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

1.1 Product identifier

Trade name: GRINDING OIL 411 NE

This safety data sheet pertains to the following products: Article number: 42200002 - GRINDING OIL 411 NE

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

General use: abrasive / polishing agent

For industrial purposes only

1.3 Details of the supplier of the safety data sheet

Company name: August Rueggeberg GmbH & Co. KG

PFERD-Werkzeuge

Street/POB-No.: Hauptstraße 13
Postal Code, city: 51709 Marienheide
WWW: www.pferd.com
E-mail: info@pferd.com
Telephone: +49 (0)2264-9-0
Telefax: +49 (0)2264-9-400

Department responsible for information:

Telephone: +49 (0) 2264-9-0

1.4 Emergency telephone number

Germany: 0800-181-5313 Austria: 0800-802278 France: 0805-089352 Italy: 800-794-834 Bulgaria: 359-32571722 Poland: +48-223073296 Sweden: 020-889-215 Greece: 30-2111981153 Portugal: 800 250 250

Other EU-Countries: 1-813-248-0585

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to EC regulation 1272/2008 (CLP)

Aerosol 1; H222; H229 Extremely flammable aerosol. Pressurised container: May burst if heated.

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2.2 Label elements Labelling (CLP)



Signal word: Danger

Hazard statements: H222 Extremely flammable aerosol.

H229 Pressurised container: May burst if heated.

Precautionary statements:

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.

Do not pierce or burn, even after use.

P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

2.3 Other hazards

Heating will lead to pressure increase: Danger of bursting and explosion.

Vapours can form explosive mixtures with air.

Vapours in high concentrations have anaesthetic effect.

Results of PBT and vPvB assessment:

No data available

SECTION 3: Composition / information on ingredients

3.1 Substances: not applicable

3.2 Mixtures

Chemical characterisation: compressed gas package (gases under presussure, highly refined base oils)

Hazardous ingredients:

Ingredient	Designation	Content	Classification
EC No. 265-158-7 CAS 64742-55-8	Distillates (petroleum), hydrotreated light paraffinic	50 - 65 %	Asp. Tox. 1; H304.
EC No. 203-448-7 CAS 106-97-8	n-Butane, pure	20 - 30 %	Flam. Gas 1; H220. Press. Gas (Liq.); H280.
EC No. 200-827-9 CAS 74-98-6	Propane	5 - 10 %	Flam. Gas 1; H220. Press. Gas (Liq.); H280.

Full text of H- and EUH-statements: see section 16.

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SECTION 4: First aid measures

4.1 Description of first aid measures

General information: First aider: Pay attention to self-protection!

Immediately remove any contaminated clothing, shoes or stockings.

In case of inhalation: Move victim to fresh air, put at rest and loosen restrictive clothing.

If the casualty has difficulty breathing, call a doctor immediately.

Following skin contact: Change contaminated clothing. After contact with skin, wash immediately with soap and

plenty of water.

In case of skin reactions, consult a physician.

After eye contact: Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids

apart. Remove contact lenses, if present and easy to do. Continue rinsing. Subsequently

consult an ophthalmologist.

4.2 Most important symptoms and effects, both acute and delayed

In case of inhalation:

n-Butane: In case of prolonged exposure: Nausea, drowsiness, headache, agitation, fatigue, dizziness, unconsciousness. In case of high vapour concentraitons: CNS disorders, unconsciousness.

Even short-term inhalation of larger quantities of gas may cause death. Risk of suffocation!

Vapours in high concentrations have anaesthetic effect.

In case of ingestion:

When swallowed and vomited immediately, aspiration into the lungs may occur resulting

in chemical pneumonia or suffocation.

After contact with skin: Repeated exposure may cause skin dryness or cracking.

n-Butane: Danger of freezing: Whitening of skin (skin emphysema). After eye contact: n-Butane: Frostbite: Risk of serious damage to eyes.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media:

extinguishing powder, Water spray jet, Carbon dioxide.

In case of large fires: Water spray jet or alcohol resistant foam.

Extinguishing media which must not be used for safety reasons:

Full water jet

5.2 Special hazards arising from the substance or mixture

Extremely flammable aerosol.

In case of fire may be liberated: carbon monoxide and carbon dioxide.

5.3 Advice for firefighters

Special protective equipment for firefighters:

Wear self-contained breathing apparatus.

