	MATERIAL SAFETY DATA SHEET According to article 31 and Annex II of the EU REACH Regulation	Revision: 12.07.2013
	GRAFEN PROFESSIONAL FOAM MONTAGE (+5°C to +30°C)	Update date: 16.12.2016
		Version 4.0
		Page 1 of 11

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

1.1 Product identifier

Grafen Professional Foam montage (+5°C to +30°C)

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

Relevant identified uses: Used for:

- sealing cement board, ceramic, corrugated sheets,
- to fill gaps of roofs and terraces,
- sealing and bonding connections floors and terraces,
- the expansion joints of concrete floors.

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	Skin Irrit.2 H315 Skin Sens.1 H317 Eye Irrit.2 H319 Acute Tox.4 H332 Resp. Sens.1 H334 STOT SE.3 H335 Carc.2 H351 Lact. H362 STOT RE.2 H373
Environment	Aquatic Chronic2 H411


2.2 Label elements

Contains Polymethylene polyphenyl isocyanate, Iso-butane, Dimethyl Ether, Chloroalkanes C14-17.

Supplemental information on the label:

EUH204 Contains isocyanates. May produce an allergic reaction

Hazard pictograms:

	MATERIAL SAFETY DATA SHEET According to article 31 and Annex II of the EU REACH Regulation	Revision: 12.07.2013
		Update date: 16.12.2016
GRAFEN PROFESSIONAL FOAM MONTAGE (+5°C to +30°C)		Version 4.0
		Page 2 of 11



Signal word:

DANGER

Hazard statements:

- H222 Extremely flammable aerosol.
- H229 Pressurised container: May burst if heated.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.
- H332 Harmful if inhaled.
- H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- H335 May cause respiratory irritation.
- H351 Suspected of causing cancer.
- H362 May cause harm to breast-fed children.
- H373 May cause damage to organs through prolonged or repeated exposure.
- H411 Toxic to aquatic life with long lasting effects.

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.
- P261** Avoid breathing dust/fume/gas/mist/vapours/spray.
- P263** Avoid contact during pregnancy/while nursing.
- P264** Wash hands thoroughly after handling.
- P271** Use only outdoors or in a well-ventilated area.
- 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.
- P410+P412** Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
- 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).
------	-------------	------------	---

	MATERIAL SAFETY DATA SHEET According to article 31 and Annex II of the EU REACH Regulation	Revision: 12.07.2013
		Update date: 16.12.2016
GRAFEN PROFESSIONAL FOAM MONTAGE (+5°C to +30°C)		Version 4.0
		Page 3 of 11

Polymethylene polyphenyl isocyanate	Index No: - EC No: - CAS No: 9016-87-9 REACH Registration No.: -	30-50	Skin Irrit.2 H315 Skin Sens.1 H317 Eye Irrit.2 H319 Acute Tox.4 H332 Resp. Sens.1 H334 STOT SE.3 H335 Carc.2 H351 STOT RE.2 H373
Iso-butane	Index No: 601-004-00-0 EC No: 200-857-2 CAS No: 75-28-5 REACH Registration No.: -	<10	Flam. Gas1 H220 Press. Gas
Dimethyl Ether	Index No: 603-019-00-8 EC No: 204-065-8 CAS No: 115-10-6 REACH Registration No: 01-2119472128-37-0003	<15	Flam. Gas1 H220 Press. Gas
Chloroalkanes C14-17	Index No.: 602-095-00-X EC No: 287-477-0 CAS No: 85535-85-9 REACH pre-Registration No: 17-2119406889-25-0000	<10	Lact. H362 Aquatic Acute1 H400 Aquatic Chronic1 H410
Tris(2-chlorisopropyl)-phosphate	Index No.: --- EC No: 237-158-7 CAS No: 13674-84-5 REACH Registration No: 01-2119447716-31-0000	<10	Acute Tox.4 H302

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 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

	MATERIAL SAFETY DATA SHEET According to article 31 and Annex II of the EU REACH Regulation	Revision: 12.07.2013
	GRAFEN PROFESSIONAL FOAM MONTAGE (+5°C to +30°C)	Update date: 16.12.2016
		Version 4.0
		Page 4 of 11

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

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases.

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.

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 below 50°C). Keep away from heat, sparks, sunlight, open flame and smoking. Do not store together with oxidizing agents. Keep away from acids and bases.

