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

1.1 Product identifier

Grafen Professional Pu Foams Cleaner

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

Relevant identified uses: Used to remove the foam residue. Prevents clogging of the gun.

Uses advised against: No further relevant information available.

1.3 Details of the supplier of the safety data sheet:

Supplier:	Madejski Sp. J.
Street address:	ul. Makuszyńskiego 28
Country/Postcode:	Poland, 31-752 Kraków
Telephone number:	+48 (12) 643 67 67
E-mail:	info@madejski.com.pl

1.4 Emergency telephone number: 112

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Mixture:

Classification according to Regulation (EC) No 1272/2008 (CLP)

Classification of the mixture	Regulation (EC) No 1272/2008 (CLP)
Hazard	
Physical and chemical properties	Flam. Aerosol 1 H222, H229
Human	Eye Irrit.2 H319 STOT SE.3 H336
Environment	Not classified

2.2 Label elements

Contains Ethyl Methyl Ketone, N-butane, Propane, Iso-butane.

Supplemental information on the label:

EUH066 Repeated exposure may cause skin dryness or cracking

Hazard pictograms:




Signal word:

DANGER

Hazard statements:

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

H319 Causes serious eye irritation

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H336 May cause drowsiness or dizziness.

Precautionary statements:

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P251 Do not pierce or burn, even after use.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P264 Wash hands thoroughly after handling.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P302 + P352 IF ON SKIN: Wash with plenty of water with soap.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P362 +364 Take off contaminated clothing and wash it before reuse.

P403+P235 Store in a well-ventilated place. Keep cool.

P501 Dispose of contents/container to in accordance with local/ regional/national/international regulation.

2.3 Other hazards

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

SECTION 3: Composition/information on ingredients

3.1 Substances: not applicable


3.2 Mixtures:

Name	Identifiers	[% weight]	Classification according to Regulation (EC) No 1278/2008 (CLP).
Ethyl Methyl Ketone	Index No: 606-002-00-3 EC No: 201-159-0 CAS No: 78-93-3 REACH Registration No.: 01-2119457290-43-XXXX	60-75	Flam. Liq. 2 H225 Eye Irrit. 2 H319 STOT SE.3 H336 EUH 066
N-butane	Index No: 601-004-00-0 EC No: 203-448-7 CAS No: 106-97-8 REACH Registration No.: -	15-25	Flam. Gas1 H220 Press. Gas
Propane	Index No: 601-003-00-5 EC No: 200-827-9 CAS No: 74-98-6 REACH Registration No:	15-25	Flam. Gas1 H220 Press. Gas
Iso-butane	Index No: 601-004-00-0 EC No: 200-857-2 CAS No: 75-28-5 REACH Registration No:---	24,2	Flam. Gas1 H220 Press. Gas

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

SECTION 4: First aid measures

4.1 Description of first aid measures

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Following eye contact: Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes and get medical attention.

Following inhalation: Move the exposed person to fresh air at once. Provide fresh air, warmth and rest, preferably in a comfortable upright sitting position. Get medical attention if any discomfort continues.

Following skin contact: Immediately remove contaminated clothing. Wash the skin with soap and water. Contaminated clothing should be washed before re-use. Get medical attention promptly if symptoms occur after washing.

Following ingestion: Do not induce vomiting. Immediately rinse mouth. Give victim two glasses of water. Never give anything by mouth to an unconscious person. Seek medical advice. Provide ventilation.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

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

If any symptoms persist seek medical advice and show the msds or label.

Notes for the doctor: Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: foam, carbon dioxide, dry powder, water spray

Unsuitable extinguishing media: do not use water in a jet

5.2 Special hazards arising from the substance or mixture

On burning may emit toxic fumes.

5.3 Advice for firefighters

Special Fire Fighting Procedures: Wear full protective clothing and self-contained breathing apparatus.

Protective equipment for fire-fighters: Keep containers cool by spraying with water. If possible remove containers from the danger zone. Prevent from spreading or entering drains, ditches or rivers. Dispose of released and contained material in accordance with local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel:

Removed from the danger area all persons not involved in the emergency. If necessary, order the evacuation. Avoid contact with skin, eyes. Avoid inhalation of vapours / aerosols. Provide ventilation.

