SAFETY DATA SHEET

SECTION 1: CHEMICAL PRODUCT AND SUPPLIER'S IDENTIFICATION

Product ID: NIT1003, NIT1004
Product Name: Nitro Dry Graphite
Revision Date: 17-Sep-21 **Supersedes Date:** 16-Nov-16
Version: 3
Distributor's Name: NitroLubricants, USA
Address: PO Box 204
Forest Lake, MN 55025
Emergency Phone: 800-535-5053
Information Phone: 855-587-7515
Product Recommended Use: Dry Graphite Lubricant

SECTION 2: HAZARDS IDENTIFICATION

Classification:

Specific Target Organ Toxicity - Single Exposure (Narcotic Effects) - Category 3
Skin Irritation - Category 2
Germ Cell Mutagenicity - Category 2
Carcinogenicity - Category 1B
Aerosol - Category 1
Eye Irritation - Category 2
Acute Aquatic Toxicity - Category 3
Chronic Acquatic Toxicity - Category 3

Pictograms:

Signal Word:

Danger

Hazardous Statements - Physical:

H222, H229 - Extremely flammable aerosol, pressurized container may burst if heated

Hazardous Statements - Health:

H350 - May cause cancer
H319 - Causes serious eye irritation
H341 - Suspected of causing genetic defects
H315 - Causes skin irritation
H336 - May cause drowsiness or dizziness
H335 - May cause respiratory irritation

Hazardous Statements - Environmental:

H412 - Harmful to aquatic life with long lasting effects

Precautionary Statements - General:

P101 - If medical advice is needed, have product container or label at hand

P102 - Keep out of reach of children

P103 - Read label before use

Precautionary Statements - Prevention:

P273 - Avoid release to the environment

P202 - Do not handle until all safety precautions have been read and understood

P280 - Wear eye protection/face protection

P264 - Wash thoroughly after handling

P211 - Do not spray on an open flame or other ignition source

P251 - Do not pierce or burn, even after use.

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray

P271 - Use only outdoors or in a well-ventilated area

Precautionary Statements - Responsive:

P308 + P313 - IF exposed or concerned: Get medical advice/attention.

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy t

P337 + P313 - IF EYE IRRITATION PERSISTS: Get medical advice/attention.

P370 + P378 - IN CASE OF FIRE: Use water fog, dry chemical or carbon dioxide to extinguish.

P302 + P352 - IF ON SKIN: Wash with plenty of soap nad water.

P332 + P313 - IF SKIN IRRITATION OCCURS: Get medical advice/attention.

P362 + P364 - Take off contaminated clothing and wash before reuse.

P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P312 - Call a POISON CENTER or doctor/physician if you feel unwell.

Precautionary Statements - Storage:

P405 - Store locked up

P410 - Protect from sunlight

P412 - Do not expose to temperatures exceeding 50°C/122°F.

P403 + P235 - Store in a well-ventilated place. Keep cool.

Precautionary Statements - Disposal:

P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

CAS #	*Chemical Name*	*% by Weight*
0000079-01-6	Trichloroethylene	45% - 80%
0000106-97-8	Butane	7% - 19%
0000075-28-5	Isobutane	3% - 8%
0000074-98-6	Propane	3% - 8%
0000067-63-0	Isopropyl Alcohol	3% - 7%

SECTION 4: FIRST AID MEASURES

Inhalation:

Remove source of exposure or move person to fresh air and keep comfortable for breathing. If exposed/feel unwell/concerned: call a POISON CENTER/doctor. Eliminate all ignition sources if safe to do so.

Eye Contact:

Remove source of exposure or move person to fresh air. Rinse eyes cautiously with lukewarm, gently flowing water for several minutes, while holding the eyelids open. Remove contact lenses, if present and easy to do so. Continue rinsing for a duration of 15-20 minutes. Take care not to rinse contaminated water into the unaffected eye or onto the face. If eye irritaiton persists: get medical advice/attention.

Skin Contact:

Take off immediately all contaminated clothing, shoes and leather goods (ex watchbands, belts). Gently blot or brush away excess product. Wash with plenty of lukewarm, gently flowing water for a duration of 15-20 minutes. Call a POISON CENTER/doctor if you feel unwell. Store contaminated lothing under water and wash before reuse or discard.

Ingestion:

Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor. If vomiting occurs naturally, lie on your side, in the recovery position.
Never give anything by mouth to an unconscious or convulsing victim. Keep person warm and quiet.

