

ProOne Nitro Downhole Drilling Fluid Treatment

Prepared to U.S. OSHA, CMA, ANSI, Canadian WHMIS Standards, Australian WorkSafe, Japanese Industrial Standard JIS Z 7250:2000, and European Directives

1. PRODUCT IDENTIFICATION

TRADE NAME (AS LABELED):

CHEMICAL FAMILY NAME: CAS#: PRODUCT USE: CHEMICAL SHIPPING NAME/CLASS: U.N. NUMBER: MANUFACTURER'S NAME: ADDRESS: EMERGENCY PHONE: BUSINESS PHONE: E-MAIL ADDRESS: WEB SITE INFORMATION: DATE OF CURRENT REVISION: DATE OF LAST REVISION: ProOne Nitro DownHole Drilling Fluid Treatment Emulsifiable Oil Mixture Various Uses Non-Regulated Material None ProOne, Inc 940 South Coast Dr., Suite# 200, Costa Mesa, CA 92626 USA 1-800-424-9300 Chemtrec 1-800-424-9300

2. HAZARD IDENTIFICATION

EMERGENCY OVERVIEW:

Product Description: This product is an amber oily colored liquid with a petroleum odor.

Health Hazards: Harmful if inhaled. Prolonged exposure can cause irritation to skin, eyes and respiratory tract.

Flammability Hazards: This product has a flash point of >400°F (>204°C).

Reactivity Hazards: Negligible.

Environmental Hazards: The environmental effects of this product have not been fully investigated. All work practices should be aimed at eliminating environmental contamination.

Emergency Considerations: Emergency responders must wear the proper personal protective equipment (and have appropriate fire-suppression equipment) suitable for the situation to which they are responding.

US DOT SYMBOL(S)

CANADA (WHMIS) SYMBOL(S)

Non-Regulated Material



EUROPEAN and (GHS) Hazard Symbol(s)



Signal Word: Warning!

EU LABELING AND CLASSIFICATION:

This product does meet the definition of a hazardous substance or preparation as defined by the European Union Council Directives 67/548/EEC, 1999/45/EC, 1272/2008/EC and subsequent Directives.

EU HAZARD CLASSIFICATION OF INGREDIENTS PER DIRECTIVE 1272/2008/EC:

Index Number:

CAS# 120962-03-0 Not listed in ESIS

CAS# 57171-56-9 Not listed in ESIS

CAS# 68130-33-6 Not listed in ESIS

CAS# 68071-17-0 Not listed in ESIS

Substances not listed either individually or in group entries must be self classified.

Component(s) Contributing to Classification(s)

Emulsified Brassica Napus Oil, Reacted Emulsifier

GHS Hazard Classification(s):

Acute Oral Toxicity Category 4 Acute Inhalation Toxicity Category 4

Hazard Statement(s):

H302: Harmful if swallowed H320: Causes eye irritation H315: Causes skin irritation H332: Harmful if inhaled

Precautionary Statement(s):

P260: Do not breathe dust/fume/gas/mist/vapors/spray P264: Wash hands thoroughly after handling P271: Use only in well ventilated area. P280: Wear protective gloves/protective clothing/eye protection/face protection

EU HAZARD CLASSIFICATION OF INGREDIENTS PER DIRECTIVE 1999/45/EC:



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[Xn] Harmful [Xi] Irritant <u>**Risk Phrases:**</u> R20/22: Harmful by inhalation and if swallowed R36/37/38: Irritating to eyes, respiratory system and skin

Safety Phrases:

S24/25: Avoid contact with skin and eyes S37/39: Wear suitable gloves and eye/face protection

HEALTH HAZARDS OR RISKS FROM EXPOSURE:

SYMPTOMS OF OVEREXPOSURE BY ROUTE OF EXPOSURE: The most significant routes of overexposure for this product are by contact with skin or eyes, inhalation of vapors or mists. The symptoms of overexposure are described in the following paragraphs.

ACUTE:

INHALATION: Inhalation of vapors or mist may cause respiratory irritation.

CONTACT WITH SKIN: Prolonged exposure may cause skin irritation.