For emergency responders:


Wear protective clothing as described in Section 8.

6.2 Environmental precautions

Do not discharge into drains, water courses or into the ground. Local authorities should be advised if any exposure to the environment occurs.

6.3 Methods and material for containment and cleaning up

Allow product to solidify and remove it by mechanical means. Take collected spill to manufacturer/ competent authority. Clean contaminated surfaces with acetone. Dispose of waste according to the applicable local and national regulation.

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6.4 Reference to other sections

See Section 8 for information on personal protective equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Protective measures:

Use only in a well-ventilated area. Avoid breathing vapor or aerosol. Avoid contact with eyes, skin. When handling, use appropriate personal protective equipment (see Section 8). Keep away from heat, sparks, flame and all other sources of ignition. Do not smoke! When using do not eat or drink.

Advice on general occupational hygiene:

Ensure good ventilation / exhaustion at the workplace. When using do not eat, drink or smoke. Wash hand before and after work with product. May cause sensitization by skin. Contaminated clothing should be washed before re-use. Avoid spillage.

7.2 Conditions for safe storage, including any incompatibilities

Store in tightly closed original container in a dry, cool and well-ventilated place (in temperature between 5°C - 25 °C). Keep away from heat, sparks, sunlight, open flame and smoking. Do not store together with oxidizing agents. Keep away from acids, bases and alkalis.

7.3 Specific end use(s)

No further relevant information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

International Limits Values:

Substance	CAS No:	Basis / Country	Short Time Value [mg/m ³]	Short Time Value [ppm-Calculated]	Time Weighted Average Exposure Limit [mg/m ³ -8 h]	Time Weighted Average Exposure Limit [ppm-Calculated]
Ethyl Methyl Ketone	78-93-3	Germany European Union	600 900	200 300	600 600	200 200

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:


Ethyl Methyl Ketone

Route of exposure	WORKERS		CONSUMERS	
	Acute effect local	Acute effects systemic	Acute effect local	Acute effects systemic
Oral	No data available	No data available	No data available	31 mg/kg bw/day
Inhalation	No data available	600 mg/m ³	No data available	106 mg/m ³
Dermal	No data available	1 161 mg/kg bw/day	No data available	412 mg/kg bw/day

N-butane

No data available

Propane

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No data available

Iso-butane

No data available

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Ethyl Methyl Ketone

Environmental protection target	PNEC
Freshwater	55.8 mg/L
Freshwater sediments	284.74 mg/kg sediment dw
Marine water	55.8 mg/L
Marine sediments	284.7 mg/kg sediment dw
Food chain	No data available
Microorganisms in sewage treatment	No data available
Soil (agricultural)	22.5 mg/kg soil dw
Air	No data available

N-butane

No data available

Propane

No data available

Iso-butane

No data available

8.2 Exposure controls

Appropriate engineering controls

Wash hands at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. When using do not eat, drink or smoke.

Individual protection measures, such as personal protective equipment

Eye/face protection

Avoid contact with eyes. Wear approved chemical safety goggles where eye exposure is reasonably probable.

Skin protection:

Hand protection: Wear protective gloves. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material.

Other: Wear protective clothing. Contaminated clothing should be washed before re-use.

Respiratory protection: Respiratory protection must be used if air contamination exceeds acceptable level. It is recommended to use respiratory equipment with filter.


Environmental exposure controls

Local guidelines on emission limits for volatile substances must be observed for the discharge of exhaust air containing vapour. Do not discharge into drains, water courses or into the ground. Local authorities should be advised if any exposure to the environment occurs.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	Aerosol
Odour	No data available

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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	No data available
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper/lower flammability or explosive limits	No data available
Vapour pressure	No data available
Vapour density	No data available
Relative density	No data available
Solubility(ies)	No data available
Partition coefficient: n-octanol / water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidising properties	No data available

9.2 Other information:

No data available

SECTION 10: Stability and Reactivity

10.1 Reactivity

Not reactive under normal conditions of storage and use.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

Reacts with acids and bases. The risk of explosion.

10.4 Conditions to avoid

Avoid release to the environment. Avoid heat, flames and other sources of ignition. At temperatures above 50 °C containers may explode.


10.5 Incompatible materials

No further relevant information available.

