New Tech Lubes Limited

SAFETY DATA SHEET
According to the REACH etc (Amendment etc.) (EU Exit) Regulations 2020 No. 1577, as amended
NTL SDS 103-1.2
August 2024

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# HI GRAF GREASE

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

| | | |
|---|---|---|
| **1.1** | **Product name:** | Hi Graf Grease |
| **1.2** | **Identified use(s):** | Lubricant, General machinery |
| | **Use(s) advised against:** | None known. |
| **1.3** | **Details of supplier of SDS:** | New Tech Lubes Ltd, Unit 2-4 Harrison Drive Ind Est, Worksop Notts, S81 9RL |
| | **E Mail (competent person):** | info@newtechlubes.com |
| **1.4** | **Emergency telephone:** | +44 (0)1909 730900 (08.00 -16.00 GMT Monday to Friday) |

## SECTION 2. HAZARDS IDENTIFICATION

**2.1 Classification of the substance/mixture:** Not classified.

**2.2 Label elements:** Not classified.

**2.3 Other hazards:** The mixture does not contain any vPvB or PBT substances.

## SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

**3.1 Substances:** Not applicable

**3.2 Mixtures:** Not classified

## SECTION 4. FIRST AID MEASURES

**4.1 Description of first aid measures:**

Inhalation: Remove person to fresh air and keep comfortable for breathing. Get medical advice/attention if you feel unwell.

Ingestion: Rinse mouth out with water. Get medical advice/attention if you feel unwell. Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Skin contact: Wash skin thoroughly with mild soap and water. Take off contaminated clothing and wash it before reuse. Seek medical attention if irritation develops.

Eye contact: Remove contact lenses, if present and easy to do. Continue rinsing. Rinse immediately with plenty of water. Obtain medical attention is pain, blinking or redness persists. If eye irritation persists: Get medical advice/attention.

**4.2 Most important symptoms and effects, both acute and delayed:**

Inhalation: Inhalation of mists or vapours at elevated temperatures may cause respiratory irritation.

Ingestion: None under normal conditions. May cause irritation to the digestive tract. Ingestion may cause nausea and vomiting.

Skin contact: Prolonged, or repeated, contact may cause dryness of the skin. Slight irritation. Cracking of the skin.

Eye contact: May be slightly irritating to eyes.

**4.3 Indication of any immediate medical attention and special treatment needed:** Treat symptomatically.

## SECTION 5. FIRE FIGHTING MEASURES

**5.1 Extinguishing media:**
Suitable extinguishing media: Water fog. Dry chemical powder. Alcohol-resistant foam. Carbon dioxide (CO2). Unsuitable extinguishing media: Do not use water jet as an extinguisher, as this will spread the fire.

**5.2 Special hazards arising from the substance or mixture:** Will ignite if exposed to intensive heat. Not expected to be a fire/explosion hazard under normal conditions of use. Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries. Incomplete combustion releases dangerous carbon monoxide, carbon dioxide and other toxic gases. Toxic fumes may be released. Carbon monoxide. Carbon dioxide. Nirogen oxides (NOx) (as NO2). Sulfur oxides (SOx). Phosphorus oxides. Hydrogen sulphide. Metal oxides.

**5.3 Advice for fire fighters:** Evacuate area. Eliminate all sources if safe to do so. Use water spray or fog for cooling exposed containers. Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

## SECTION 6. ACCIDENTAL RELEASE MEASURES

**6.1 Personal precautions, protective equipment and emergency procedures:** Spill area may be slippery. Prevent soil and water pollution. Prevent entry to sewers and public waters. Do not attempt to take action without suitable protective equipment. For further information refer to section 8. Ventilate spillage area. Evacuate unnecessary personnel. Avoid any direct contact with the product. Stop leaks if it can be done without personal risk. Eliminate all ignition sources if safe to do so.

