New Tech Lubes Limited

SAFETY DATA SHEET
According to EC Regulations 1907/2006 & 1272/2008
NTL SDS 1001A-1.0
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DRY GRAF

SECTION 1. IDENTIFICATION OF THE PREPARATION AND THE COMPANY / UNDERTAKING

1.1 Product Name: Dry Graf

1.2 Identified uses: Lubricant, Dry film. Graphite base.

Use's advised against Do not use on live electrics – potential ignition. .

1.3 Details of supplier of SDS: New Tech Lubes Ltd, Unit 3 Harrison Drive Ind Est, Worksop

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1.4 Emergency Telephone: +44 (0)1909 730900 (09.00 -17.00 GMT Monday to Friday)

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance /mixture:

2.1.1 Regulation EC 1272/2008:

Aerosol (cat 1) Extremely flammable

Eye irritant (cat 2) Causes serious eye irritation.

STOT SE (cat 3) May cause drowsiness or dizziness

2.2 Label elements:





Signal word(s): Danger

Hazard statements:

H222 Extremely flammable aerosol

H229 Pressurised container: may burst if heated

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness

Precautionary statements:

P210 Keep away from heat/sparks/open flames/hot surfaces – No

smoking.

P211 Do not spray on an open flame or other ignition source..
P243 Take precautionary measures against static discharge.

P251 Pressurised container – do not pierce or burn, even after use

P261 Avoid breathing vapour/spray.

P271 Use only outdoors or in well-ventilated area.

P280 Wear eye / face protection

P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses if present. Continue rinsing

P410 + P412 Protect from sunlight. Do not expose to temperatures

exceeding 50°C

2.3 Other hazards

The mixture does not contain any vPvB or PBT substances. Danger of bursting (explosion) when heated over 50°C.

SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Mixture:

HAZARDOUS INGREDIENTS	%W/W	CAS No	REACH REG NO	HAZARD PICT/STATEMENTS
		EC No		
Hydrocarbon aerosol	25-50	68476-85-7	N/A	Flam gas1, H220
propellant (<0.1 butadiene)		270-704-2		_
Propan-2-ol	25-50	67-63-0	01-2119457558-25	Flam liq 2, H225
		200-661-7		Eye irritant 2, H319
				STOT SE3, H336
Ethanol	10-20	64-17-5		Flam liq 2, H225
		200-578-6		Eye irritant 2, H319
Methanol	<1	67-56-1		Flam liq 2, H225
		200-659-6		Acute tox 3 H301/311/331
				STOT SE1 H370

3.2 Additional information

See sect 16 for full text of H phrases.

SECTION 4. FIRST AID MEASURES

4.1 Description of first aid measures:

Eyes: Remove contact lenses. Rinse with water immediately for at least 10 minutes.

Obtain medical attention if any discomfort continues.

Skin: Wash skin with soap and water. If grease has been injected under the skin,

seek Medical advice immediately

Inhalation: Move to fresh air. Provide rest and warmth. If effects occur, obtain medical

attention.

Ingestion: If swallowed, drink plenty of water. Do not induce vomiting. Obtain immediate

medical attention.

4.2 Most important symptoms and effects, both acute and delayed.

The following symptoms may be apparent depending upon the routes of absorption as detailed in 4.1 above; eye irritation, headache, nausea, dizziness, respiratory tract irritation. Resultant acute /long-term effect to the CNS, dermatitis, vomiting, diarrhoea and are further detailed in sect 11

4.3 Indication of any immediate medical attention and special treatment needed.

Excessive exposure may aggravate pre-existing asthma and other respiratory disorders.

SECTION 5. FIRE FIGHTING MEASURES

5.1 Extinguishing media:

Suitable extinguishing media: Powder, alcohol resistant foam. CO2, dry chemicals

Unsuitable extinguishing media: Water stream

5.2 Special hazards arising from the substance or mixture

May produce oxides of Carbon and other combustion products. Danger of explosion when heated. Contents will add to fuelling of fire. Solvent vapours may form explosive mixtures with air.

5.3 Advice for fire fighters

Wear self-contained breathing apparatus. Keep containers cool by spraying with water. Ventilate closed spaces before entering

SECTION 6. ACCIDENTAL RELEASE MEASURES:

6.1 Personal precautions, protective equipment and emergency procedures

Remove possible sources of ignition. Ensure sufficient ventilation. Wear suitable protective equipment as in Sect 8.

6.2 Environmental precautions.

Prevent from entering drainage systems or water courses.