10.6 Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

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11.1. Information on toxicological effects

Acute toxicity

No data available for the mixture

Iso-butane

LD50 (oral) No data available

LC50 (rat, inhalation) 1443 mg/L

LD50 (dermal) No data available

N-butane

LD50 (oral) No data available

LC50 (rat, inhalation) 31 mg/L

LD50 dermal) No data available

Ethyl Methyl Ketone

LD50 (rat, oral) 4,29 ml/kg

LC50 (rat, inhalation) 10000 mg/kg

LD50 (rabbit, dermal) < 10 ml/kg

Skin corrosion/irritation

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

Serious eye damage/irritation

The mixture was classified as irritant to the eyes.

Respiratory or skin sensitisation

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

Germ cell mutagenicity

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

Carcinogenicity

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

Reproductive toxicity

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

STOT-single exposure

The mixture was classified as may cause drowsiness or dizziness.

STOT-repeated exposure

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

Aspiration hazard

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

Additional information

No further relevant information available.

SECTION 12: Ecological information

12.1 Toxicity

No data available for the mixture

N-butane

Fish LC50 27,98 mg/L exposition time: 96h

Aquatic invertebrates LC50 14,22 mg/L exposition time:48h

Algae and bacteria (green algae) EC50 7,71mg/L exposition time: 96h

Ethyl Methyl Ketone


Fish (Pimephales promelas) LC50 2993 mg/L exposition time: 96h

Aquatic invertebrates (Daphnia pulex) EC50 No data

Algae and bacteria (Pseudokirchnerella subcapitata) EC50 2029 mg/L exposition time: 96h

12.2 Persistence and degradability

No further relevant information available.

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12.3 Bioaccumulative potential

No further relevant information available.

12.4 Mobility in soil

No further relevant information available.

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Other adverse effects

No further relevant information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste is classified as hazardous waste. Disposal to licensed waste disposal site in accordance with the local Waste Disposal Authority.

Proposed waste code

14 06 03* other solvents and solvent mixtures

16 05 04 gases in pressure containers (including halons) containing dangerous substances

SECTION 14: Transport Information

	ADR/RID	IMDG	IATA
14.1. UN number	UN1950	UN1950	UN1950
14.2. UN proper shipping name	Aerosol, flame	Aerosol, flame	Aerosol, flame
14.3. Transport hazard class(es)	2	2	2
14.4. Packing group	V A	V A	V A
14.5. Environmental hazards	Not applicable	Not applicable	Not applicable
14.6. Special precautions for user	Not applicable	Not applicable	Not applicable
14.7. Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable	Not applicable	Not applicable

SECTION 15: Regulatory information


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

Commission Directive 2000/39/EC of 8 June 2000 establishing a first list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH),

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments.

2014/955/EU: Commission Decision of 18 December 2014 amending Decision 2000/532/EC on the list of waste pursuant to Directive 2008/98/EC of the European Parliament and of the Council Text with EEA relevance

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15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this mixture by the supplier.

SECTION 16: Other information

Classification according to Regulation (EC) No. 1272/2008

Classification procedure: calculation method

Flam. Aerosol 1 H222, H229

Eye Irrit.2 H319

STOT SE.3 H336

Relevant H-statements (number and full text)

H220 Extremely flammable gas

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation

H336 May cause drowsiness or dizziness.

Additional Information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, Information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The 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, unless specified in the text.

It is the responsibility of persons in receipt of this Product Safety Data Sheet to ensure that the information contained herein is properly read and understood by all people who may use, handle, dispose or in any way come in contact with the product. If the recipient subsequently produces a formulation containing the product, it is the recipient's sole responsibility to ensure the transfer of all relevant information from the Product Safety Data Sheet to their own Product Safety Data Sheet.

All information and instructions provided in this Safety Data Sheet (SDS) are based on the current state of scientific and technical knowledge at the date indicated on the present SDS. As stated above, this Safety Data Sheet has been prepared in compliance with applicable European law. If you purchase this material outside Europe, where compliance laws may differ, you should receive from your local supplier a SDS applicable to the country in which the product is sold and intended to be used. Please note that the appearance and content of the SDS may vary –even for the same product between different countries, reflecting the different compliance requirements.