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

1.1 Product identifier

Grafen Professional Brake Cleaner

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

Relevant identified uses: Grafen Professional Brake Cleaner is used for cleaning dust, grease on all parts of the brakes and clutch.

Uses advised against: It's not specified.

1.3 Details of the supplier of the safety data sheet:

Supplier:	Madejski Sp. J.
Street address:	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)

Flam. Liq.2 H225 Highly flammable liquid and vapour.

Skin Irrit.2 H315 Causes skin irritation.

Eye Irrit 2 H319 Causes serious eye irritation.

STOT SE.3 H336 May cause drowsiness or dizziness.

Rep.2 H361 Suspected of damaging fertility or the unborn child.

STOT RE.2 H373 May cause damage to organs through prolonged or repeated exposure.

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.

2.2 Label elements

Contains hydrocarbons, C6, n-alkanes, isoalkanes, cyclic, n-hexane rich, propan-2-ol.

Supplemental information on the label:

Not applicable

Hazard pictograms:



Signal word:

DANGER

Hazard statements:

H225 Highly flammable liquid and vapour.


H315 Causes skin irritation.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

H361 Suspected of damaging fertility or the unborn child.

H373 May cause damage to organs through prolonged or repeated exposure.

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H411 Toxic to aquatic life with long lasting effects.

Precautionary statements:

P103 Read label before use.

P201 Obtain special instructions before use.

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

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

P264 Wash hands thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P273 Avoid release to the environment.

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

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

P308+P313 IF exposed or concerned: Get medical advice/attention.

P337+P313 If eye irritation persists: Get medical advice/ attention.

P332+P313 If skin irritation occurs: Get medical advice/ attention.

P403+P233 Store in a well-ventilated place. Keep container tightly closed

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

P405 Store locked up.

P501 Dispose of contents/container to in accordance with national 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)
Hydrocarbons, C6, n-alkanes, isoalkanes, cyclic, n-hexane rich	Index No: - EC No: 925-292-5 CAS No: - REACH Registration No:-	<100	Flam. Liq. 2 H225 Asp. Tox.1 H304 Skin Irrit.2 H315 STOT SE.3 H336 Repr.2 H361 STOT RE.2 H373 Aquatic Chronic 2 H411
Propan-2-ol	Index No: 603-117-00-0 EC No: 200-661-7 CAS No: 67-63-0 REACH Registration No:-	<20	Flam. Liq.2 H225 Eye Irrit.2 H319 STOT SE.3 H336

*Specific Concentration Limits for n-hexane CAS 110-54-3

STOT RE 2; H373: C ≥ 5 %

Hydrocarbons, C6, n-alkanes, isoalkanes, cyclics, n-hexane rich contains 20-45% n-hexane.


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

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 10 minutes and get medical attention if symptoms occur after washing.

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.

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

Following ingestion: Do not induce vomiting. 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

May cause skin irritation, redness. May cause eye irritation. May cause drowsiness or dizziness.

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

Flammable vapors may accumulate in the container. May explode on heating. Thermal decomposition or combustion may liberate carbon oxides.

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. Avoid open flames, sparks and other sources of ignition.

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

Absorb with liquid-binding material (eg. sawdust, sand). Collect in a waste container. Dispose of waste according to the applicable local and national regulation.

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:

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Avoid breathing vapour or aerosol. Avoid contact with eyes, skin. When handling, use appropriate personal protective equipment (see Section 8). Flammable vapours may accumulate in the container. Provide local exhaust or general room ventilation. Keep away from heat, hot surface, sparks, open flame and all other sources of ignition. No smoking. When using do not eat or drink. Avoid direct contact with the product.

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. 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. Containers should be protected from sunlight. Keep away from heat, sparks, sunlight, open flame and smoking.

7.3 Specific end use(s)

Used for cleaning dust, grease.

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]
n-hexane	110-54-3	Germany	1440(1)	400(1)	180	50
		European Union	-	-	72	20
		Belgium	-	-	72	20
		France	-	-	72	20
		Spain	-	-	72	20
propan-2-ol	67-63-0	Germany	1000	400	500	200
		European Union	-	-	-	-
		Belgium	1000	400	500	200
		France	980	400	-	-
		Spain	1000	400	500	200

(1) 15 minutes average value

DNEL, PNEC- 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. Use equipment for eye protection tested and approved under appropriate government standards such as EN 166.


Skin protection

Hand protection: Use gloves. Gloves must be inspected prior to use. Recommended gloves:

Material: nitrile rubber

Minimum layer thickness: ≥0,34 mm

Break through time: ≥480 min

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The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374.