6.3 Methods and material for containment and clearing

If spray or gas escapes, ensure plenty of fresh air / ventilation. Absorb spilled contents on inert material such as sand or earth - collect and dispose of as in Sect 13. Scrub area with detergent and water to prevent slippery residues.

6.4 Reference to other sections

For PPE and disposal see sections 8 and 13 respectively.

SECTION 7. HANDLING AND STORAGE:

7.1 Precautions for safe handling

Only use in areas with good ventilation. Keep away from any sources of ignition including live electrics. Do not use on hot surfaces. Take precautions against static discharge. Wash hands after use and before eating. Remove contaminated clothing.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool, dry, ventilated area. Keep protected from direct sunlight and temperatures above 50°C.

7.3 Specific end use (s)

For general lubrication for equipment and machinery

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Workplace exposure limits:

Ingredients	LTEL 8 Hr	STEL 15 min	Note
Hydrocarbon aerosol propellant (<0.1	1000 ppm	1250 ppm	EH40
butadiene)			
Propan-2-ol	400 ppm	500 ppm	EH40
Ethanol	1000 ppm	-	EH40
Methanol	200 ppm	250 ppm	EH40

Biological limit value: Not established

PNECs, DNELs: Not established

8.2 Exposure controls

8.2.1 Appropriate engineering controls: Ensure good ventilation /local exhaust ventilation to

keep airborne contaminants below exposure limits.

8.2.2 Personal protective equipment:





Eye / face protection: Safety goggles/glasses if there is a risk of eye contact.

Skin protection: Nitrile gloves (EN 374). See glove manufacturer data for glove

selection and breakthrough time for use conditions.

Respiratory protection: Not required under normal circumstances. Type RPE if required

Thermal hazards: Not applicable

8.2.3 Environmental exposure controls – See sections 6, 12, 13.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance/physical state: Aerosol Colour: Black

Odour: Alcohol, characteristic

Odour threshold: Not established pH: Not applicable

Melting /freezing point: $< 0^{0}$ C IBP /boiling range: $< 0^{0}$ C Flash Point $< 0^{0}$ C

Evaporation rate:

Flammability (gas):

Upper /lower explosive limits:

Vapour pressure:

Vapour density:

Relative density:

Not established

Extremely flammable

1.8% - 9.4% by vol

Approx 3 bar at 20°C

Not established

Not applicable

Solubility: Negligible water miscibility

Partition coefficient (n-octanol/water):

Auto-ignition temperature:

Decomposition temperature:

Viscosity:

Not established

Not established

Not applicable

Explosive properties:

Not established

Oxidising properties: None

SECTION 10 STABILITY AND REACTIVITY

10.1 Reactivity

No dangerous reactions known under normal conditions of use.

10.2 Chemical Stability

Stable under proper storage and handling conditions.

10.3 Possibility of chemical reactions

No dangerous reactions known.

10.4 Conditions to avoid

Heat, flame and other ignition sources .Pressurised container: Protect from sunlight and do not Expose to temperatures exceeding 50°C. Do not pierce or burn even after use.

10.5 Incompatible materials

Avoid contact with strong oxidising agents

10.6 Hazardous decomposition products

None when used as directed.

SECTION 11 TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Low order of acute toxicity.

11.1.2. **Mixtures**

Acute toxicity
Irritation
Corrosivity
Sensitisation

Repeated dose toxicity

Carcinogenicity Mutagenicity

Toxicity for reproduction

No data available

Other information

May cause significant irritation and discomfort to eyes. Prolonged or repeated contact may cause irritation and dermatitis. High concentrations of vapours may cause drowsiness and dizziness. Ingestion may cause irritation to mouth and cause damage to respiratory system.

Propan-2-ol

Toxicity / Effect	Endpoint	Value	Organism	Method	Notes
Acute Tox -Oral	LD50	>2000mg/kg	Rat		
Acute Tox- Derm	LD50	>2000mg/kg	Rabbit		
Skin corrosion / Irritation			Rabbit		Not irritating
Serious eye damage / Irritation			Rabbit		Irritating
Sensitisation – Respiratory or Skin			Guinea pig	Buehler test	Not sensitising
Germ Cell Mutagenicity					
Genotox in vitro				Ames test, Salmonella typhi – with/without	Not mutagenic

Ethanol

Toxicity / Effect	Endpoint	Value	Organism	Method	Notes
Acute Tox -Oral	LD50	>2000mg/kg	Rat		
Acute Tox- Derm	LD50	>2000mg/kg	Rabbit		
Acute Tox- Inhal	LC50	>20mg/L	Mouse		Vapours
Serious eye			Rabbit		Slightly irritating
damage / Irritation					
Sensitisation -			Guinea pig		Not sensitising

Respiratory or Skin			
Carcinogenicity			Not a carcinogen

Hydrocarbon aerosol propellant (<0.1% Butadiene)

General

In low concentrations may cause narcotic effects. Symptoms include dizziness, headache, nausea and loss of co-ordination.