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Additional information: Hazchem-Code: -

Use fine water spray to cool endangered containers.

Container under pressure. Heating will lead to pressure increase: Danger of bursting and

explosion.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Provide adequate ventilation. Do not breathe vapour/aerosol.

Eliminate all ignition sources if safe to do so.

Wear appropriate protective equipment. Keep unprotected people away.

6.2 Environmental precautions

Do not allow to penetrate into soil, waterbodies or drains.

6.3 Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents) and place in closed containers for disposal. Special waste.

6.4 Reference to other sections

Refer additionally to section 8 and 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advices on safe handling: Provide adequate ventilation, and local exhaust as needed.

Use only in well-ventilated areas.

Avoid contact with the substance. Wear appropriate protective equipment.

Do not breathe vapour/aerosol. Do not spray in the eyes.

Precautions against fire and explosion:

Container under pressure. Protect from direct exposure to sunlight and temperatures exceeding 50 °C. Do not open or incinerate, even when empty. Do not spray into flames or on incandescent objects. Keep away from sources of ignition - No smoking. Keep out of the reach of children. Provide adequate ventilation, and local exhaust as needed. Use only in well-ventilated areas. Vapours can form explosive mixtures with air.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storerooms and containers:

Keep container tightly closed and in a well-ventilated place. Keep container dry. Protect from frost, heat and sunlight.

Hints on joint storage: Keep away from food, drink and animal feedingstuffs. Further details: Heating causes rise in pressure with risk of bursting.

Storage class: 2B = Aerosols

7.3 Specific end use(s)

No information available.

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SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values:

CAS No.	Designation	Туре	Limit value
	GRINDING OIL 411 NE	France: VME	10 mg/m³
			(Dust limit value, inhalable fraction)
		France: VME	5 mg/m³
			(Dust limit value, respirable fraction)
		Germany: DFG Kurzzeit	2.4 mg/m³
			(Dust limit value, respirable fraction)
		Germany: DFG Langzeit	0.3 mg/m³
			(Dust limit value, respirable fraction)
		Germany: DFG Langzeit	4 mg/m³
			(Dust limit value, inhalable fraction)
		Germany: TRGS 900 Kurzzeit	2.5 mg/m³
			(Dust limit value, respirable fraction)
		Germany: TRGS 900 Kurzzeit	20 mg/m³
			(Dust limit value, inhalable fraction)
		Germany: TRGS 900 Langzeit	1.25 mg/m³
			(Dust limit value, respirable fraction)
		Germany: TRGS 900 Langzeit	10 mg/m³
			(Dust limit value, inhalable fraction)
		Great Britain: WEL-TWA	10 mg/m³
			(Dust limit value, inhalable fraction)
		Great Britain: WEL-TWA	4 mg/m³
			(Dust limit value, respirable fraction)
		Ireland: 8 hours	10 mg/m³
			(Dust limit value, inhalable fraction)
		Ireland: 8 hours	4 mg/m³
			(Dust limit value, respirable fraction)
106-97-8	n-Butane, pure	France: VME	1900 mg/m³; 800 ppm
		Germany: TRGS 900 Kurzzeit	9600 mg/m³; 4000 ppm
		Germany: TRGS 900 Langzeit	2400 mg/m³; 1000 ppm
		Great Britain: WEL-STEL	1810 mg/m³; 750 ppm
		Great Britain: WEL-TWA	1450 mg/m³; 600 ppm
		Ireland: 8 hours	1000 ppm
74-98-6	Propane	Germany: TRGS 900 Kurzzeit	7200 mg/m³; 4000 ppm
	•	Germany: TRGS 900 Langzeit	1800 mg/m³; 1000 ppm
		Ireland: 8 hours	1000 ppm

Additional information: Observe in addition any national exposure limit values!

8.2 Exposure controls

Use only in well-ventilated areas.

If necessary: Execute works under fume hood.

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Personal protection equipment

Occupational exposure controls

Respiratory protection: Respiratory protection must be worn whenever the WEL levels have been exceeded.

Use filter type A (= against vapours of organic substances) according to EN 14387.

If higher concentrations occur: Wear self-contained breathing apparatus.

Hand protection: Protective gloves according to EN 374.

Observe glove manufacturer's instructions concerning penetrability and breakthrough time.