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

Respiratory protection:

Where risk assessment shows air-purifying respirators are appropriate use a face respirator. It is recommended to use respiratory equipment with filter A.

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	Liquid
Odour	Characteristic
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)	Not applicable
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 recommended conditions of storage and use.

10.2 Chemical stability

The product is chemically stable under recommended conditions of storage and use.

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10.3 Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.

10.4 Conditions to avoid

Avoid release to the environment. Avoid hot surface, sparks, heat, flames and other sources of ignition.

10.5 Incompatible materials

No data available

10.6 Hazardous decomposition products

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

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Hydrocarbons, C6, n-alkanes, isoalkanes, cyclic, n-hexane rich

LD50 (rat, oral) >25 mL/kg bw

LD50 (rabbit, dermal) > 5 mg/kg bw

LC50 (rabbit, dermal) 73 860 ppm

Propan-2-ol

LD50 (rat, oral) 5.84 g/kg bw

LD50 (rabbit, dermal) 16.4 mL/kg bw

LC50 (rabbit, dermal) > 10 000 ppm

Skin corrosion/irritation

Mixture is classified as an irritating to skin.

Serious eye damage/irritation

Mixture is classified as an irritating to eye.

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

Mixture is classified as an suspected of damaging fertility or the unborn child.

STOT-single exposure

Mixture is classified as an may cause drowsiness or dizziness.

STOT-repeated exposure

Mixture is classified as an may cause damage to organs through prolonged or repeated exposure.

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.


Hydrocarbons, C6, n-alkanes, isoalkanes, cyclic, n-hexane rich

Fish (*Oncorhynchus mykiss*) LL50 > 13.3 mg/L exposition time: 96h

Aquatic invertebrates (*Daphnia magna*) LC50 45 mmol/m³ exposition time: 48h

Algae and bacteria (*Chlorella pyrenoidosa*) EC50 2.66 %v/v exposition time: 10d

Propan-2-ol

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Fish (Pimephales promelas)	LC50	10 000 mg/L exposition time: 96h
Aquatic invertebrates (Daphnia magna)	LC50	> 10 000 mg/L exposition time: 24h
Algae and bacteria (Scenedesmus quadricauda)	TGK	1 800 mg/L exposition time: 8d

12.2 Persistence and degradability

n-hexane: Biodegradable in the soil. Readily biodegradable in water.

12.3 Bioaccumulative potential

n-hexane: BCF: 501.187; Log Pow: 4; Potential for bioaccumulation

12.4 Mobility in soil

n-hexane: Log Koc: 3.34; Low potential for mobility in soil.

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

07 01 04* Other organic solvents, washing liquids and mother liquors


SECTION 14: Transport Information

	ADR/RID	ADN/ADNR	IMDG	IATA
14.1. UN number	1993	1993	1993	1993
14.2. UN proper shipping name	FLAMMABLE LIQUID, N.O.S. (contains hydrocarbons, C6, n-alkanes, isoalkanes, cyclic, n-hexane rich)	FLAMMABLE LIQUID, N.O.S. (contains hydrocarbons, C6, n-alkanes, isoalkanes, cyclic, n-hexane rich)	FLAMMABLE LIQUID, N.O.S. (contains hydrocarbons, C6, n-alkanes, isoalkanes, cyclic, n-hexane rich)	FLAMMABLE LIQUID, N.O.S. (contains hydrocarbons, C6, n-alkanes, isoalkanes, cyclic, n-hexane rich)
14.3. Transport hazard class(es)	3	3	3	3
14.4. Packing group	II	II	II	II
14.5. Environmental hazards	YES	YES	YES	YES
14.6. Special precautions for user	Tunnel restriction code: D/E	Not applicable	Number EmS: F-E, S-E	Not applicable
14.7. Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable	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.

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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

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. Liq.2 H225

Skin Irrit.2 H315

Eye Irrit.2 H319

STOT SE.3 H336

Rep.2 H361

STOT RE.2 H373

Aquatic Chronic 2 H411

Relevant H-statements (number and full text)

H225 Highly flammable liquid and vapour

H304 May be fatal if swallowed and enters airways

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

H361 Suspected of damaging fertility or the unborn child.

H373 May cause damage to organs through prolonged or repeated exposure

H411 Toxic to aquatic life with long lasting effects

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.

Updated msds: section 2,3,4,5,7,8,9,11,12,14,16.

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.