EYE CONTACT: Contact with eyes may cause irritation with redness and tearing.

INGESTION: Under normal conditions of intended use, this material is not expected to be an ingestion hazard.

Ingestion may cause gastrointestinal irritation, including pain, vomiting or diarrhea. If vomiting occurs, this material may be an aspiration hazard if product enters the lungs.

CHRONIC: Prolonged exposure to this product may cause skin dryness or dermatitis.

TARGET ORGANS: Acute: Skin, Eyes, Respiratory System

Chronic: Skin

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Hazardous Ingredients:	WT%	CAS#	EINECS #	Hazard Classification	Risk Phrases
Emulsified Brassica Napus Oil	65 - 75%	120962-03-0	Not Listed in ESIS	[Xn] Harmful	R20/22
Reacted Emulsifier	<20%	57171-56-9	Not Listed in ESIS	[Xi] Irritant	R36/37/38
Polymer	>5%	68130-33-6	Not Listed in ESIS	[Xi] Irritant	R36/37/38
Extreme Pressure Additive	>5%	68071-17-0	Not Listed in ESIS	[Xi] Irritant	R36/37/38
Balance of other ingredients is less than 1% in concentration (or 0.1% for carcinogens, reproductive toxins, or respiratory sensitizers).					

NOTE: ALL WHMIS required information is included in appropriate sections based on the ANSI Z400.1-2010 format. This product has been classified in accordance with the hazard criteria of the CPR and the SDS contains all the information required by the CPR, EU Directives and the Japanese Industrial Standard *JIS Z* 7250: 2000.

4. FIRST-AID MEASURES

EYE CONTACT: If product enters the eyes, open eyes while under gentle running water for at least 15 minutes. Seek medical attention if irritation persists.

SKIN CONTACT: Wash skin thoroughly with soap and water after handling. Seek medical attention if irritation develops and persists.

INHALATION: If breathing becomes difficult, remove victim to fresh air. If necessary, use artificial respiration to support vital functions. Seek medical attention.

INGESTION: If product is swallowed, call physician or poison control center for most current information. If professional advice is not available, do not induce vomiting. Never induce vomiting or give diluents (milk or water) to someone who is unconscious, having convulsions, or who cannot swallow. Seek medical advice. Take a copy of the label and/or SDS with the victim to the health professional.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Pre-existing skin, respiratory system or eye problems may be aggravated by prolonged contact or exposure.

RECOMMENDATIONS TO PHYSICIANS: Treat symptoms and eliminate overexposure.

5. FIRE-FIGHTING MEASURES

FLASH POINT: >400°F (>204°C). AUTOIGNITION TEMPERATURE: Not Established



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FLAMMABLE LIMITS (in air by volume, %): Lower NA Upper NA

FIRE EXTINGUISHING MATERIALS: Use fire extinguishing methods below:

Water Spray:	Yes
Foam: Yes	
Halon: Yes	

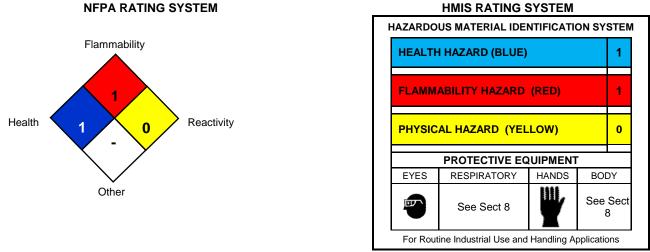
Carbon Dioxide: Yes Dry Chemical: Yes Other: Any "C" Class

UNUSUAL FIRE AND EXPLOSION HAZARDS: Not considered a fire or explosion hazard.

Explosion Sensitivity to Mechanical Impact: No

Explosion Sensitivity to Static Discharge: No

SPECIAL FIRE-FIGHTING PROCEDURES: Incipient fire responders should wear eye protection. Structural firefighters must wear Self-Contained Breathing Apparatus and full protective equipment. Isolate materials not yet involved in the fire and protect personnel. Move containers from fire area if this can be done without risk; otherwise, cool with carefully applied water spray. If possible, prevent runoff water from entering storm drains, bodies of water, or other environmentally sensitive areas.



Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe * = Chronic hazard

6. ACCIDENTAL RELEASE MEASURES

SPILL AND LEAK RESPONSE: Stop the flow of material, if this can be done safety. Contain discharged material. Absorb spill using an absorbent, non-combustible material such as earth, sand, or vermiculite. Place in a proper container for disposal. Dispose of in accordance with U.S. Federal, State, and local hazardous waste disposal regulations and those of Canada and its Provinces, those of Australia, Japan and EU Member States (see Section 13, Disposal Considerations).

7. HANDLING and STORAGE

WORK PRACTICES AND HYGIENE PRACTICES: As with all chemicals, avoid getting this product ON YOU or IN YOU. Wash thoroughly after handling this product. Use good hygiene practices.

STORAGE AND HANDLING PRACTICES: Containers of this product must be properly labeled. Store containers in a cool, dry location. Keep container tightly closed when not in use. Do not store at temperatures above 120°F (49°C) Store away from strong oxidizers.

8. EXPOSURE CONTROLS - PERSONAL PROTECTION

Chemical Name	CAS#	ACGIH TLV	OSHA TWA
Oil Mists	All Ingredients	5 mg/m³	5 mg/m³

VENTILATION AND ENGINEERING CONTROLS: Use with adequate ventilation to ensure exposure levels are maintained below the limits provided above. Use local exhaust ventilation to control airborne vapor. Ensure eyewash/safety shower stations are available near areas where this product is used.

The following information on appropriate Personal Protective Equipment is provided to assist employers in complying with OSHA regulations found in 29 CFR Subpart I (beginning at 1910.132) or equivalent standard of Canada, or standards of EU member states (including EN 149 for respiratory PPE, and EN 166 for face/eye protection), and those of Japan. Please reference applicable regulations and standards for relevant details.

ProOne, Inc, Suite# 200, Costa Mesa, CA 92626



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RESPIRATORY PROTECTION: Maintain airborne contaminant concentrations below guidelines listed above, if applicable. If necessary, use only respiratory protection authorized in the U.S. Federal OSHA Respiratory Protection Standard (29 CFR 1910.134), equivalent U.S. State standards, Canadian CSA Standard Z94.4-93, the European Standard EN149, or EU member states.

EYE PROTECTION: Safety glasses or chemical goggles as appropriate to prevent eye contact. If necessary, refer to U.S. OSHA 29 CFR 1910.133, Canadian Standards, and the European Standard EN166, Australian Standards, or relevant Japanese Standards.

HAND PROTECTION: Use chemical resistant gloves to prevent skin contact. If necessary, refer to U.S. OSHA 29 CFR 1910.138, the European Standard DIN EN 374, the appropriate Standards of Canada, Australian Standards, or relevant Japanese Standards.

BODY PROTECTION: Use body protection appropriate to prevent contact (e.g. lab coat, overalls). If necessary, refer to appropriate Standards of Canada, or appropriate Standards of the EU, Australian Standards, or relevant Japanese Standards. If a hazard of injury to the feet exists due to falling objects, rolling objects, where objects may pierce the soles of the feet or where employee's feet may be exposed to electrical hazards, use foot protection, as described in U.S. OSHA 29 CFR 1910.136.

9. PHYSICAL and CHEMICAL PROPERTIES

APPEARANCE (Physical State) and COLOR: This product is an amber oily colored liquid with a petroleum odor **ODOR:** Mild **ODOR THRESHOLD:** Not Available **pH:** 8.7 MELTING/FREEZING POINT: Not Available **BOILING POINT: Not Available** FLASH POINT: >400°F (>204°C) EVAPORATION RATE (n-BuAc=1): Negligible FLAMMABILITY (SOILD, GAS): Not Applicable UPPER/LOWER FLAMMABILITY OR EXLOSION LIMITS: Not Available VAPOR PRESSURE (mm Hg @ 20°C (68°F): Negligible at ambient temperature VAPOR DENSITY: Not Available **RELATIVE DENSITY: Not Available** SPECIFIC GRAVITY: 0.0.8967 SOLUBILITY IN WATER: Complete WEIGHT PER GALLON: 7.476 PARTITION COEFFICENT (n-octanol/water): Not Available **AUTO-IGNITION TEMPERATURE: Not Available DECOMPOSITION TEMPERATURE:** Not Available VISCOSITY: Not Available VOC: Nil