7.3 Specific end use(s)

No further relevant information available.

	MATERIAL SAFETY DATA SHEET According to article 31 and Annex II of the EU REACH Regulation	Revision: 12.07.2013
		Update date: 16.12.2016
	GRAFEN PROFESSIONAL FOAM MONTAGE (+5°C to +30°C)	Version 4.0
		Page 5 of 11

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]
Polymethylene polyphenyl isocyanate	9016-87-9	Germany European Union	0,05* -	- -	0,05* -	- -
Iso-butane	75-28-5	Germany European Union	9600 -	4000 -	2400 -	1000 -
Dimethyl ether	115-10-6	Germany European Union	15200 -	8000 -	1900 1920	1000 1000
Chloroalkanes C14-17	85535-85-9	Germany European Union	48** -	2,4** -	6** -	0,3** -

*- inhalable fraction

** inhalable aerosol

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

Dimethyl ether

	WORKERS		CONSUMERS	
Route of exposure	Acute effect local	Acute effects systemic	Acute effect local	Acute effects systemic
Oral	No data available	No data available	No data available	No data available
Inhalation	No data available	1 894 mg/m ³	No data available	471 mg/m ³
Dermal	No data available	No data available	No data available	No data available


Chloroalkanes C14-17

	WORKERS		CONSUMERS	
Route of exposure	Acute effect local	Acute effects systemic	Acute effect local	Acute effects systemic
Oral	No data available	No data available	No data available	0.58 mg/kg bw/day
Inhalation	No data available	6.7 mg/m ³	No data available	2 mg/m ³
Dermal	No data available	47.9 mg/kg bw/day	No data available	28.75 mg/kg bw/day

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

Dimethyl ether

Environmental protection target	PNEC
Freshwater	0.155 mg/L
Freshwater sediments	0.681 mg/kg sediment dw
Marine water	0.016 mg/L
Marine sediments	0.069 mg/kg sediment dw
Food chain	No data available
Microorganisms in sewage treatment	No data available

	MATERIAL SAFETY DATA SHEET According to article 31 and Annex II of the EU REACH Regulation	Revision: 12.07.2013
		Update date: 16.12.2016
	GRAFEN PROFESSIONAL FOAM MONTAGE (+5°C to +30°C)	Version 4.0
		Page 6 of 11

Soil (agricultural)	0.045 mg/kg soil dw
Air	No data available

Chloroalkanes C14-17

Environmental protection target	PNEC
Freshwater	1 µg/L
Freshwater sediments	13 mg/kg sediment dw
Marine water	0.2 µg/L
Marine sediments	2.6 mg/kg sediment dw
Food chain	No data available
Microorganisms in sewage treatment	No data available
Soil (agricultural)	11.9 mg/kg soil dw
Air	No data available

Tris(2-chlorisopropyl)-phosphate

Environmental protection target	PNEC
Freshwater	0.42 mg/L
Freshwater sediments	2.96 mg/kg sediment dw
Marine water	0.42 mg/L
Marine sediments	2.96 mg/kg sediment dw
Food chain	No data available
Microorganisms in sewage treatment	No data available
Soil (agricultural)	1.33 mg/kg soil dw
Air	No data available

8.2 Exposure controls

Appropriate engineering controls

DO NOT SMOKE IN WORK AREA! 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

	MATERIAL SAFETY DATA SHEET According to article 31 and Annex II of the EU REACH Regulation	Revision: 12.07.2013
		Update date: 16.12.2016
	GRAFEN PROFESSIONAL FOAM MONTAGE (+5°C to +30°C)	Version 4.0
		Page 7 of 11

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	15 ± 2 kg/m ³
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, bases and oxidizing agents.

