1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name: **PENETRATING OIL NSF**

Article number: **F412**

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

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:
Tygris Industrial
Unit 31
Kyle Road Industrial Estate
Irvine
Ayshire
KA12 8LE
Tel +44 (0) 1294 311 066
Fax +44 (0) 1294 277 115
Email technical@tygrisindustrial.com

Further information obtainable from: Technical Department

1.4 Emergency telephone number: Tel +44 (0) 1294 311 066

2. Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)	Physical and Chemical Hazards	Flam. Aerosol 1: H222; -:H229
	Human health	
	Environment	

Classification (1999/45/EEC)

Most important adverse effects Extremely flammable aerosol. Pressurised container: May burst if heated.

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

2.2. Label elements

Label In Accordance With (EC) No. 1272/2008

Signal Word Danger

Hazard Statements
H222: Extremely flammable aerosol.
H229: Pressurised container: May burst if heated

Precautionary Statements
P102: Keep out of reach of children.
P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211: Do not spray on an open flame or other ignition source.
P251: Do not pierce or burn, even after use.
P410+412: Protect from sunlight. Do not expose to temperatures exceeding 50 ºC..

2.3. Other hazards In use, may form flammable / explosive vapour-air mixture.

PBT: This product is not identified as a PBT/vPvB substance.

3. Composition/information on ingredients

3.2. Mixtures

PROPANE	1-10%
Index No.	REACH Registration No.
CAS-No.: 74-98-6	EINECS: 200-827-9
Classification (EC 1272/2008) Flam. Gas 1: H220; Press. Gas: H280	Classification (67/548/EEC)
BUTANE	1-10%
Index No.	REACH Registration No.
CAS-No.: 106-97-8	EINECS: 203-448-7
Classification (EC 1272/2008) Flam. Gas 1: H220; Press. Gas: H280	Classification (67/548/EEC)
WHITE MINERAL OIL (PETROLEUM)	70-90%
Index No.	REACH Registration No.
CAS-No.: 8042-47-5	EINECS: 232-455-8
Classification (EC 1272/2008) Asp. Tox. 1: H304	Classification (67/548/EEC)
ISOBUTANE	1-10%
Index No.	REACH Registration No.
CAS-No.: 75-28-5	EINECS: 200-857-2
Classification (EC 1272/2008) Flam. Gas 1: H220; Press. Gas: H280	Classification (67/548/EEC)

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16

4. First aid measures

4.1. Description of first aid measures

Inhalation Remove casualty from exposure ensuring one's own safety whilst doing so. Move the exposed person to fresh air. Consult a doctor.

Ingestion Do not induce vomiting. Consult a doctor.

Skin contact Wash immediately with plenty of soap and water.

Eye contact Bathe the eye with running water for 15 minutes. Consult a doctor.

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

Inhalation There may be a feeling of tightness in the chest with shortness of breath.

Ingestion There may be irritation of the throat.

Skin Contact There may be mild irritation at the site of contact.

Eye Contact There may be irritation and redness.

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

5. Firefighting measures

5.1 Extinguishing Media

Extinguishing media Alcohol resistant foam. Water spray. Carbon dioxide. Dry chemical powder.

5.2. Special hazards arising from the substance or mixture

Exposure hazards Highly flammable. Forms explosive air-vapour mixture. Vapour may travel considerable distance to source of ignition and flash back.

5.3. Advice for firefighters

Advice for fire-fighters Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Refer to section 8 of SDS for personal protection details. Notify the police and fire brigade immediately. Eliminate all sources of ignition.

6.2. Environmental precautions

Environmental precautions Do not discharge into drains or rivers.

6.3. Methods and material for containment and cleaning up

Clean-up procedures Do not use equipment in clean-up procedure which may produce sparks. Absorb into dry earth or sand. Clean-up should be dealt with only by qualified personnel familiar with the specific substance.

6.4. Reference to other sections

Reference to other sections Refer to section 8 of SDS.

