



Kemetyl

Safety data sheet

According to Regulation (EU) No 2015/830

SECTION 1 IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name : SHELL SILICON SPRAY
Product code : CRX728, AT651I

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

Application : SU21 Consumer product. PC24 Lubricants, greases and release products.

1.3. Details of the supplier of the safety data sheet

Supplier : Kemetyl Polska Sp. z o. o.
Al. Jerozolimskie 146, Budynek C
02-305 Warszawa, Poland
Telephone : +48 22 822 5390
E-mail : msds@kemetyl.com
Website : www.kemetyl.com

1.4. Emergency telephone number

EMERGENCY TELEPHONE NUMBER, for DOCTORS/FIRE BRIGADE/POLICE only:

PL - Telephone : +48 22 822 5390 (During office hours only)

EMERGENCY TELEPHONE NUMBER (for DOCTORS only):

National Poisons Information Service +44 344 892 0111 (24/7)

SECTION 2 HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

CLP classification : Aerosols, category 1. Specific target organ toxicity after single exposure, category 3. Hazardous to the aquatic environment — Chronic category 3.
(1272/2008/EC)
Human health hazards : May cause drowsiness or dizziness. Exposure to high vapour concentrations may result in a narcotic effect. Use only as directed. Intentional misuse by deliberately concentrating and inhaling contents can be harmful or fatal.
Physical/chemical hazards : Extremely flammable. Keep away from sources of ignition — No smoking. Do not spray on a naked flame or any incandescent material. Do not spray near fire, sources of heat or live electrical equipment. Aerosol may explode from internal pressure build-up when exposed to temperatures exceeding 50 °C.
Environmental hazards : Harmful to aquatic life with long lasting effects.
Other information : Caution: Do not breathe spray. Use only in well-ventilated areas. Spray in short intervals for a short period only. Ventilate well after use. Harmful to house pets.

2.2. Label elements

Label elements (1272/2008/EC):

Hazard pictograms :



Signal word : Danger



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H- and P-phrases	:	H222	Extremely flammable aerosol.
		H229	Pressurised container: May burst if heated.
		H336	May cause drowsiness or dizziness.
		H412	Harmful to aquatic life with long lasting effects.
		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.
		P211	Do not spray on an open flame or other ignition source.
		P251	Do not pierce or burn, even after use.
		P271	Use only outdoors or in a well-ventilated area.
		P405	Store locked up.
		P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
		P501	Dispose of contents/container to an official chemical waste depot.

Labelling of packagings where the contents do not exceed 125 ml and it is technically impossible to list all phrases:

Hazard pictograms :



Signal word : Danger

H- and P-phrases	:	H222	Extremely flammable aerosol.
		H229	Pressurised container: May burst if heated.
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		H412	Harmful to aquatic life with long lasting effects.
		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.
		P211	Do not spray on an open flame or other ignition source.
		P251	Do not pierce or burn, even after use.
		P271	Use only outdoors or in a well-ventilated area.
		P405	Store locked up.
		P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
		P501	Dispose of contents/container to an official chemical waste depot.

Additional labelling (for all packaging sizes)

: Contains: Pentane .

2.3. Other hazards

Other information : The classification of this product is based on the non-aerosolised form of the mixture (on basis of section 1.1.3.7. of Regulation (EC) No 1272/2008). Does not contain PBT or vPvB substances in concentrations higher than 0,1%.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

3.2. Mixtures

Product description : Mixture.

Information on hazardous substances:

Substance name	Concentration (w/w) (%)	CAS nr.	EC number	Remark	REACH nr.
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Butane	50 - 75	106-97-8	203-448-7		01-2119474691-32
Propane	10 - < 25	74-98-6	200-827-9		01-2119486944-21
Isobutane	2,5 - < 10	75-28-5	200-857-2		01-2119485395-27
Pentane	2,5 - < 10	109-66-0	203-692-4		01-2119459286-30

Substance name	Hazard Class	H-phrases	Pictograms	
Butane	Flam. Gas 1; Press. Gas	H220; H280	GHS02; GHS04	
Propane	Flam. Gas 1; Press. Gas	H220; H280	GHS02; GHS04	
Isobutane	Flam. Gas 1; Press. Gas	H220; H280	GHS02; GHS04	
Pentane	Flam. Liq. 2; Asp. Tox. 1; STOT SE 3; Aquatic Chronic 2	H225; H304; H336; H411; EUH066	GHS02; GHS08; GHS07; GHS09	

Occupational exposure limit(s), if relevant, are listed in section 8.