SECTION 5: FIRE-FIGHTING MEASURES

Suitable Extinguishing Media:

Use water, fog, dry chemical or carbon dioxide. Carbon dioxide can dispace oxygen. Use caution when applying carbon dioxide in confined spaces. Simultaneous use of foam and water on the same surface is to be avoided as water distroys the foam.

Unsuitable Extinguishing Media:

Water may be ineffective but can be used to cool containers exposed to heat or flame.

Specific Hazards in Case of Fire:

Contents under pressure. Keep away from ignition sources and open flames. Exposure of containers to extreme heat and flames can cause them to rupture often with violent force.
Aerosol cans may rupture when heated. Heated cans may burst.
In fire, will decompose to carbon dioxide, carbon monoxide.

Fire-Fighting Procedures:

Isolate immediate hazard area and keep unauthorized personnel out. Stop spill/release if it can be done safely. Move undamaged containers from immediate hazard area if it can be done safely. Water spray may be useful in minimizing or dispersing vapors and to protect personnel.
Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

Special Protective Actions:

Wear protective pressure self-contained breathing apparatus (SCBA) and full turnout gear.
Care should always be excercised in dust/mist areas.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Emergency Procedure:

Flammable/combustable material.
ELIMINATE all ignition sources (no smoking, flare, sparks or flames in immediate area). Stay upwind; keep out of low areas. Immediately turn off or isolate any source of ignition. Keep unnecessary people away; isolate hazard area and deny entry. Do not touch or walk through spilled material. Clean up immediately. Use absorbent sweeping compound to soak up material and put into suitable container for proper disposal.

Recommended Equipment:

Wear safety glasses and gloves.

Personal Precautions:

Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area). Use explosion proof equipment. Avoid breathing vapor. Avoid contact with skin, eye or clothing. Do not touch damaged containers or spilled materials unless wearing appropriate protective clothing.

Environmental Precautions:

Stop spill/release if it can be done safely. Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems and natural waterways by using sand, earth, or other appropriate barriers.

SECTION 7: HANDLING AND STORAGE

General:

For industrial and institutional use only.
For use by trained personnel only.
Keep away from children.
Wash hands after use.
Do not get in eyes, on skin or on clothing.
Do not breathe vapors or mists.
Use good personal hygiene practices.
Eating, drinking and smoking in work areas is prohibited.
Remove contaminated clothing and protective equipment before entering eating areas.
Eyewash stations and showers should be available in areas where this material is used and stored.

Ventilation Requirements:

Use only with adequate ventilation to control air contaminants to their exposure limits. The use of local ventilation is recommended to control emissions near the source.

Storage Room Requirements:

Keep container(s) tightly closed and properly labeled. Store in cool, dry, well-ventilated areas away from heat, direct sunlight and incompatibles. Store in approved containers and protect against physical damage. Keep containers securely sealed when not in use. Indoor storage should meet OSHA standards and appropriate fire codes. Containers that have been opened must be carefully resealed to prevent leakage. Empty containers retain residue and may be dangerous.
Do not cut, drill, grind, weld or perform similar operations on or near containers. Do not pressurize containers to empty them.
Ground all sparks. Static electricity may accumulate and create a fire hazard.
Store at temperatures below 120°F.

SECTION 8: EXPOSURE CONTROLS, PERSONAL PROTECTION

Eye Protection:

Chemical goggles, safety glasses with side shields or vented/splash proof goggles. Contact lenses may absorb irritants. Particles may adhere to lenses and cause corneal damage.

Skin Protection:

Wear gloves, long sleeved shirt, long pants and other protective clothing as required to minimize skin contact.
Use of gloves approved to relevant standards made from the following materials may provide suitable chemical protection: PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Chemical-resistant clothing is recommended to avoid prolonged contact. Avoid unnecessary skin contact.

Respiratory Protection:

If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker, a respiratory protection program that meets or is equivalent to OSHA 29 CFR 1910.134 and ANSI Z88.2 should be followed. Check with respiratory protective equipment suppliers. Where air-filtering respirators are suitable, select an appropriate combination of mask and filter. Select a filter suitable for combined particulate/organic gases and vapors.
When spraying more than one half can continuously or more than one can consecutively, use NIOSH approved respirator.