7. Handling and storage

7.1 Precautions for safe handling

Handling requirements Smoking is forbidden. Use non-sparking tools. Ensure there is sufficient ventilation of the area. Do not handle in a confined space. Avoid the formation or spread of mists in the air.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions Store in a cool, well ventilated area. Keep container tightly closed. Keep away from sources of ignition. Prevent the build up of electrostatic charge in the immediate area. Ensure lighting and electrical equipment are not a source of ignition.

Suitable packaging Must only be kept in original packaging.

7.3. Specific end use(s)

8. Exposure controls/personal protection

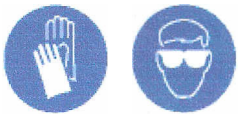
8.1. Control parameters

Name	STD	TWA - 8 Hrs		STEL - 15 Min	
PROPANE	WEL		1800 mg/m3		7200 mg/m3
BUTANE	WEL		1450 mg/m3		1810 mg/m3
ISOBUTANE	WEL		2400 mg/m3		9600 mg/m3

WEL = Workplace Exposure Limits

8.2. Exposure controls

Protective equipment



Engineering measures Ensure there is sufficient ventilation of the area. Ensure lighting and electrical equipment are not a source of ignition.

Respiratory equipment Respiratory protection not required.

Hand protection Protective gloves. Chemically resistant gloves.

Eye protection Safety glasses. Ensure eye bath is to hand.

Other Protection Protective clothing.

Environmental Not applicable.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance Aerosol

Colour Colourless

Odour Characteristic odour

Flash point°C -60

9.2. Other information

10. Stability and reactivity

10.1. Reactivity

Stable under recommended transport or storage conditions.

10.2. Chemical stability

Stable under normal conditions. Stable at room temperature.

10.3. Possibility of hazardous reactions

Hazardous reactions will not occur under normal transport or storage conditions. Decomposition may occur on exposure to conditions or materials listed below.

10.4. Conditions to avoid

Heat. Hot surfaces. Sources of ignition. Flames.

10.5. Incompatible materials

Strong oxidising agents. Strong acids.

10.6. Hazardous decomposition products

No data available.

11. Toxicological information

11.1. Information on toxicological effects

Symptoms / routes of exposure

Inhalation	There may be a feeling of tightness in the chest with shortness of breath.
Ingestion	There may be irritation of the throat.
Skin contact	There may be mild irritation at the site of contact.
Eye contact	There may be irritation and redness.
Delayed / immediate effects	No data available.
Other information	Not applicable.

12. Ecological information

12.1. Toxicity

12.2. Persistence and degradability

Biodegradable.

12.3. Bioaccumulative potential

No bioaccumulation potential.

12.4. Mobility in soil

Readily absorbed into soil.

12.5. Results of PBT and vPvB assessment

This product is not identified as a PBT/vPvB substance.

12.6. Other adverse effects

Negligible ecotoxicity.

13. Disposal considerations

13.1. Waste treatment methods

Transfer to a suitable container and arrange for collection by specialised disposal company. Dispose of contents and container according to national regulations.

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

14. Transport information

14.1. UN number

UN No. (ADR/RID/ADN)	1950
UN No. (IMDG)	1950
UN No. (ICAO)	1950

14.2. UN proper shipping name

Proper Shipping Name	AEROSOLS

14.3. Transport hazard class(es)

ADR/RID/ADN Class	2
ADR/RID/ADN Class	Class 2: Gases
ADR Label No.	2.1
IMDG Class	2.1
ICAO Class/Division	2.1
Transport Labels	

14.4. Packing group

Packing group	Not applicable.

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant	Environmentally Hazardous Substance - No Marine Pollutant - No

14.6. Special precautions for user

EMS

Tunnel Restriction Code	(D)

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

15. Regulatory information

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

Uk Regulatory References

Statutory Instruments

Approved Code Of Practice

Guidance Notes

15.2. Chemical safety assessment

A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

16. Other information

Phrases used in s.2 and s.3

H220: Extremely flammable gas.
H222: Extremely flammable aerosol.
H229: Pressurised container: May burst if heated
H304: May be fatal if swallowed and enters airways.

DISCLAIMER

This 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. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.