Reference is made to chapter 16 for full text of each relevant H phrase.

SECTION 4 FIRST-AID MEASURES

4.1. Description of first aid measures

First aid measures

- Inhalation : Move victim into fresh air. Consult a doctor if victim feels unwell.
- Skin contact : Take off contaminated clothing. Wash off skin with plenty of water and soap before product dries up.
- Eye contact : Wash out with (lukewarm) water. Remove contact lenses. Consult a doctor if irritation persists.
- Ingestion : Aerosol or mist: Ingestion is unlikely to occur.

4.2. Most important symptoms and effects, both acute and delayed

Effects and symptoms

- Inhalation : May cause headache, drowsiness, dizziness and a feeling of sickness. May cause irritation to respiratory airways and coughing.
- Skin contact : May cause dry skin.
- Eye contact : May cause stinging of eyes and redness.
- Ingestion : Aerosol or mist: Ingestion is unlikely to occur.

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

Note to physicians : None known.

SECTION 5 FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

- Suitable : Carbondioxide (CO₂). Foam. Dry chemical. Water fog.
- Not suitable : Water jet.

5.2. Special hazards arising from the substance or mixture

Special exposure hazards : Aerosol may explode from internal pressure build-up when exposed to temperatures exceeding 50 °C. Do not expose emergency personnel to overheated aerosol containers. Water may be used to cool container and prevent explosion of the aerosol.



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Hazardous thermal decomposition products : Carbon monoxide may be evolved if incomplete combustion occurs.

5.3. Advice for firefighters

Special protective equipment for fire-fighters : Fight a fire where aerosols are involved from a protected position. Use adequate respiratory equipment in case of insufficient ventilation.

SECTION 6 ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions : Danger of slipping. Clean up spills immediately. Wear shoes with non-slip soles. Avoid contact with spilled or released material. Do not breathe vapours and/or spray. Keep away from sources of ignition — No smoking. Build up of highly flammable gasses involves an explosion risk. Vapours are heavier than air. Build up (of gasses) in low areas involves risk of suffocation.

6.2. Environmental precautions

Environmental precautions : Avoid release of product into sewers, surface water and/or ground water. Waste product should not be allowed to contaminate soil or water.

Other information : Notify authorities if any exposure to the general public or the environment occurs or is likely to occur.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Collect spilled material in containers. Absorb residues in sand or other inert material. Collect aerosol cans in an approved container. Do not pierce aerosols. Wash away remainder with plenty of water and soap.

6.4. Reference to other sections

Reference to other sections : See also section 8.

SECTION 7 HANDLING AND STORAGE

7.1. Precautions for safe handling

Handling : Handle in accordance with good occupational hygiene and safety practices in well-ventilated areas. Important: Pressurized container; protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Keep away from sources of ignition — No smoking. Do not spray on a naked flame or any incandescent material. Do not spray near fire, sources of heat or live electrical equipment. Electrostatic discharge may cause fire. Ensure electrical continuity by bonding and grounding (earthing) all equipment. Do not breathe spray. Do not breathe vapour. Avoid contact with skin and eyes.

7.2. Conditions for safe storage, including any incompatibilities

Storage : Keep frost-free, in a cool (< 35°), dry and well-ventilated place. Protect from sunlight and keep away from heat.

Recommended packaging : Not applicable.

7.3. Specific end use(s)

Use : Use only as directed.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION



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8.1. Control parameters

Occupational exposure limits : Occupational exposure limits have not been established for this product. Derived no-effect levels (DNEL) have not been established for this product. Predicted no-effect concentrations (PNEC) have not been established for this product.

Workplace exposure limits (mg/m³):

Chemical name	Country	TWA 8 hour (mg/m ³)	STEL 15 min (mg/m ³)	Comments	Source
Butane	GB	1450	1810	-	MAC: MSDS Aeron Butane MAC: BG, PL, CH, SL, etc MAC: FI, BE, CH
Butane		1450	1810	-	
Propane		1800	-	-	
Isobutane	GB	1900	2400	-	Directive 2006/15/EG
Pentane		1800	-	-	
Pentane		3000	-	-	

Derived no-effect level (DNEL) for workers:

Chemical name	Route of exposure	DNEL, short-term		DNEL, long-term	
		Local effect	Systemic effect	Local effect	Systemic effect
Pentane	Dermal Inhalation				432 mg/kg bw/day 3000 mg/m ³

