PROFESSIONAL GRAFEN automotive & construction chemistry	MATERIAL SAFETY DATA SHEET According to article 31 and Annex II of the EU REACH Regulation	Revision: 12.07.2013 Update date: 27.12.2017
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	625g (-10°C to +30°C)	

SECTION 1: Identification of the substance/mixture and of the company/undertaking 1.1 Product identifier

Grafen Professional Foam Montage All Weather 625g (-10°C to +30°C)

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

Relevant identified uses: Used for:

- Installation of doors and windows profiles,

- Sealing and insulation works: partition walls, parapets, stair treads,
- Filling and insulation of pipe culverts,
- Insulating roof, wall and ceiling joints,
- Joining and sealing in framework constructions,

- Thermal insulation of system components of central heating, plumbing-sewerage installations,

- Sealing of cooling systems,
- Thermal insulation of roofs.

Uses advised against: No further relevant information available.

1.3 Details of the supplier of the safety data sheet:

Supplier: Street address: Country/Postcode: Telephone number:	Madejski Sp. J. ul. Makuszyńskiego 28 Poland, 31-752 Kraków +48 (12) 643 67 67
E-mail:	info@madejski.com.pl
1.4 Emergency telephone number:	112

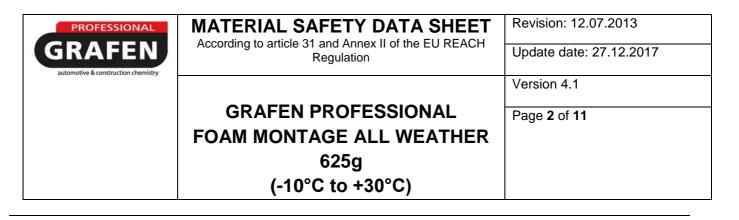
SECTION 2: Hazards identification

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:



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



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3.1 Substances: not applicable

3.2 Mixtures:

Name	Identifiers	[% weight]	Classification according to Regulation (EC) No 1278/2008 (CLP).
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.

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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

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.

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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.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

International Limits Values:

Substance	CAS No:	Basis / Country	Short Time Value [mg/m³]	Short Time Value [ppm- Calculated]	Time Weighted Average Exposure Limit [mg/m ³ -8 h]	Time Weighted Average Exposure Limit [ppm- Calculated]
Polymethylene	9016-87-9	Germany	0,05*	-	0,05*	-
polyphenyl		European	-	-	-	-
isocyanate		Union				
Iso-butane	75-28-5	Germany	9600	4000	2400	1000
		European Union	-	-	-	-
Dimethyl ether	115-10-6	Germany	15200	8000	1900	1000
		European Union	-	-	1920	1000
Chloroalkanes	85535-85-9	Germany	48**	2,4**	6**	0,3**
C14-17		European	-	-	-	-
* introductor		Union				

*- inhalable fraction

** inhalable aerosol

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

Dimethyl ether

	WORKERS		CONSUMERS	
Route of	Acute effect local	Acute effects systemic	Acute effect local	Acute effects systemic
exposure				
Oral	No data available	No data available	No data available	No data available
Inhalation	No data available	1 894 mg/m³	No data available	471 mg/m³
Dermal	No data available	No data available	No data available	No data available

Chloroalkanes C14-17

	WORKERS		CONSUMERS	
Route of	Acute effect local	Acute effects systemic	Acute effect local	Acute effects systemic



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exposure				
Oral	No data available	No data available	No data available	0.58 mg/kg bw/day
Inhalation	No data available	6.7 mg/m³	No data available	2 mg/m³
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
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	

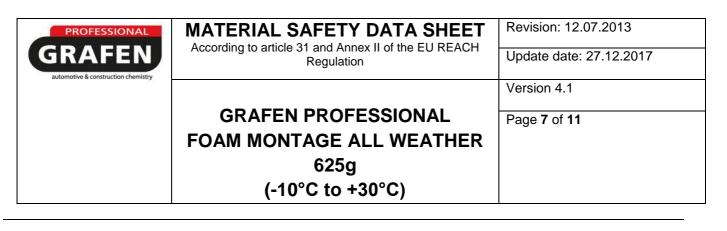
Tris(2-chlorisopropyl)-phosphate

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:

