NEOGRAF SOLUTIONS

SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name or designation

of the mixture

GRAFOIL® GTS® Thread Sealant Paste/Lubricant

Registration number

Synonyms None. 0041 SDS number

07-May-2018 Issue date

Version number 01 **Revision date** Supersedes date

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses Injectable thread sealant or lubricant.

Uses advised against None known. 1.3. Details of the supplier of the safety data sheet

Manufacturer/Supplier NeoGraf Solutions, LLC

11709 Madison Ave.

Lakewood, OH 44107 +1 216-529-3777

Product Responsibility Manager +1 216-529-3724 Contact person

E-mail info@neograf.com

Emergency telephone

For Chemical Emergency ONLY, call 3E at:

number

+44-20-35147487, +1-760-476-3961

Access Code: 333366

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

Classification according to Regulation (EC) No 1272/2008 as amended

This mixture does not meet the criteria for classification according to Regulation (EC) 1272/2008 as amended.

Hazard summary Not classified for health hazards. However, occupational exposure to the mixture or substance(s)

may cause adverse health effects.

2.2. Label elements

Label according to Regulation (EC) No. 1272/2008 as amended

Graphite, Petrolatum USP, White mineral oil (petroleum) Contains:

Hazard pictograms None. Signal word None.

Hazard statements The mixture does not meet the criteria for classification.

Precautionary statements

Prevention Observe good industrial hygiene practices.

Wash hands after handling. Response

Store away from incompatible materials. Storage

Disposal Dispose of waste and residues in accordance with local authority requirements.

Supplemental label information

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2.3. Other hazards Not a PBT or vPvB substance or mixture.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
Graphite	30 - 60	7782-42-5 231-955-3	-	-	
Classification: -					
Petrolatum USP	20 - 40	8009-03-8 232-373-2	-	649-254-00-X	
Classification: -					N
White mineral oil (petroleum)	20 - 40	8042-47-5 232-455-8	-	-	
Classification: Asp. Tox	. 1;H304				

List of abbreviations and symbols that may be used above

#: This substance has been assigned Union workplace exposure limit(s).

M: M-factor

PBT: persistent, bioaccumulative and toxic substance. vPvB: very persistent and very bioaccumulative substance.

Note N: The classification as a carcinogen need not apply if the full refining history is known and it can be shown that the substance from which it is produced is not a carcinogen. This note applies only to certain complex oil-derived substances in Part

Composition comments

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume. The full text for all H-statements is displayed in section 16.

SECTION 4: First aid measures

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

protect themselves.

4.1. Description of first aid measures

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

Skin contact Wash off with soap and water. Get medical attention if irritation develops and persists.

Eye contact Rinse with water. Get medical attention if irritation develops and persists.

Rinse mouth. Do not induce vomiting without advice from poison control center. If vomiting occurs, Ingestion

keep head low so that stomach content doesn't get into the lungs.

4.2. Most important symptoms and effects, both acute and

delayed

Direct contact with eyes may cause temporary irritation.

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

SECTION 5: Firefighting measures

General fire hazards No unusual fire or explosion hazards noted.

5.1. Extinguishing media

media

Suitable extinguishing

Foam. Dry powder. Dry chemicals. 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 During fire, gases hazardous to health may be formed.

5.3. Advice for firefighters

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

Special fire fighting procedures

Cool containers exposed to heat with water spray and remove container, if no risk is involved.

Specific methods

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency

Keep unnecessary personnel away.

personnel

For emergency responders Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the

Avoid discharge into drains, water courses or onto the ground. 6.2. Environmental precautions

GRAFOIL® GTS® Thread Sealant Paste/Lubricant

6.3. Methods and material for containment and cleaning up The product is immiscible with water and will sediment in water systems. Following product recovery, flush area with water. For waste disposal, see section 13 of the SDS.

6.4. Reference to other

sections

For personal protection, see section 8 of the SDS, For waste disposal, see section 13 of the SDS,

SECTION 7: Handling and storage

7.1. Precautions for safe

handling

Avoid prolonged or repeated contact with skin. Avoid prolonged exposure. Use only in

well-ventilated areas.

7.2. Conditions for safe storage, including any incompatibilities

Keep away from heat and sources of ignition. Store in original tightly closed container. Store away

from incompatible materials (see section 10 of the SDS).

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

7.3. Specific end use(s) Injectable thread sealant or lubricant.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

No exposure limits noted for ingredient(s).

Biological limit values **Recommended monitoring**

procedures

Follow standard monitoring procedures

Derived no effect levels

(DNELs)

Not available

Predicted no effect concentrations (PNECs) Not available.

8.2. Exposure controls

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.

Individual protection measures, such as personal protective equipment

General information Personal protection equipment should be chosen according to the CEN standards and in

discussion with the supplier of the personal protective equipment.

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

Skin protection

- Hand protection Wear appropriate chemical resistant gloves.

Wear suitable protective clothing. - Other

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

Hygiene measures 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.

Environmental exposure

controls

Environmental manager must be informed of all major releases.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance Black paste. Solid. Physical state **Form** Paste.

Colour Black Odour None.

Odour threshold Not applicable. pН Not applicable. Melting point/freezing point Not applicable.

Initial boiling point and boiling

range

315.56 - 329.44 °C (600 - 625 °F)

160.0 °C (320.0 °F) Flash point **Evaporation rate** Not applicable.

Flammability (solid, gas) Will burn if involved in a fire.

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Upper/lower flammability or explosive limits

Flammability limit - lower

(%)

Not applicable.