**6.2 Environmental precautions:** Prevent from entering drainage systems or water courses.

**6.3 Methods and material for containment and clearing:** For a large spillage, contain the spillage by bunding. Clear up spills immediately and dispose of water safely. Sweep or shovel spills into appropriate container for disposal. This material and its container must be disposed of in a safe way, and as per local legislation. May be reused following decontamination. Clean contaminated surfaces with an excess of water. Dispose of materials or solid residues at an authorised site.

**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:** Empty containers retain product residue and can be hazardous. Wear personal protective equipment. For further information refer to section 8. Avoid contact with eyes, skin and clothing. Do not ingest. Do not breathe fumes from fires or vapours from decomposition. Avoid breathing dust/fume/gas/mist/vapours/spray. Ensure good ventilation of the work station. Spilled material may present a slipping hazard. Clean spills promptly. Routine housekeeping should be instituted. Do not eat, drink and smoke when using this product. Always wash hands after handling the product. Wash contaminated clothing before reuse.

**7.2 Conditions for safe storage, including any incompatibilities:** Store in a well-ventilated place. Keep cool. Store away from oxidising agents. Protect from sunlight. Store: store in original container. Always keep in containers made of the same material as the supply container. Do not store in unlabelled containers. Opened containers must be carefully closed and kept upright to avoid leakage. Empty containers should be taken for recycling, recovery or waste in accordance with local regulation. Empty containers retain product residue and can be hazardous. Max storage period: 5 years. Storage temperatures: 0-40°C. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Store away from strong oxidisers, strong bases, strong acids. Store at ambient temperature. Keep container tightly closed and dry. Suitable container materials: mild steel, certain plastic materials.

**7.3 Specific end use(s):** The identified use(s) for this product are detailed in Section 1.2.

## SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**8.1 Control parameters:**
National occupational exposure and biological limit values:

| Graphite (7782-42-5) | |
|---|---|
| Ireland – Occupational Exposure Limits | |
| Local name | Graphite (all forms except fibres) |
| OEL TWA [1] | 2mg/m³ R (Respirable Fraction) |

| | |
|---|---|
| Regulatory reference | Chemical Agents Code of Practice 2021 |

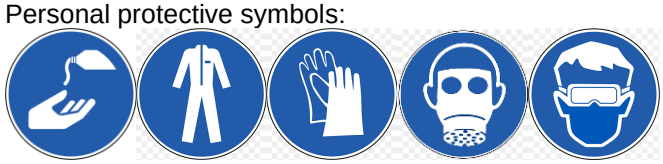
| | |
|---|---|
| Carbon black (1333-86-4) | |
| Ireland – Occupational Exposure Limits | |
| OEL TWA [1] | 3mg/m³ Inhalable Fraction |
| OEL STEL | 15mg/m³ Calculated, Inhalable Fraction |
| United Kingdom – Occupational Exposure Limits | |
| WEL TWA (OEL TWA) [1] | 3.5mg/m³ |
| WEL STEL (OEL STEL) | 7mg/m³ |

**8.2 Exposure controls:**

Appropriate engineering controls: Ensure good ventilation of the work station. Avoid spills. Do not walk on or roll equipment over spills.

Personal protective equipment: Eye protection should only be necessary where liquid could be splashed or sprayed. If the ventilation is suitable, it is not essential to wear respiratory equipment. Use barrier cream. Boots, gloves, goggles.

Personal protective symbols:



Eye/face protection: Safety glasses.

| Type | Field of application | Characteristics | Standard |
|---|---|---|---|
| Safety glasses, safety goggles | Droplet, dust, fine dust | Clear, with side shields | EN 166 |

Skin and body protection: Wear suitable protective clothing

Hand protection: Protective gloves

| Type | Material | Permeation | Thickness | Penetration | Standard |
|---|---|---|---|---|---|
| Disposable gloves | Nitrile rubber (NBR) | 2 (>30 minutes) | >0.09 | 2 (<1.5) | EN ISO 374-1 |

Respiratory protection: If the ventilation is suitable, it is not essential to wear respiratory equipment. In case of insufficient ventilation, wear suitable respiratory equipment.

| Device | Filter type | Condition | Standard |
|---|---|---|---|
| Respiratory protective device with a particle filter | Particle filter, gas/vapour filter | Vapour protection | EN 143 |