10.4 Conditions to avoid

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

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

11.1. Information on toxicological effects

Acute toxicity

No data available for the mixture

	MATERIAL SAFETY DATA SHEET According to article 31 and Annex II of the EU REACH Regulation	Revision: 12.07.2013
		Update date: 16.12.2016
GRAFEN PROFESSIONAL FOAM MONTAGE (+5°C to +30°C)		Version 4.0
		Page 8 of 11

Iso-butane

LD50 (oral)	No data available
LC50 (rat, inhalation)	1443 mg/L
LD50 (dermal)	No data available

Dimethyl Ether

LD50 (oral)	No data available
LC50 (rat, inhalation)	164000 ppm
LD50 dermal)	No data available

Tris(2-chlorisopropyl)-phosphate

LD50 (rat, oral)	1011 mg/kg bw
LC50 (rat, inhalation)	> 4.6 mg/L air
LD50 (rabbit, dermal)	< 5000 mg/kg bw

Chloroalkanes C14-17

LD50 (rat, oral)	> 15000 mg/L
LC50 (rat, inhalation)	> 48170 mg/m ³
LD50 (rabbit, dermal)	> 10 mL/kg bw

Skin corrosion/irritation

The mixture was classified as an irritant to the skin.

Serious eye damage/irritation

The mixture was classified as an irritant to the eyes.

Respiratory or skin sensitisation

The mixture was classified as an may cause an allergic skin reaction. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Germ cell mutagenicity

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

Carcinogenicity

The mixture was classified as an suspected of causing cancer

Reproductive toxicity

The mixture was classified as an may cause harm to breast-fed children

STOT-single exposure

The mixture was classified as an may cause respiratory irritation.

STOT-repeated exposure

The mixture was 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

Contains isocyanates. May produce an allergic reaction.

SECTION 12: Ecological information

12.1 Toxicity

No data available for the mixture

Dimethyl Ether


Fish (Poecilia reticulata)	LC50	> 4.1 g/L	exposition time: 96h
Aquatic invertebrates (Daphnia magna)	EC50	> 4.4 g/L	exposition time:48h
Algae and bacteria (green algae)	EC50	154.917 mg/L	exposition time: 96h

Tris(2-chlorisopropyl)-phosphate

Fish (Lepomis macrochirus)	LC	84 mg/L	exposition time: 96h
Aquatic invertebrates (Ceriodaphnia dubia)	LC50	0,071 mg/L	exposition time: 48h
Algae and bacteria (Pseudokirchnerella subcapitata)	EC50	82 mg/L	exposition time: 72h

Chloroalkanes C14-17

Fish (Alburnus alburnus)	LC50	> 5000mg/L	exposition time: 96h
Aquatic invertebrates (Daphnia magna)	EC50	75 mg/L	exposition time: 24h
Algae and bacteria (Pseudokirchnerella subcapitata)	EC50	> 3.2mg/L	exposition time: 72h

	MATERIAL SAFETY DATA SHEET According to article 31 and Annex II of the EU REACH Regulation	Revision: 12.07.2013
		Update date: 16.12.2016
GRAFEN PROFESSIONAL FOAM MONTAGE (+5°C to +30°C)		Version 4.0
		Page 9 of 11

12.2 Persistence and degradability

No further relevant information available.

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

08 05 01 waste isocyanates

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	YES	YES	YES
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

	MATERIAL SAFETY DATA SHEET According to article 31 and Annex II of the EU REACH Regulation	Revision: 12.07.2013
	GRAFEN PROFESSIONAL FOAM MONTAGE (+5°C to +30°C)	Update date: 16.12.2016
		Version 4.0
	Page 10 of 11	

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. Aerosol 1 H222, H229

Skin Irrit.2 H315

Skin Sens.1 H317

Eye Irrit.2 H319

Acute Tox.4 H332

Resp. Sens.1 H334

STOT SE.3 H335

Carc.2 H351

Lact. H362

STOT RE.2 H373

Aquatic Chronic2 H411

Relevant H-statements (number and full text)

H220 Extremely flammable gas.

H302 Harmful if swallowed

H315 Causes skin irritation

H317 May cause an allergic skin reaction

H319 Causes serious eye irritation

H332 Harmful if inhaled.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H335 May cause respiratory irritation

H351 Suspected of causing cancer

H362 May cause harm to breast-fed children

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

H400 Very toxic to aquatic life


H410 Very 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.

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

	MATERIAL SAFETY DATA SHEET According to article 31 and Annex II of the EU REACH Regulation	Revision: 12.07.2013
		Update date: 16.12.2016
	GRAFEN PROFESSIONAL FOAM MONTAGE (+5°C to +30°C)	Version 4.0
		Page 11 of 11

appearance and content of the SDS may vary –even for the same product between different countries, reflecting the different compliance requirements.