Flammability limit - upper

Not applicable.

Not applicable. Vapour pressure Vapour density Not applicable.

1.5 - 1.7 (21°C (70°F)) Relative density Solubility(ies) < 0.1 % Insoluble in water.

Partition coefficient

(n-octanol/water)

Not available.

Auto-ignition temperature Not applicable. Not available. **Viscosity** Not explosive. **Explosive properties Oxidising properties** Not oxidising.

9.2. Other information

No data available. **Bulk density Explosive limit** Not applicable.

SECTION 10: Stability and reactivity

10.1. Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability Material is stable under normal conditions.

10.3. Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

10.4. Conditions to avoid Contact with incompatible materials. 10.5. Incompatible materials Strong oxidising agents. Chlorine.

10.6. Hazardous

No hazardous decomposition products are known.

decomposition products

SECTION 11: Toxicological information

General information Occupational exposure to the substance or mixture may cause adverse effects.

Information on likely routes of exposure

Prolonged inhalation may be harmful. Inhalation

Skin contact No adverse effects due to skin contact are expected. Direct contact with eyes may cause temporary irritation. Eye contact

May cause discomfort if swallowed. However, ingestion is not likely to be a primary route of Ingestion

occupational exposure.

Symptoms Direct contact with eyes may cause temporary irritation.

11.1. Information on toxicological effects

Acute toxicity

Components **Test Results** Species Graphite (CAS 7782-42-5) **Acute** Oral

LD50 Rat > 10000 mg/kg

White mineral oil (petroleum) (CAS 8042-47-5)

Acute Dermal

LD50 Rabbit > 2000 mg/kg

Inhalation

Aerosol

LC50 Rat > 5 mg/l

Oral

LD50 Rat > 5000 mg/kg

Based on available data, the classification criteria are not met. Skin corrosion/irritation

Serious eye damage/eye

irritation

Based on available data, the classification criteria are not met.

Respiratory sensitisationBased on available data, the classification criteria are not met.Skin sensitisationBased on available data, the classification criteria are not met.Germ cell mutagenicityBased on available data, the classification criteria are not met.CarcinogenicityBased on available data, the classification criteria are not met.

IARC Monographs. Overall Evaluation of Carcinogenicity

Petrolatum USP (CAS 8009-03-8) 3 Not classifiable as to carcinogenicity to humans.

Reproductive toxicity Based on available data, the classification criteria are not met.

Specific target organ toxicity -

single exposure

Based on available data, the classification criteria are not met.

Specific target organ toxicity - Based on available data, the classification criteria are not met.

repeated exposure

repeated exposure
Aspiration hazard

Due to partial or complete lack of data the classification is not possible.

Mixture versus substance

information

No information available.

Other information Not available.

SECTION 12: Ecological information

12.1. ToxicityBased on available data, the classification criteria are not met for hazardous to the aquatic

environment.

Components Species Test Results

White mineral oil (petroleum) (CAS 8042-47-5)

Aquatic

Acute

Crustacea LL50 Invertebrates (Invertebrates) 100 mg/l Fish LL50 Fish 10 mg/l

12.2. Persistence and

degradability

No data is available on the degradability of any ingredients in the mixture.

12.3. Bioaccumulative potential No data available.

Partition coefficient

Not available.

n-octanol/water (log Kow)

Bioconcentration factor (BCF) Not available.

12.4. Mobility in soil The product is insoluble in water.

12.5. Results of PBT and vPvB

assessment

Not a PBT or vPvB substance or mixture.

12.6. Other adverse effectsNo other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation

potential, endocrine disruption, global warming potential) are expected from this component.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Residual waste 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.

EU waste codeThe Waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

Disposal methods/information Collect and reclaim or dispose in sealed containers at licensed waste disposal site.

Special precautions Dispose in accordance with all applicable regulations.

SECTION 14: Transport information

ADR

14.1. - 14.6.: Not regulated as dangerous goods.

RID

14.1. - 14.6.: Not regulated as dangerous goods.

ADN

14.1. - 14.6.: Not regulated as dangerous goods.

SDS UK

IATA

14.1. - 14.6.: Not regulated as dangerous goods.

IMDG

14.1. - 14.6.: Not regulated as dangerous goods.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC

Code

SECTION 15: Regulatory information

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

EU regulations

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended

Not listed.

Regulation (EC) No. 850/2004 On persistent organic pollutants, Annex I as amended

Not applicable.

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended Not listed.

Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended Graphite (CAS 7782-42-5)

Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA Not listed.

Authorisations

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorisation, as amended Not listed.

Restrictions on use

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended Petrolatum USP (CAS 8009-03-8)

Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended.

Petrolatum USP (CAS 8009-03-8)

Other EU regulations

Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended

Not listed.

Other regulations This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006, as

amended. The product is classified and labelled in accordance with Regulation (EC) 1272/2008

(CLP Regulation) as amended.

National regulations Follow national regulation on the protection of workers from the risks of exposure to carcinogens

and mutagens at work, in accordance with Directive 2004/37/EC.

15.2. Chemical safety

assessment

No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

Not available. List of abbreviations References Not available

Information on evaluation method leading to the classification of mixture

The classification for health and environmental hazards is derived by a combination of calculation

methods and test data, if available.

Full text of any H-statements not written out in full under

H304 May be fatal if swallowed and enters airways.

Training information

Sections 2 to 15

Follow training instructions when handling this material.

Disclaimer

NeoGraf Solutions cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use.

This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.