Derived no-effect level (DNEL) for consumers:

Chemical name	Route of exposure	DNEL, short-term		DNEL, long-term	
		Local effect	Systemic effect	Local effect	Systemic effect
Pentane	Dermal Inhalation Oral				214 mg/kg bw/day 643 mg/m ³ 214 mg/kg bw/day

Predicted no-effect concentration (PNEC):

Chemical name	Route of exposure	Fresh water	Marine water	
Pentane	Water	0,23 mg/l	0,23 mg/l	0,88 mg/l 3,6 mg/l 0,55 mg/kg
	Sediment	1,2 mg/kg	1,2 mg/kg	
	Intermittent water			
	STP Soil			

8.2. Exposure controls

Engineering measures : Use only in well-ventilated areas. Comply with standard precautionary measures for working with chemicals.

Hygienic measures : When using do not eat, drink or smoke.

Personal protective equipment:

The efficiency of personal protective equipment depends among other things on temperature and degree of ventilation. Always get professional advice for the particular local situation.

Body protection : Use of specific protective industrial clothing is not required under normal conditions of use.

Respiratory protection : Take care of sufficient ventilation. Wear suitable respiratory protection in case of large scale exposure. Suitable: gas filter type A (brown), class I or higher on e.g. a facemask in accordance with EN 140.

Hand protection : Under normal conditions of use specific gloves are not required.

Eye protection : Wear appropriate safety glasses when there is danger of possible eye contact.



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SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	: Aerosol.	
Colour	: Colourless.	
Odour	: Characteristic.	
Odour threshold	: Not known.	
pH	: Not applicable.	Waterfree product.
Solubility in water	:	Active ingredients not soluble. Propellant(s) not soluble.
Partition coefficient (n-octanol/water)	: Not known.	Not measured. Not relevant for mixtures.
Flash point	: Not applicable.	Not measurable.
Flammability (solid, gas)	: Extremely flammable.	Contains > 85% flammable components and has a heat of combustion of > 30 kJ/g.
Auto ignition temperature	: Not applicable.	Aerosol container explodes before reaching the auto-ignition point.
Boiling point/boiling range	: Not known.	Not measurable.
Melting point/melting range	: < -20 °C	
Explosive properties	:	Pressurised container: May burst if heated.
Explosion limits (% in air)	: 1,4 - 10,9	
Oxidising properties	: Not applicable.	Does not contain oxidizing substances.
Decomposition temperature	: Not applicable.	Aerosol explodes before reaching the decomposition temperature.
Viscosity (20°C)	: Not known.	Not measurable.
Viscosity (40°C)	: Not known.	Not measurable.
Vapour pressure (20°C)	: 8300 hPa	
Vapour density (20°C)	: > 1	(air = 1)
Relative density (20°C)	: 0,58 g/ml	
Evaporation rate	: Not known.	Not relevant. Mixture of gases, liquids and solids.

9.2. Other information

Other information : Not relevant.

SECTION 10 STABILITY AND REACTIVITY

10.1. Reactivity

Reactivity : See sub-sections below.

10.2. Chemical stability

Stability : Stable under normal conditions.

10.3. Possibility of hazardous reactions

Reactivity : No other hazardous reactions known.

10.4. Conditions to avoid

Conditions to avoid : Keep away from sources of ignition and sources of heat. See section 7.

10.5. Incompatible materials

Materials to avoid : Not applicable.

10.6. Hazardous decomposition products



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Hazardous decomposition : Not known.
products

SECTION 11 TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

No toxicological research has been carried out on this product.

Inhalation

- Acute toxicity : Calculated LC50: > 10 mg/l. Ingredients of unknown toxicity: < 1 %. ATE: > 5 mg/l. Low toxicity. Not classified - based on available data, the classification criteria are not met. May cause damage to organs. Central nervous system. Effect(s): Breathing of high vapour concentrations may cause central nervous system (CNS) depression resulting in dizziness, lightheadedness, headache, nausea and loss of coordination. Continued inhalation may result in unconsciousness and death.
- Corrosion/irritation : May cause irritation to respiratory airways and coughing. Not classified - based on available data, the classification criteria are not met.
- Sensitisation : Does not contain substances classified as respiratory sensitiser. Not classified - based on available data, the classification criteria are not met.
- Carcinogenicity : Not classified - based on available data, the classification criteria are not met.
- Mutagenicity : Not classified - based on available data, the classification criteria are not met.