Chemical Name	OSHA TWA (ppm)	OSHA TWA (mg/m^3)	OSHA STEL (ppm)	OSHA STEL (mg/m^3)	OSHA-Tables Z1,2,3	OSHA Carcinogen	OSHA Skin designation	NIOSH TWA (ppm)	NIOSH TWA mg/m^3)
Butane								800	1900
Isobutane								800	1900
Isopropyl Alcohol	400	980			1			400	980
Propane	1000	1800			1			1000	1800
Trichloroethylene	100(a)/200 ceiling		300/5 mins in any 2 hours (a)		1, 2			25b	

Chemical Name	NIOSH STEL (ppm)	NIOSH STEL (mg/m^3)	NIOSH Carcinogen	ACGIH TWA (ppm)	ACGIH TWA (mg/m^3)	ACGIH STEL (ppm)	ACGIH STEL (mg/m^3)
Butane				1000			
Isobutane				1000			
Isopropyl Alcohol	500	1225		200		400	

Propane	See appendix F: Minimimal		
Trichloroethylene	1	10	25

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Density	8.70737 lb/gal
Density VOC	8.36866 lb/gal
% VOC	96.11%
VOC Actual	8.36866 lb/gal
VOC Actual	1002.81623g/l
VOC Regulatory	8.36866 lb/gal
VOC Regulatory	1002.81623 g/l
Appearance	Dark Liquid
Odor Threshold	NA
Odor Description	NA
pH	NA
Water Solubility	Nil
Flammability	NA
Flash Point Symbol	NA
Flash Point	NA
Viscosity	NA
Lower Explosion Level	NA
Upper Explosion Level	NA
Melting Point	NA
Vapor Density	Slower than ether
Freezing Point	NA
Low Boiling Point	NA
High Boiling Point	NA
Decomposition Pt	0
Auto Ignition Temp	NA
Evaporation Rate	Slower than ether

SECTION 10: STABILITY AND REACTIVITY

Stability:

Stable.

Conditions to Avoid:

High temperatures.

Incompatible Materials

None known.

Hazardous Reactions/Polymerization:

Will not occur.

Hazardous Decomposition Products:

In fire, will decompose to carbon dioxide, carbon monoxide.

SECTION 11: TOXICOLOGICAL INFORMATION

Skin Corrosion/Irritation:

Overexposure will cause defatting of skin.

Serious Eye Damage/Irritation:

Overexposure will cause redness and burning sensation.

Carcinogenicity:

May cause cancer.

Germ Cell Mutagenicity:

Suspected of causing genetic defects.

Reproductive Toxicity:

No data available.

Respiratory/Skin Sensitization:

No data available.

Specific Target Organ Toxicity - Single Exposure:

May cause drowziness or dizziness.

Specific Target Organ Toxicity - Repeated Exposure:

No data available.

Aspiration Hazard:

No data available.

Acute Toxicity:

Inhalation: effect of overexposure include irritation of respiratory tract, headache, dizziness, nausea and loss of coordination. Extreme overexposure may result in unconsciousness and possibly death.

0000067-63-0	**Isopropyl Alcohol**	
	LC50 (rat):	17000 ppm; 4-hour exposure (cited as 12000 ppm; 8-hour exposure)(18)
	LD50 (oral, male rat):	4710 mg/kg (cited as 6.0 mL/kg) (19)
	LD50 (oral, mouse):	3600 mg/kg (20, unconfirmed)
	LD50 (dermal, rabbit):	12870 mg/kg (cited as 16.4 mL/kg) (14)
0000079-01-6	**Trichloroethylene**	
	LC50 (rat):	Approximately 8000 ppm; 4-hour exposure (5); 12500 ppm; 4-hour exposure (
	LC50 (mouse):	8450 ppm; 4-hour exposure (3)
	LD50 (oral, rat):	7200 mg/kg (cited as 4.92 mL/kg) (5)
	LD50 (oral, male mouse):	2402 mg/kg (4)
	LD50 (dermal, rabbit):	greater than 29000 mg/kg (cited as greater than 20 mL/kg) (5)
0000075-28-5	**Isobutane**	
	LC50 (mouse, inhalation):	520000 ppm (52%); 2-hour exposure (4)
0000106-97-8	**Butane**	
	LC50 (mouse):	202000 ppm (481000 mg/m^3); 4-hour exposure (cited as 680 mg/L; 2-hour exposure) (9)
	LC50 (rat):	276000 ppm (65800 mg/m^3); 4-hour exposure (cited as 658 mg/L; 4-hour exposure) (9)

Potential Health Effects - Miscellaneous

0000067-63-0 Isopropyl Alcohol

The following medical conditions may be aggravated by exposure: dermatitis, respiratory disease. Developmental toxicity was seen in rats offspring at doses that were maternally toxic. Contact will cause moderate to severe redness and swelling, itching, tingling sensation, painful burning. May cause injury to the cornea of the eyes. Prolonged or repeated exposure may cause damage to any of the following organs/systems: liver. Ingestion studies on laboratory animals showed that very high oral doses caused increase liver and kidney weights.