10. STABILITY and REACTIVITY

STABILITY: Stable under conditions of normal storage and use. **HAZARDOUS DECOMPOSITION PRODUCTS**: Thermal decomposition products include oxides of carbon **MATERIALS WITH WHICH SUBSTANCE IS INCOMPATIBLE**: Strong oxidizing or reducing agents. **POSSIBILITY OF HAZARDOUS REACTIONS**: Will not occur. **CONDITIONS TO AVOID**: Contact with incompatible materials and excessive temperatures

11. TOXICOLOGICAL INFORMATION

TOXICITY DATA:

No LD50 Data Available for mixture or components

SUSPECTED CANCER AGENT: Ingredients within this product are not found on the following lists: FEDERAL OSHA Z LIST, NTP, IARC, or CAL/OSHA and therefore are not considered to be, nor suspected to be, cancer-causing agents by these agencies.

IRRITANCY OF PRODUCT: This product may be irritating to skin, eyes or respiratory system. **SENSITIZATION TO THE PRODUCT:** This product is not a skin and respiratory sensitizer



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REPRODUCTIVE TOXICITY INFORMATION: No information concerning the effects of this product and its components on the human reproductive system

human reproductive system.

12. ECOLOGICAL INFORMATION

ALL WORK PRACTICES MUST BE AIMED AT ELIMINATING ENVIRONMENTAL CONTAMINATION.

ENVIRONMENTAL STABILITY: This product is believed to be stable. Engineering controls should be put in place to prevent release to the environment.

EFFECT OF MATERIAL ON PLANTS or ANIMALS: If applied to leaves, this product may kill grasses and small plants by interfering with transpiration and respiration. This product is not toxic to fish but may coat gill structures resulting in suffocation if spilled in shallow, running water. Product may be moderately toxic to amphibians by preventing dermal respiration. This product may cause gastrointestinal distress in birds and mammals through ingestion during pelage grooming.

EFFECT OF CHEMICAL ON AQUATIC LIFE: Testing was conducted by Environmental Enterprises USA, Inc. in May of 2012 with the following results:

96 Hour LC50: 464,800 PPM

Additional testing was conducted by Aquatic Bioassay Consulting Laboratories, Inc in April, 2012 with the following results:

DOHS (Title 22) Hazardous Waste Bioassay using Fathead Minnows: 96 hour LC50 = >750 mg/l

WATER ENDANGERMENT CLASS: Not water endangering in accordance with EU Guideline 91/155-EWG

13. DISPOSAL CONSIDERATIONS

PREPARING WASTES FOR DISPOSAL: Waste disposal must be in accordance with appropriate U.S. Federal, State, and local regulations, those of Canada, Australia, EU Member States and Japan.

Recycle used containers were possible.

EU Waste Code: Not determined

14. TRANSPORTATION INFORMATION

US DOT, IATA, IMO, ADR:

THIS PRODUCT IS CLASSIFIED BY THE U.S. DEPARTMENT OF TRANSPORTATION (49 CFR 172.101) AS FOLLOWS: PROPER SHIPPING NAME: Non-Regulated Material

HAZARD CLASS NUMBER and DESCRIPTION: None (Materials with a flash point greater than 200°F are not regulated by DOT) UN/NA IDENTIFICATION NUMBER: None

DOT CLASS: 60

DOT LABEL(S) REQUIRED: None

NORTH AMERICAN EMERGENCY RESPONSE GUIDEBOOK NUMBER (2012): Not Applicable

MARINE POLLUTANT: None of the ingredients are classified by the DOT as a Marine Pollutant (as defined by 49 CFR 172.101, Appendix B)

INTERNATIONAL AIR TRANSPORT ASSOCIATION SHIPPING INFORMATION (IATA): This product is not considered as dangerous goods for air transport.

