SAFETY DATA SHEET

1. Identification

Product identifier **Nano Penetrating Lubricant**

Other means of identification

SDS number NDT11P

Part No. NDT11P

Tariff code 3403.19.5000

Recommended use Lubricant

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name Nano ProMT LLC

Address 7427 Matthews-Mint Hill Road, Suite 201
Charlotte, NC 28227

Telephone Not available.

E-mail Not available.

Contact person Chris Hunter

Emergency phone number (704) 408-3641

2. Hazard(s) identification

Physical hazards	Flammable aerosols	Classification not possible
Health hazards	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 2A
Environmental hazards	Hazardous to the aquatic environment, acute hazard	Category 2
	Hazardous to the aquatic environment, long-term hazard	Category 2

OSHA defined hazards Not classified.

Label elements

Signal word Warning

Hazard statement Causes skin irritation. Causes serious eye irritation. Toxic to aquatic life with long lasting effects.

Precautionary statement

Prevention Pressurized container: Do not pierce or burn, even after use. Wash thoroughly after handling. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.

Response If on skin: Wash with plenty of water. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash before reuse. Collect spillage.

Storage Store away from incompatible materials.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC) None known.

Supplemental information 56.08% of the mixture consists of component(s) of unknown acute oral toxicity. 83.26% of the mixture consists of component(s) of unknown acute dermal toxicity. 79.08% of the mixture consists of component(s) of unknown acute inhalation toxicity. 56.08% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 56.08% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Dioctyl Adipate		103-23-1	20 - < 30
Alkyl Phosphite, Alkanolamine ester, polymer			1 - < 3
Bht (butylated Hydroxytoluene)		128-37-0	1 - < 3
Carbon Dioxide		124-38-9	1 - < 3
Calcium Carbonate		471-34-1	< 1
Paraffin Oils (petroleum), Catalytic Dewaxed Heavy		64742-70-7	< 0.2
Other components below reportable levels			60 - < 70

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact Remove contaminated clothing. Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Ingestion In the unlikely event of swallowing contact a physician or poison control center. Rinse mouth.

Most important symptoms/effects, acute and delayed Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain.

Indication of immediate medical attention and special treatment needed Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

General information Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media Foam. Powder. Carbon dioxide (CO2).

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions Containers should be cooled with water to prevent vapor pressure build up.

Specific methods Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

Refer to attached safety data sheets and/or instructions for use. Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Isolate area until gas has dispersed. Keep combustibles (wood, paper, oil, etc.) away from spilled material. Prevent product from entering drains. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. For waste disposal, see section 13 of the SDS.

Environmental precautions

Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. Ground and bond containers when transferring material. Do not re-use empty containers. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Level 1 Aerosol.

Contents under pressure. Do not expose to heat or store at temperatures above 120°F/49°C as can may burst. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. Keep out of the reach of children. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Calcium Carbonate (CAS 471-34-1)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
Carbon Dioxide (CAS 124-38-9)	PEL	9000 mg/m3	
		5000 ppm	
Paraffin Oils (petroleum), Catalytic Dewaxed Heavy (CAS 64742-70-7)	PEL	5 mg/m3	Mist.

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Bht (butylated Hydroxytoluene) (CAS 128-37-0)	TWA	2 mg/m3	Inhalable fraction and vapor.
Carbon Dioxide (CAS 124-38-9)	STEL	30000 ppm	
	TWA	5000 ppm	
Paraffin Oils (petroleum), Catalytic Dewaxed Heavy (CAS 64742-70-7)	TWA	5 mg/m3	Inhalable fraction.

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Bht (butylated Hydroxytoluene) (CAS 128-37-0)	TWA	10 mg/m3	
Calcium Carbonate (CAS 471-34-1)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total
Carbon Dioxide (CAS 124-38-9)	STEL	54000 mg/m3	

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
		30000 ppm	
	TWA	9000 mg/m3	
		5000 ppm	
Paraffin Oils (petroleum), Catalytic Dewaxed Heavy (CAS 64742-70-7)	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.

Biological limit values No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station. Eye wash fountain and emergency showers are recommended.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection Wear appropriate chemical resistant gloves.

Other Wear appropriate chemical resistant clothing.

Respiratory protection If permissible levels are exceeded use NIOSH mechanical filter / organic vapor cartridge or an air-supplied respirator. Chemical respirator with organic vapor cartridge and full facepiece if threshold limits are exceeded.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance Opaque Liquid

Physical state Liquid, Gas.

Form Aerosol.

Color Dark brown

Odor Petroleum

Odor threshold Not available.

pH Not available.