Skin contact

- Acute toxicity : Calculated LD50: no data mg/kg.bw. Ingredients of unknown toxicity: < 1 %. ATE: > 2000 mg/kg.bw. Low toxicity. Not classified - based on available data, the classification criteria are not met.
- Corrosion/irritation : Prolonged contact may dry out and defat the skin. Not classified - based on available data, the classification criteria are not met.
- Sensitisation : Does not contain skin sensitisers. Not classified - based on available data, the classification criteria are not met.
- Mutagenicity : Does not contain mutagenic substances. Not classified - based on available data, the classification criteria are not met.

Eye contact

- Corrosion/irritation : Slight irritation possible. Not classified - based on available data, the classification criteria are not met.

Ingestion

- Acute toxicity : Aerosol or mist: Ingestion is unlikely to occur. Calculated LD50: > 298 mg/kg.bw. Ingredients of unknown toxicity: < 1 %. ATE: > 2000 mg/kg.bw. Low toxicity. Not classified - based on available data, the classification criteria are not met.
- Aspiration : Contains a substance/substances with an aspiration hazard. Not classified - based on available data, the classification criteria are not met.
- Corrosion/irritation : Aerosol or mist: Ingestion is unlikely to occur. May cause a feeling of sickness, vomiting and diarrhoea.
- Carcinogenicity : Aerosol or mist: Ingestion is unlikely to occur. Does not contain carcinogenic substances. Not classified - based on available data, the classification criteria are not met.
- Mutagenicity : Aerosol or mist: Ingestion is unlikely to occur. Does not contain mutagenic substances. Not classified - based on available data, the classification criteria are not met.
- Reprotoxicity : Aerosol or mist: Ingestion is unlikely to occur. Development: Not expected to be reprotoxic. Development: Not classified - Based on available data, the classification criteria are not met. Fertility: not expected to be reprotoxic. Fertility: Not classified - based on available data, the classification criteria are not met.

Toxicological information:

Chemical name	Property		Method	Test animal
Pentane	Skin irritation	Mildly irritant	OECD 404	Rabbit
	Skin sensitisation	Not sensitizing	OECD 406	Guinea pig



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	NOAEL (development, oral)	1000 mg/kg bw/d	OECD 414	Rat
	LC50 (inhalation)	> 20000 mg/m ³		Rat
	Eye irritation	Slightly irritant	-----	Rabbit
	Mutagenicity	Negative	OECD 471	Salmonella typhimurium
	LD50 (oral)	> 2000 mg/kg bw	-----	Rat
	NOAEL (inhalation)	> 20000 mg/m ³	OECD 413	Rat
	NOAEL (fertility, inh.)	24080 mg/m ³	-----	Rat
	Skin irritation	Non-irritant	-----	Human

SECTION 12 ECOLOGICAL INFORMATION

12.1. Toxicity

No ecotoxicological research has been carried out on this product.

Ecotoxicity : Harmful to aquatic organisms. Calculated LC50 (fish): 68 mg/l. Calculated EC50 (waterflea): 43 mg/l. Contains 0 % of components with unknown hazards to the aquatic environment.

12.2. Persistence and degradability

Persistence – degradability : May cause long-term adverse effects in the aquatic environment.

12.3. Bioaccumulative potential

Bioaccumulative potential : No specific information known.

12.4. Mobility in soil

Mobility : Not applicable.

12.5. Results of PBT and vPvB ass

PBT/vPvB assessment : Does not contain PBT or vPvB substances in concentrations higher than 0,1%.

12.6. Other adverse effects

Other information : Not applicable.

Ecological information:

Chemical name	Property		Method	Test animal
Pentane	LC50 (fish)	4,26 mg/l	OECD 203	Oncorhynchus mykiss
	EC50 (waterflea)	2,7 mg/l	-----	Daphnia magna
	IC50 (algae)	10,7 mg/l	OECD 201	Selenastrum capricornutum
	Ultimate aerobic biodegradation (%)	87 %	OECD 301 F	
	Log P(ow)	3,45		
	BCF	171		

SECTION 13 DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Product residues : Recyclable metal container. Do not puncture or burn even after use. Do not dispose empty pack with waste produced by households. Containers may be recycled. Treat product residues and non-empty pack as hazardous waste.

Additional warning : Residues may cause an explosion hazard. Do not puncture, cut or weld uncleaned drums.