Thermal hazards: No additional information available

Environmental exposure controls: Avoid release to the environment

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

**9.1 Information on basic physical and chemical properties:**

Physical state: Solid
Appearance: Paste
Colour: Black
Odour: Almost odourless
Odour threshold: No information available.
pH: Not applicable.
Melting point: >280°C ASTM D2265
Initial boiling point and range: No information available
Flash point: >215°C ASTM D93
Evaporation rate: No information available
Evaporation factor: No information available
Flammability (solid, gas): Non flammable
Upper/lower flammability or explosive limits: Not applicable
Other flammability: No information available
Vapour pressure: No information available
Vapour density: No information available
Relative density: 1.05 – 1.15 @ 250°C
Bulk density: No information available
Solubility(ies): Insoluble in water
Partition coefficient n-octanol/water (Log Kow): No information available
Auto-ignition temperature: Not applicable
Decomposition temperature: No information available
Viscosity: 125mm²/s @ 40°C. Major component

Explosive properties: Not considered to be explosive
Explosive under the influence of a flame: Not considered to be explosive
Oxidising properties: Not applicable

## SECTION 10. STABILITY AND REACTIVITY

**10.1 Reactivity:** No test data specifically related to reactivity available for this product or its ingredients.

**10.2 Chemical stability:** Stable under proper storage and handling conditions.

**10.3 Possibility of hazardous reactions:** No dangerous reactions known under normal conditions of use.

**10.4 Conditions to avoid:** None under recommended storage and handling conditions (see section 7).

**10.5 Incompatible materials:** Oxidising agents.

**10.6 Hazardous decomposition products:** On heating or during combustion may release: Carbon oxides (CO, CO2), nitrogen oxides (NOx) (as NO2), sulphur oxides (SOx), hydrogen sulphide, phosphorus oxide, metal oxides.

## SECTION 11. TOXICOLOGICAL INFORMATION

**11.1 Information on toxicological effects:**

**Toxicological effects:** Not regarded as a health hazard under current legislation.
Acute toxicity – oral: Not classified
Acute toxicity – dermal: Not classified
Acute toxicity – inhalation: Not classified

| Graphite (7782-42-5) | |
|---|---|
| LD50 oral – Rat | >2000mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 423 (Acute Oral toxicity – Acute Toxic Class Method) |
| LC50 inhalation – Rat | >2000mg/m³ Animal: rat, Animal sex: male, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity) |

| Carbon black (1333-86-4) | |
|---|---|
| LD50 oral – Rat | >8000mg/kg (Equivalent to OECD TG 401) |

Skin corrosion/irritation: Not classified

| Carbon black (1333-86-4) | |
|---|---|
| pH | 4-11 |

Serious eye damage/irritation: Not classified

| Carbon black (1333-86-4) | |
|---|---|
| pH | 4-11 |

Respiratory sensitisation: Not classified
Skin sensitisation: Not classified
Germ cell mutagenicity: Not classified
Carcinogenicity: Not classified
Reproductive toxicity: Not classified
STOT – single exposure: Not classified
STOT – repeated exposure: Not classified

| Carbon black (1333-86-4) | |
|---|---|
| LOAEC (inhalation, rat, dust/mist/fume, 90 days) | 0.0071mg/l air<br>Animal: rat, Animal sex: male |

| Carbon black (1333-86-4) | |
|---|---|
| NOAEL (oral, rat, 90 days) | >1000mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-day Oral Toxicity Study in Rodents) |
| NOAEC (inhalation, rat, dust/mist/fume, 90 days) | 0.0011 mg/l air Animal: rat, Animal sex: male |

Aspiration hazard: Not classified

| Hi Graf | |
|---|---|
| Viscosity, kinematic | 125mm²/s @ 40°C. Major component |