SECTION 12: ECOLOGICAL INFORMATION

Toxicity:

Harmful to aquatic life with long lasting effects.

Persistence and Degradability:

No data available.

Bio-Accumulative Potential:

No data available.

Mobility in Soil:

No data available.

Other Adverse Effects:

No data available.

SECTION 13: DISPOSAL CONSIDERATIONS

Water Disposal:

Under RCRA, it is the responsibility of the user of the product, to determine a time of disposal whether the product meets RCRA criteria for hazardous waste. Waste management should be in full compliance with federal, state, and local laws.
Empty containers retain product residue which may exhibit hazards of material, therefore do not pressurize, cut, glaze, weld or use for any other purposes. Return drums to reclamation centers for proper cleaning and reuse.

SECTION 14: TRANSPORT INFORMATION

U.S. DOT Information:

Consumer Commodity, ORM-D

IMDG Information:

Consumer Commodity, ORM-D

IATA Information:

Consumer Commodity, ORM-D

SECTION 15: REGULATORY INFORMATION

CAS #	*Chemical Name*	*% by Weight*	*Regulation List*
0000067-63-0	Isopropyl Alcohol	3% - 7%	SARA312, SARA313, VOC, TSCA, ACGIH, OSHA
0000074-98-6	Propane	3% - 8%	SARA312, VOC, TSCA, ACGIH, OSHA
0000075-28-5	Isobutane	3% - 8%	SARA312, VOC, TSCA, ACGIH
0000079-01-6	Trichloroethylene	45% - 80%	HAPS, SARA312, SARA313, VOC, TSCA, RCRA, ACGIH, CA_Prop65 - California Proposition 65, OSHA
0000106-97-8	Butane	7% - 19%	SARA312, VOC, TSCA, ACGIH

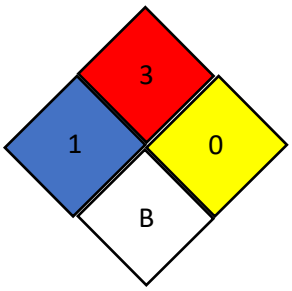
SECTION 16: OTHER INFORMATION

Glossary:

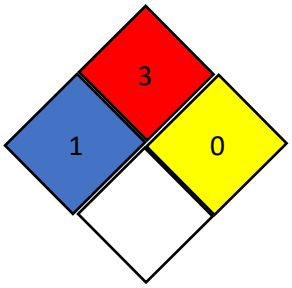
*There are points of differences between OSHA GHS and UN GHS. In 90% of the catetories, they can be used interchangeable, but for the Skin Coorsion/Irritant Category and the Specific Target Organ Toxicity (Single and Repeated Exposure) Categories. In these cases, our system will say UN GHS.

ACGIH - American Conference of Governmental Industrial Hygienists; ANSI-American National Standards Institute; Canadian TDG-Canadian Transportation of Dangerous Goods; CAS- Chemical Abstract Service; Chemtrec- Chemical Transporation Emergency Center (US); CHIP- Chemical Hazard Information and Packaging; DSL- Domestic Substances List; EC-Equivalent Concentration; EH40 (UK)- HSE Guidance Note EH40 Occupational Exposure Limits; EPCRA-Emergency Planning and Community Right-to-Know Act; ESL- Effects screening levels; HMIS- Hazardous Material Information Service; LC-Lethan Concentration; LD-Lethal Dose; NFPA-National Fire Protection Association; OEL-Occupational Exposure Limits; OSHA-Occupational Safety and Health Administration, US Department of Labor; PEL-Permissible Exposure Limit; SARA (Title III)-Superfund Amendments and Reauthorization Act; SARA 313-Superfund Amendments and Reauthorization Act, Section 313; SCBA-Self-Contained Breathing Apparatus; STEL-Short Term Exposure Limit; TCEQ-Texas Commission on Environmental Quality; TLV-Threshold Limit Value; TSCA-Toxic Substances Control Act Public Law 94-469; TWA- Time-Weighted Value; US DOT- US Department of Transportation; WHMIS- Workplace Hazardous Materials Information System.

HMIS



NFPA



Chronic:

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