prolonged exposure.
Emergency Response Data	Lubricating Grease

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	None
Products of decomposition	Fumes, smoke, carbon monoxide, sulphur oxides, aldehydes and other decomposition products, in the case of incomplete combustion.
Flashpoint C	> 199 °C (ASTM D-92)

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 appropriate authorities.
Methods for cleaning up	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. If necessary, dispose of absorbed residues as directed in Section 13.
Environmental precautions	Prevent spills from entering storm sewers or drains and contact with soil.
Personal precautions	See Section 13

SECTION 7. HANDLING AND STORAGE

Safe handling advice	No special precautions are necessary beyond normal good hygiene practices.
Storage information	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

Occupational exposure limits Distillates (petroleum) solvent-dewaxed heavy paraffinic

LTEL:
Long Term Exposure Limits - Time Weight Average (TWA) over 8 hours.

STEL:
Short Term Exposure Limits - Time Weight Average (TWA) over 15 Minutes

Note:
Limits Shown for guidance only. Follow applicable regulations.

2-ethylhexyl zinc dithiophosphate (CAS: 4259-15-8)

DNEL
- Workers - Dermal; systemic effects: 0.14 mg/kg/day
- Workers - Inhalation; systemic effects: 0.422 ppm
- Workers - Inhalation; Long term systemic effects: 0.07 ppm
- Workers - Dermal; local effects: 0.09 mg/cm^2
- Workers - Inhalation; local effects: 0.42 ppm
- Workers - Inhalation; Long term systemic effects: 0.21 ppm
- Workers - Dermal; Long term systemic effects: 0.09 mg/cm^2
- Workers - Dermal; Long term systemic effects

PNEC
- Fresh water; 0.004 mg/l
- Soil; 0.0548 mg/kg
- Sediment (Freshwater); 0.0701 mg/kg
- Marine water; 0.0046 mg/l
- Sediment (Marinewater); 0.00701 mg/kg
- STP; 3.8 mg/l
- Air; 7.1 mg/m^3

benzenesulfonic acid, mono-C16-24-alkyl derivs.

DNEL

- Workers - Dermal; Long term systemic effects: 3.33 mg/kg
- Workers - Inhalation; Long term systemic effects: 0.66 mg/m^3
- Consumer - Dermal; Long term systemic effects:
- Consumer - Inhalation; Long term systemic effects: 0.33 mg/m^3
- Consumer - Oral; Long term systemic effects:

PNEC

- Fresh water; 1 mg/l - Soil; 868700000 mg/kg
- Sediment (Freshwater); 723500000 mg/kg
- STP; 100 mg/l - Marine water; 1 mg/l
- Intermittent release; 10 mg/l
- Sediment (Marinewater); 723500000 mg/kg

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Liquid
Colour	Light Amber
Odour	Mild
pH	N/A
Boiling Point (Celsius)	> 320 °C
Flash Point	> 190 °C (ASTM D-92)
Pour Point	10 °C
Flammability	Flammable
Auto Flammability	N/E
Explosive Properties	N/A
Oxidizing Properties	N/A
Vapour pressure	< 0.1 hPa
Density at 25°C	0.874 g/cm3 @ 20 °C (ASTM D-4052)
Solubility in water	Negligible

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

SECTION 10. STABILITY AND REACTIVITY

Stability	Stable
Conditions to avoid	Extreme heat and high energy sources of ignition, such as sparks and static electricity.
Materials to avoid	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 2000mg/kg). Based on testing of similar products and/or the components.
Dermal toxicity	Practically non-toxic (LD50: greater than 2000 mg/kg). Based on testing of similar products and /or the components.
Inhalation toxicity	Not established.
Eye irritation	Practically non-irritating. Based on testing of similar products and/or the components.
Other acute toxicity data	Practically non-irritating. Based on testing of similar products and/or the components.
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	Not established.
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
Toxicity to aquatic organisms	This substance is practically non-toxic to aquatic organisms (LL50: >1000 mg/l).
Further information on ecology	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

1 = ACGIH ALL	**11 = TSCA 4**
2 = ACGIH A1	**12 = TSCA 5a2**
3 = ACGIH A2	**13 = TSCA 5e**
4 = NTP	**14 = TSCA 6**
5 = NTP A	**15 = TSCA 12b**
6 = IAC 1	**16 = CA P65**
7 = IAC 2A	**17 = CA RTK**
8 = IARC 2B	**18 = FL RTK**
9 = OSHA	**19 = IL RTK**
19 = IL RTK	**20 = LA RTK**

Code Key;
CARC = Carcinogen
SUS = Suspected Carcinogen

SECTION 16. OTHER INFORMATION

Use	Lubricant	
Ingredient	Percent	CAS Number
Synthetic Extract	>70	63161-02-6
Additives/Thickener	>15	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.

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 users.

Prepared by	NONA INDUSTRIAL CC Product Technical Services

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