SECTION 12 ECOLOGICAL INFORMATION:

Mixture

- 12.1 Toxicity
- 12.2 Persistence and degradability
- 12.3 Bioaccumulative potential
- 12.4 Mobility in soil
- 12.4 results of PBT and vPvB assessment
- 12.6 Other adverse effects.

No data available

Propan - 2 - ol

12.1 Toxicity

Test	Duration	Organism	Method	Result	Notes
Toxicity to fish	48 hrs	Leucisus idus	LC50	>100mg/l	Static
-		melanotus			Lit value
Toxicity to daphnia	48 hrs	Daphnia magna	EC50	>100mg/l	Static
/other aq invertibrates					Lit value
Toxicity to algae	72 hrs	Scenedesmus	EC 50	>100mg/l	Static
		subspicatus			Lit value

12.2 Persistence, Degradability and Bioaccumulation Potential.

Media	Test type	Duration	Result	Notes	
Water	Ready	10 days	>70%	Lit value	
	biodegradability	(content 7mg/l)			

- 12.3 Bioaccumulative potential No data available
- **12.4 Mobility in soil** No data available
- 12.5 Results of PBT and vPvB assessment Contains no PBT or vPvB components
- 12.6 Other adverse effects No data available

Ethanol

12.1 Toxicity

Test	Duration	Organism	Method	Result	Notes
Toxicity to fish	48 hrs	Leucisus idus	LC50	>100mg/l	
Toxicity to daphnia	48 hrs	Daphnia magna	EC50	>100mg/l	
/other aq invertibrates					
Toxicity to algae	48 hrs	Selenastrum	EC 50	>100mg/l	
		capricornutum			

- **12.2 Persistence, Degradability and Bioaccumulation Potential.** Biodegradable. Oxidises rapidly by photochemical reactions in air.Integrated experimental half-life expected to be 1-10 days. Dominant loss process biodegradation.
- 12.3 Bioaccumulative potential Does not bioaccumulate significantly
- **12.4 Mobility in soil** Evaporates readily from all surfaces. Water soluble and may spread in water systems
- 12.5 Results of PBT and vPvB assessment Contains no PBT or vPvB components
- 12.6 Other adverse effects No data available

Hydrocarbon aerosol propellant (<0.1% Butadiene)

General

No known ecological damage.

SECTION 13 DISPOSAL CONSIDERATIONS:

13.1 Waste Treatment Methods

Empty containers must not be burnt or incinerated because of explosion hazard. Dispose of in accordance with local authority guidelines. Empty aerosol products may be recyclable via local authority.

SECTION 14. TRANSPORT INFORMATION:

14.1 UN number 1950

14.2 UN proper shipping name Aerosols

14.3 Transport hazard class 2 (UN / IMDG)

ADR Classification code 5F

14.4 Packing group None

14.5 Environmental hazards Not applicable

SECTION 15. REGULATORY INFORMATION:

15.1 Safety, health and environmental regulations/legislation specific for the mixture

REACH - 1907/2006 CLP - 1272/2008 DPD - 199/45/EC

COSHH - 2002 (as amended)

15.2 Chemical safety assessment

A CSA has not been carried out for this mixture.

SECTION 16. OTHER INFORMATION:

Legend

LTEL Long term exposure limit

STEL (SE) Short term exposure limit (Single exposure)

STOT Specific target organ toxicity
PNEC Predicted no effect concentration

DNEL Derived no effect level

Hazard statements -referred to in sect 3

H220 Extremely flammable gas

H225 Highly flammable liquid and vapour H226 Flammable liquid and vapour

H301/311/331 Toxic if swallowed, in contact with skin and if inhaled

H370 Causes damage to organs (kidney /liver)

Classification methods used to derive classification of mixture

Classification according to calculation procedure detailed in EC1272/2008

Additional information

This safety data sheet has been produced based on information supplied by the manufacturers of the materials therein and is believed to be accurate. No warranty is expressed or implied by this information. It is for the user to satisfy themselves of the suitability of the product for their own purposes.