Melting point/freezing point -90.04 °F (-67.8 °C) estimated

Initial boiling point and boiling range 469.04 °F (242.8 °C) estimated

Flash point 250.0 °F (121.1 °C) estimated

Evaporation rate Not available.

Flammability (solid, gas) Not applicable. Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower (%) 0.8 % estimated

Flammability limit - upper (%) 8.5 % estimated

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressure 0.01 hPa estimated

Vapor density Not available.

Relative density Not available.

Solubility(ies)

Solubility (water) Not available.

Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	500 °F (260 °C) estimated
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Density	7.80 lbs/gal estimated
Explosive properties	Not explosive.
Flame extension	No Flame Extension
Flammability (flash back)	No
Heat of combustion (NFPA 30B)	0.03 kJ/g estimated
Oxidizing properties	Not oxidizing.
Percent volatile	0.73 % estimated
Specific gravity	0.93 estimated

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Prolonged inhalation may be harmful.
Skin contact	Causes skin irritation.
Eye contact	Causes serious eye irritation.
Ingestion	Expected to be a low ingestion hazard.
Symptoms related to the physical, chemical and toxicological characteristics	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain.

Information on toxicological effects

Acute toxicity Not known.

Components	Species	Test Results
Bht (butylated Hydroxytoluene) (CAS 128-37-0)		
Acute		
Oral		
LD50	Rat	890 mg/kg

* Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation	Causes skin irritation.
Serious eye damage/eye irritation	Causes serious eye irritation.
Respiratory or skin sensitization	
Respiratory sensitization	Not a respiratory sensitizer.
Skin sensitization	This product is not expected to cause skin sensitization.
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity	Not classifiable as to carcinogenicity to humans.

IARC Monographs. Overall Evaluation of Carcinogenicity

Bht (butylated Hydroxytoluene) (CAS 128-37-0)	3 Not classifiable as to carcinogenicity to humans.
Dioctyl Adipate (CAS 103-23-1)	3 Not classifiable as to carcinogenicity to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens

Paraffin Oils (petroleum), Catalytic Dewaxed Heavy (CAS 64742-70-7) — Known To Be Human Carcinogen.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure Not classified.

Specific target organ toxicity - repeated exposure Not classified.

Aspiration hazard Not an aspiration hazard.

Chronic effects Prolonged inhalation may be harmful.

12. Ecological information

Ecotoxicity Toxic to aquatic life with long lasting effects.

Components		Species	Test Results
Bht (butylated Hydroxytoluene) (CAS 128-37-0)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia pulex)	1.44 mg/l, 48 hours
Calcium Carbonate (CAS 471-34-1)			
Aquatic			
Fish	LC50	Western mosquitofish (Gambusia affinis)	> 56000 mg/l, 96 hours
Dioctyl Adipate (CAS 103-23-1)			
Aquatic			
Fish	LC50	Bluegill (Lepomis macrochirus)	0.48 - 0.85 mg/l, 96 hours

* Estimates for product may be based on additional component data not shown.

Persistence and degradability

Bioaccumulative potential No data available.

Mobility in soil No data available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents under pressure. Do not puncture, incinerate or crush. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.

14. Transport information

DOT

UN number Not available.

UN proper shipping name Consumer Commodity

Transport hazard class(es)

Class	ORM-D
Subsidiary risk	-

Packing group Not available.

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

IATA

UN number UN1950

UN proper shipping name Aerosol, non-flammable

Transport hazard class(es)

Class	2.2
Subsidiary risk	-

Packing group Not available.

Environmental hazards Yes

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

IMDG

UN number UN1950

UN proper shipping name Aerosols, MARINE POLLUTANT

Transport hazard class(es)

Class	2.2
Subsidiary risk	-

Packing group Not available.

Environmental hazards

Marine pollutant Yes

EmS F-D, S-U

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not established.

Marine pollutant

General information IMDG Regulated Marine Pollutant.

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes
Delayed Hazard - Yes
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

US state regulations California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

Dioctyl Adipate (CAS 103-23-1)
Paraffin Oils (petroleum), Catalytic Dewaxed Heavy (CAS 64742-70-7)

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 09-29-2017

Version # 01

HMIS® ratings Health: 4*
Flammability: 0
Physical hazard: 0

NFPA ratings Health: 4
Flammability: 0
Instability: 0

NFPA ratings

Disclaimer

The information provided in this Safety Data Sheet 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.

Revision information

Product and Company Identification: Product Review
Hazard(s) identification: Response
GHS: Classification