Eye protection: Tightly sealed goggles according to EN 166.

Body protection: Wear suitable protective clothing.

General protection and hygiene measures:

Avoid contact with the substance. Do not breathe vapour/aerosol.

Take off immediately all contaminated clothing.

When using do not eat, drink or smoke. Wash hands before breaks and after work.

Environmental exposure controls

Refer to "6.2 Environmental precautions".

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance: Form: Aerosol/liquid

Colour: yellowish

Odour: product-specific
Odour threshold: No data available

pH: No data available

Melting point/freezing point: No data available
Initial boiling point and boiling range: No data available
Flash point/flash point range: No data available
Evaporation rate: No data available

Flammability: Extremely flammable aerosol.

Explosion limits:

Vapour pressure:

Vapour density:

No data available

No data available

No data available

at 20 °C: 0,740 g/mL

Water solubility: insoluble

Partition coefficient: n-octanol/water:

Auto-ignition temperature:

Decomposition temperature:

Viscosity, kinematic:

No data available

No data available

Explosive properties: Heating will lead to pressure increase: Danger of bursting and explosion.

Vapours can form explosive mixtures with air.

Oxidizing characteristics: No data available

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9.2 Other information

Additional information: No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

Extremely flammable aerosol.

Vapours can form explosive mixtures with air.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

Container under pressure.

Heating will lead to pressure increase: Danger of bursting and explosion.

10.4 Conditions to avoid

Keep away from heat sources, sparks and open flames.

Protect from direct exposure to sunlight and temperatures exceeding 50 °C.

10.5 Incompatible materials

strong oxidizing agents

10.6 Hazardous decomposition products

In case of fire may be liberated: carbon monoxide and carbon dioxide.

Thermal decomposition: No data available

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SECTION 11: Toxicological information

11.1 Information on toxicological effects

Toxicological effects: The statements are derived from the properties of the single components. No toxicological

data is available for the product as such.

Acute toxicity (oral): Lack of data.

Acute toxicity (dermal): Lack of data.

Acute toxicity (inhalative): Lack of data. Skin corrosion/irritation: Lack of data.

Serious eye damage/irritation: Lack of data.

Sensitisation to the respiratory tract: Lack of data.

Skin sensitisation: Lack of data.

Germ cell mutagenicity/Genotoxicity: Lack of data.

Carcinogenicity: Lack of data.

Reproductive toxicity: Lack of data.

Effects on or via lactation: Lack of data.

Specific target organ toxicity (single exposure): Lack of data. Specific target organ toxicity (repeated exposure): Lack of data.

Aspiration hazard: Lack of data.

Other information: Information about Propane:

LC50, Rat, inhalative: > 20 mg/L/4h

Information about Butane:

LC50, Rat, inhalative: > 658 mg/L/4h

Information about mineral oil: LD50, Rat, oral: > 2000 mg/kg

Symptoms

In case of inhalation:

n-Butane: In case of prolonged exposure: Nausea, drowsiness, headache, agitation, fatigue, dizziness, unconsciousness. In case of high vapour concentraitons: CNS disorders, unconsciousness.

Even short-term inhalation of larger quantities of gas may cause death. Risk of suffocation! Vapours in high concentrations have anaesthetic effect.

In case of ingestion:

When swallowed and vomited immediately, aspiration into the lungs may occur resulting in chemical pneumonia or suffocation.

After contact with skin: Repeated exposure may cause skin dryness or cracking.

n-Butane: Danger of freezing: Whitening of skin (skin emphysema). After eye contact: n-Butane: Frostbite: Risk of serious damage to eyes.

SECTION 12: Ecological information

12.1 Toxicity

Water Hazard Class: 1 = slightly hazardous to water

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12.2 Persistence and degradability

Further details: No data available

12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water:

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

No data available

12.6 Other adverse effects

General information: Do not allow to enter into ground-water, surface water or drains.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Waste key number: 12 01 07* = Mineral-based machining oils free of halogens (except emulsions and

solutions)

* = Evidence for disposal must be provided.

Recommendation: Special waste. Dispose of waste according to applicable legislation.

Contaminated packaging

Waste key number: 15 01 04 = Metallic packaging.

Recommendation: Dispose of waste according to applicable legislation.

Container under pressure. Do not open with force or incinerate, even when empty.