INTERNATIONAL MARITIME ORGANIZATION SHIPPING INFORMATION (IMO): This product is not considered as dangerous goods.

EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY ROAD (ADR): This product is not considered by the United Nations Economic Commission for Europe to be dangerous goods.

15. REGULATORY INFORMATION

UNITED STATES REGULATIONS:

U.S. SARA REPORTING REQUIREMENTS: The components of this product are subject to the reporting requirements of Sections 302, 304, and 313 of Title III of the Superfund Amendments and Reauthorization Act as follows: None

U.S. SARA THRESHOLD PLANNING QUANTITY: There are no specific Threshold Planning Quantities for the components of this product. The default Federal SDS submission and inventory requirement filing threshold of 10,000 lbs (4,540 kg) therefore applies, per 40 CFR 370.20.

U.S. CERCLA REPORTABLE QUANTITY (RQ): None

U.S. TSCA INVENTORY STATUS: The components of this product are listed on the TSCA Inventory or are exempted form listing.

OTHER U.S. FEDERAL REGULATIONS: None



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CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT (PROPOSITION 65): Ingredients within this product are not on the Proposition 65 Lists.

CANADIAN REGULATIONS:

CANADIAN DSL/NDSL INVENTORY STATUS: The components of this product are on the DSL Inventory, or are exempted from listing.

OTHER CANADIAN REGULATIONS: Not applicable.

CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA) PRIORITIES SUBSTANCES LISTS:

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

CANADIAN WHMIS CLASSIFICATION and SYMBOLS: This product is categorized as a Class D Division 2B Materials having other toxic effects as per the Controlled Product Regulations

EUROPEAN ECONOMIC COMMUNITY INFORMATION:

This product does meet the definition of a hazardous substance or preparation as defined by the European Union Council Directives 67/548/EEC, 1999/45/EC, 1272/2008/EC and subsequent Directives.

See Section 2 for Full Details

NOTE : No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

AUSTRALIAN INFORMATION FOR PRODUCT: The components of this product are listed on the International Chemical Inventory list or exempt from listing.

JAPANESE INFORMATION FOR PRODUCT:

JAPANESE MINISTER OF INTERNATIONAL TRADE AND INDUSTRY (MITI) STATUS: The components of this product are not listed as Class I Specified Chemical Substances, Class II Specified Chemical Substances, or Designated Chemical Substances by the Japanese MITI.

JAPANESE ENCS INVENTORY: The components of this product are on the ENCS Inventory as indicated in the section on International Chemical Inventories, below.

POISONOUS AND DELETERIOUS SUBSTANCES CONTROL LAW: No component of this product is a listed Specified Poisonous Substance under the Poisonous and Deleterious Substances Control Law.

INTERNATIONAL CHEMICAL INVENTORIES:

Listing of the components on individual country Chemical Inventories is as follows:

Asia-Pac: Listed or exempt from listing

Australian Inventory of Chemical Substances (AICS): Listed or exempt from listing

Korean Existing Chemicals List (ECL): Listed or exempt from listing

Japanese Existing National Inventory of Chemical Substances (ENCS): Listed or exempt from listing

Philippines Inventory if Chemicals and Chemical Substances (PICCS): Listed or exempt from listing

Swiss Giftliste List of Toxic Substances: Listed or exempt from listing

U.S. TSCA: Listed

16. OTHER INFORMATION

PREPARED BY: Paul Eigbrett – (<u>GHS MSDS Compliance PLUS)</u> DATE OF PRINTING: December 18, 2014

Disclaimer: This safety data sheet was prepared from information obtained from various sources, including product suppliers. The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. The information contained herein is accurate and reliable to the best of the company's knowledge. ProOne Inc. shall not be held liable for any inaccuracies. ProOne Inc. does not warrant nor guarantee, whether expressed or implied, its accuracy or reliability and shall not be liable for any expense, loss or damage, direct or consequential, arising out of the use thereof. It is the user's responsibility to satisfy itself that the information offered for its consideration is suitable for its particular use.

END OF SDS SHEET