<u>Hand protection</u>: 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
Odour threshold	No data available
рН	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
Deletive density	15 ± 2 kg/m ³
Relative density	15 ± 2 kg/m²
Solubility(ies)	No data available
•	Ū
Solubility(ies)	No data available
Solubility(ies) Partition coefficient: n-octanol / water	No data available No data available
Solubility(ies) Partition coefficient: n-octanol / water Auto-ignition temperature	No data available No data available No data available
Solubility(ies) Partition coefficient: n-octanol / water Auto-ignition temperature Decomposition temperature	No data available No data available No data available No data available
Solubility(ies) Partition coefficient: n-octanol / water Auto-ignition temperature Decomposition temperature Viscosity	No data available No data available No data available No data available No data available
Solubility(ies) Partition coefficient: n-octanol / water Auto-ignition temperature Decomposition temperature Viscosity Explosive properties	No data available No data available No data available No data available No data available No data available



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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 **Iso-butane** LD50 (oral) No data available LC50 (rat, inhalation) 1443 ma/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 > 48170 mg/m³ LC50 (rat, inhalation) 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.

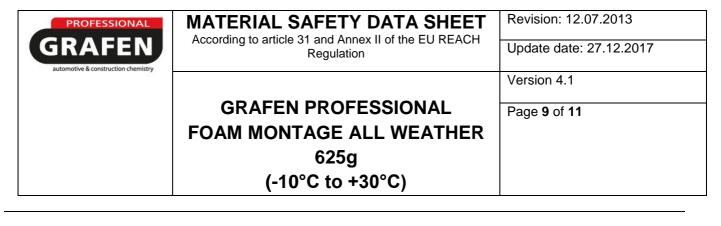
Respiratory or skin sensitisation

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 Aquatic invertebrates (Daphnia magna) EC50 Algae and bacteria (green algae) Tris(2-chlorisopropyl)-phosphate Fish (Lepomis macrochirus) LC Aquatic invertebrates (Ceriodaphnia dubia) Algae and bacteria (Pseudokirchnerella subcapitata) **Chloroalkanes C14-17** Fish (Alburnus alburnus) Aquatic invertebrates (Daphnia magna) Algae and bacteria (Pseudokirchnerella subcapitata)

EC50> 4.4 g/L exposition time:48hEC50154.917 mg/L exposition time: 96hLC84 mg/L exposition time: 96hLC500,071 mg/L exposition time: 48hEC5082 mg/L exposition time: 72hLC50> 5000mg/L exposition time: 96hEC5075 mg/L exposition time: 24hEC50> 3.2mg/L exposition time: 72h

> 4.1 g/L exposition time: 96h

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



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IATA

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SECTION 14: Transport Information				
	ADR/RID	IMDG		
14.1. UN number	UN1950	UN1950		
14.2. UN proper shipping name	Aerosol, flame	Aerosol, flame		
14.3. Transport hazard class(es)	2	2		

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

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.

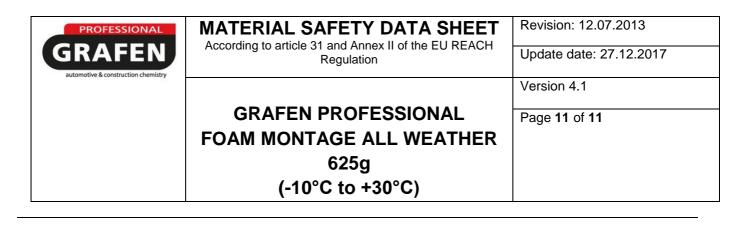
2014/955/EU: Commission Decision of 18 December 2014 amending Decision 2000/532/EC on the list of waste pursuant to Directive 2008/98/EC of the European Parliament and of the Council Text with EEA relevance.

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.

Updated msds: section 1

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.