SECTION 14: Transport information

14.1 UN number

ADR/RID, IMDG, IATA-DGR:

UN 1950

14.2 UN proper shipping name

ADR/RID, IMDG: UN 1950, AEROSOLS

IATA-DGR: UN 1950, AEROSOLS, FLAMMABLE

14.3 Transport hazard class(es)

ADR/RID: Class 2, Code: 5F

IMDG: Class 2, Subrisk -, see SP63

IATA-DGR: Class 2.1



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14.4 Packing group

ADR/RID, IATA-DGR: not applicable

IMDG:

14.5 Environmental hazards

Marine pollutant:

14.6 Special precautions for user

Land transport (ADR/RID)

Warning board: RID: Kemmler-number 23, UN number UN 1950

Hazard label: 2.1

Special provisions: 190 327 344 625

Limited quantities: 1 L EQ: E0

Contaminated packaging - Instructions: P207 LP200

Contaminated packaging - Special provisions:

PP87 RR6 L2

Special provisions for packing together: MP9
Tunnel restriction code: D

Sea transport (IMDG)

EmS: F-D, S-U

Special provisions: 63, 190, 277, 327, 344, 381, 959

Limited quantities: See SP277

Excepted quantities: E0

Contaminated packaging - Instructions: P207, LP200 Contaminated packaging - Provisions: PP87, L2

IBC - Instructions: IBC - Provisions: Tank instructions - IMO: Tank instructions - UN: Tank instructions - Provisions: -

Stowage and handling: SW1 SW22
Segregation: SG69
Properties and observations: Segregation group: none

Air transport (IATA)

Hazard label: Flamm. gas

Excepted Quantity Code: E0

Passenger and Cargo Aircraft: Ltd.Qty.: Pack.Instr. Y203 - Max. Net Qty/Pkg. 30 kg G
Passenger and Cargo Aircraft: Pack.Instr. 203 - Max. Net Qty/Pkg. 75 kg
Cargo Aircraft only: Pack.Instr. 203 - Max. Net Qty/Pkg. 150 kg

Special provisions: A145 A167 A802

Emergency Response Guide-Code (ERG): 10L

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

No data available

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SECTION 15: Regulatory information

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

National regulations - Great Britain

Hazchem-Code:

No data available

National regulations - Germany

Storage class: 2B = Aerosols

Water Hazard Class: 1 = slightly hazardous to water

Information on working limitations:

Observe employment restrictions for young people.

Observe employment restrictions for expectant or nursing mothers.

National regulations - France

No data available

National regulations - EC member states

Volatile organic compounds (VOC):

approx. 40 % by weight = 296 g/L

15.2 Chemical Safety Assessment

For this mixture a chemical safety assessment is not required.

SECTION 16: Other information

Further information

Wording of the H-phrases under paragraph 2 and 3:

H220 = Extremely flammable gas.

H222 = Extremely flammable aerosol.

H229 = Pressurised container: May burst if heated.

H280 = Contains gas under pressure; may explode if heated.

H304 = May be fatal if swallowed and enters airways.

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Abbreviations and acronyms:

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

OEL: Occupational Exposure Limit Value

AS/NZS: Australian Standards/New Zealand Standards

CAS: Chemical Abstracts Service CFR: Code of Federal Regulations

CLP: Classification, Labelling and Packaging

CNS: Central Nervous System
DMEL: Derived minimal effect level
DNEL: Derived no-effect level
EC: European Community
EN: European Standard
EU: European Union

IATA: International Air Transport Association

IBC Code: International Code for the Construction and Equipment of Ships carrying

Dangerous Chemicals in Bulk

IMDG Code: International Maritime Dangerous Goods Code

LC50: Median lethal concentration

LD50: Lethal dose 50%

MARPOL: Maritime Pollution: The International Convention for the Prevention of Pollution

from Ships

OSHA: Occupational Safety and Health Administration

PBT: Persistent, bioaccumulative and toxic PNEC: Predicted no-effect concentration

REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals

RID: Regulations Concerning the International Carriage of Dangerous Goods by Rail

TLV: Threshold Limit Value

UN: United Nations

vPvB: Very persistent and very bioaccumulative

WEL: Workplace Exposure Limit CNS: Central Nervous System

Reason of change: General revision
Date of first version: 8/11/2012

Department issuing data sheet

Contact person: see section 1: Department responsible for information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products.

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