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Waste water discharge : Do not dispose into the environment, in drains or in water courses.
European waste catalogue : Dispose hazardous waste in accordance with Directive 91/689/EEC under acknowledgement of a waste code according to Commission Decision 2000/532/EC to an official chemical waste depot.
Local legislation : Disposal should be in accordance with applicable regional, national, and local laws and regulations. Local regulations may be more stringent than regional or national requirements and must be complied with.

SECTION 14 TRANSPORT INFORMATION

14.1. UN number

UN nr. : UN 1950

14.2. UN proper shipping name

Transport name : AEROSOLS
Transport name (IMDG, : AEROSOLS
IATA)

14.3/14.4/14.5. Transport hazard class(es)/Packing group/Environmental hazards

ADR/RID/ADN (road/railway/inland waterways)

Class : 2
Classification code : 5F
Packaging group : -
Danger label : 2,1
Tunnel restriction : D
code



Other information : Not intended for carriage by tank-vessels on inland waterways.

IMDG (sea)

Class : 2,1
Packaging group : -
EmS (fire / spill) : F - D / S - U
Marine pollutant : No

IATA (air)

Class : 2,1

14.6. Special precautions for user

Other information : Country specific variations may apply. It is possible that a "Limited Quantity" exemption applies to the transport of this product.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Marpol : Not intended to be carried in bulk according to International Maritime Organisation (IMO) instruments. Packaged liquids are not considered bulk.

SECTION 15 REGULATORY INFORMATION



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

Community regulations : Regulation (EU) No 2015/830 (REACH), Regulation (EC) No 1272/2008 (CLP), 75/324/EEC (aerosols) and other regulations.

15.2. Chemical safety assessment

Chemical safety assessment : Not applicable.

SECTION 16 OTHER INFORMATION

16.1. Other information

The information in this safety data sheet is compiled in compliance with Regulation (EU) No 2015/830 dated 28 May 2015 and accurate to the best of our knowledge and experience at the date of issue specified. It is the user's obligation to use this product safely and to comply with all applicable laws and regulations concerning the use of the product. This safety data sheet complements the technical information sheets but does not replace them and offers no warranty with regard to product properties.

Users are also forewarned for any hazards involved when the product is used for other purposes than those for which it is designed.

Changed or new information with regard to the previous release is indicated with an asterisk (*).

List of abbreviations and acronyms that could be (but not necessarily are) used in this safety data sheet:

ADR	: European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	: Acute Toxicity Estimate
CLP	: Classification, Labeling & Packaging
CMR	: Carcinogenic, Mutagenic or toxic for Reproduction
EEC	: European Economic Community
GHS	: Globally Harmonized System of Classification and Labelling of Chemicals
IATA	: International Air Transport Association
IBC code	: International Bulk Chemical Code
IMDG	: International Maritime Dangerous Goods Code
LD50/LC50	: Lethal Dose/Concentration for 50% of a population
MAC	: Maximum Allowable Concentration
MARPOL	: International Convention for the Prevention of Pollution From Ships
NO(A)EL	: No Observed (Adverse) Effect Level
OECD	: Organisation for Economic Co-operation and Development
PBT	: Persistent, Bioaccumulative and Toxic
PC	: Chemical product category
PT	: Product type
REACH	: Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	: Regulations concerning the International Carriage of Dangerous Goods by Rail
STP	: Sewage Treatment Plant
SU	: Sector of Use
TWA/STEL	: Time-Weighted Average/Short Term Exposure Limit
UN	: United Nations
VOC	: Volatile Organic Compounds
vPvB	: Very Persistent and Very Bioaccumulative

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008:

Flam. Aer. 1	: Expert judgement.
STOT SE 3	: Calculation method.
Aquatic Chronic 3	: Calculation method.

Full text of hazard classes mentioned in section 3:



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Flam. Gas 1 : Flammable gas, category 1.
Flam. Liq. 2 : Flammable liquid, category 2.
Press. Gas : Gases under pressure.
STOT SE 3 : Specific target organ toxicity after single exposure, category 3.
Asp. Tox. 1 : Aspiration hazard, category 1.
Aquatic Chronic 2 : Hazardous to the aquatic environment — Chronic category 2.

Full text of H-phrases mentioned in section 3:

H220 : Extremely flammable gas.
H225 : Highly flammable liquid and vapour.
H280 : Contains gas under pressure; may explode if heated.
H304 : May be fatal if swallowed and enters airways.
H336 : May cause drowsiness or dizziness.
H411 : Toxic to aquatic life with long lasting effects.
EUH066 : Repeated exposure may cause skin dryness or cracking.

Number format : ", " used as decimal separator.

End of safety data sheet.

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