## SECTION 12. ECOLOGICAL INFORMATION

**12.1 Toxicity:**

Ecology – general: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Hazardous to the aquatic environment, short-term (acute): Not classified
Hazardous to the aquatic environment, long-term (chronic): Not classified
Not rapidly degradable

| Graphite (7782-42-5) | |
|---|---|
| LC50 – Fish [1] | >100mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio) |
| EC50 – Crustacea [1] | >100mg/l Test organisms (species): Daphnia magna |
| EC50 72h – Algae [1] | >100mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum) |

| Carbon black (1333-86-4) | |
|---|---|
| LC50 – Fish [1] | 125mm²/s @ 40°C. Major component |
| EC50 – Other aquatic organisms [1] | >5600ml/l Daphnia magna: EC50 (24hr) (Method: OECD 202) |
| EC50 72h – Algae [1] | >10000mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus) |
| EC50 72h – Algae [2] | >10000mg/l Test organisms (species): |

**12.2 Persistence and degradability:** No additional information available

**12.3 Bio-accumulative potential:** No additional information available

**12.4 Mobility in soil:** No additional information available

**12.5 Results of PBT and vPvB assessment:** No additional information available

**12.6 Endocrine disrupting properties:** No additional information available

**12.7 Other adverse effects:** No additional information available

## SECTION 13. DISPOSAL CONSIDERATIONS

**13.1 Waste treatment methods:** Recycle the material as far as possible. Recycle product or dispose safely. Recycle or dispose of in compliance with current legislation. Dispose of contents/container in accordance with licensed collector's sorting instructions. Assure that emissions are compliant with all applicable air pollution control regulations. Disposal must be done in according to official regulations.

## SECTION 14. TRANSPORT INFORMATION

**14.1 UN number:** Not applicable.

**14.2 UN proper shipping name:** Not applicable.

**14.3 Transport hazard class:** Not applicable.

**14.4 Packing group:** Not applicable.

**14.5 Environmental hazards:** Not applicable.

**14.6 Special precautions for user:** Not applicable.

**14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code:** Not applicable.

## SECTION 15. REGULATORY INFORMATION

**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:**
EU Regulations:
REACH Annex XVII (Restriction List): Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)
REACH Annex XIV (Authorisation List): Contains no substance(s) listed on REACH Annex XIV (Authorisation List)
REACH Candidate List (SVHC): Contains no substance(s) listed on the REACH Candidate List
PIC Regulation (Prior Informed Consent): Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)
POP Regulation (Persistent Organic Pollutants): Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)
Ozone Regulation (1005/2009): Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

Explosives Precursors Regulation (273/2004): Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

**15.2 Chemical safety assessment:** No chemical safety assessment has been carried out.

## SECTION 16. OTHER INFORMATION

**Classification methods used to derive classification of mixture:** Classification according to calculation procedure detailed in EC1272/2008

**Legend:**
ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE: Acute Toxicity Estimate
BCF: Bioconcentration factor
BLV: Biological limit value
BOD: Biochemical oxygen demand (BOD)
COD: Chemical oxygen demand (COD)
DMEL: Derived Minimal Effect level
DNEL: Derived-No Effect Level
EC-No: European Community number
EC50: Median effective concentration
EN: European Standard
IARC: International Agency for Research on Cancer
IATA: International Air Transport Association
IMDG: International Maritime Dangerous Goods
LC50: Median lethal concentration
LD50: Median lethal dose
LOAEL: Lowest Observed Adverse Effect Level
NOAEC: No-Observed Adverse Effect Concentration
NOAEL: No-Observed Adverse Effect Level
NOEC: No-Observed Effect Concentration
OECD: Organisation for Economic Co-operation and Development
OEL: Occupational Exposure Limit
PBT: Persistent Bio-accumulative Toxic
PNEC: Predicted No-Effect Concentration
RID: Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS: Safety Data Sheet
STP: Sewage treatment plant
ThOD: Theoretical oxygen demand (ThOD)
TLM: Medial Tolerance Limit
VOD: Volatile Organic Compounds
CAS-No: Chemical Abstract Service number
N.O.S: Not Otherwise Specified
vPvB: Very Persistent and Very Bio-accumulative
ED: Endocrine disrupting properties

**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.