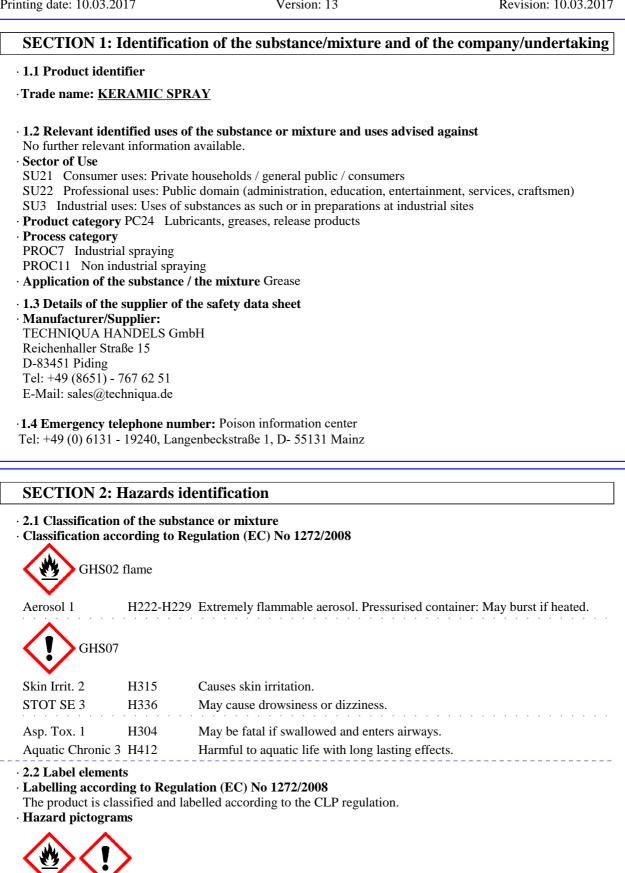
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· Signal word Danger

GHS07

GHS02

· Hazard-determining components of labelling: Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane

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	statements
	229 Extremely flammable aerosol. Pressurised container: May burst if heated.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H412	Harmful to aquatic life with long lasting effects.
· Precauti	onary 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 spray.
P211	Do not spray on an open flame or other ignition source.
P280	Wear protective gloves / eye protection.
P273	Avoid release to the environment.
P271	Use only outdoors or in a well-ventilated area.
P304+P3	40 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P302+P3	52 IF ON SKIN: Wash with plenty of soap and water.
P410+P4	12 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
P403	Store in a well-ventilated place.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.
· 2.3 Othe	r hazards
· Results of	of PBT and vPvB assessment
· PBT: No	ot applicable.
· vPvB: N	ot applicable.
SECTI	ON 3: Composition/information on ingredients

#### · 3.2 Mixtures

• **Description:** Active substance with propellant

· Dangerous components:		
CAS: 106-97-8 EINECS: 203-448-7 Reg.nr.: 01-2119474691-32	butane (containing < 0.1% butadiene (203-450-8)) Flam. Gas 1, H220; Press. Gas C, H280	25-<50%
CAS: 74-98-6 EINECS: 200-827-9 Reg.nr.: 01-2119486944-21	propane Flam. Gas 1, H220; Press. Gas C, H280	10-<25%
EC number: 921-024-6 Reg.nr.: 01-2119475514-35	Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane Flam. Liq. 2, H225; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; Skin Irrit. 2, H315; STOT SE 3, H336	10-<25%

#### · Additional information:

### **SECTION 4: First aid measures**

#### · 4.1 Description of first aid measures

- After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Generally the product does not irritate the skin.
- After eye contact: Rinse opened eye for several minutes under running water.
- After swallowing: Do not induce vomiting; call for medical help immediately.
- · 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** No further relevant information available.

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### **SECTION 5: Firefighting measures**

· 5.1 Extinguishing media

· Suitable extinguishing agents:

Water haze

Fire-extinguishing powder

Carbon dioxide Alcohol resistant foam

- · For safety reasons unsuitable extinguishing agents: Water with full jet
- 5.2 Special hazards arising from the substance or mixture No further relevant information available.
- · 5.3 Advice for firefighters
- · Protective equipment: Mount respiratory protective device.

### **SECTION 6: Accidental release measures**

- · 6.1 Personal precautions, protective equipment and emergency procedures
- Wear protective equipment. Keep unprotected persons away.
- · 6.2 Environmental precautions:

Do not allow product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/ surface or ground water.

- · 6.3 Methods and material for containment and cleaning up:
- Ensure adequate ventilation.

Do not flush with water or aqueous cleansing agents

- · 6.4 Reference to other sections
- See Section 7 for information on safe handling.
- See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

## **SECTION 7: Handling and storage**

· 7.1 Precautions for safe handling Ensure good ventilation/exhaustion at the workplace. Open and handle receptacle with care. · Information about fire - and explosion protection: Do not spray onto a naked flame or any incandescent material. Keep ignition sources away - Do not smoke. Protect against electrostatic charges. Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50 °C, i.e. electric lights. Do not pierce or burn, even after use. · 7.2 Conditions for safe storage, including any incompatibilities · Storage: · Requirements to be met by storerooms and receptacles: Store in a cool location. Observe official regulations on storing packagings with pressurised containers. · Information about storage in one common storage facility: Observe official regulations on storing packagings with pressurised containers. · Further information about storage conditions: Keep receptacle tightly sealed. Do not seal receptacle gas tight. Store in cool, dry conditions in well sealed receptacles. Protect from heat and direct sunlight.

• 7.3 Specific end use(s) No further relevant information available.

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SECTION 8: Exposure controls/personal protection			
• Additional information about design of technical facilities: No further data; see item 7.			
· 8.1 Contro	ol parameters		
· Ingredien	ts with limit values that rec	quire monitoring at the workplace:	
106-97-8 k	outane (containing < 0.1%	butadiene (203-450-8))	
	rt-term value: 1810 mg/m <sup>3</sup> , 7		
	g-term value: 1450 mg/m <sup>3</sup> , 6 c (if more than 0.1% of buta-		
74-98-6 pi			
-	rt-term value: 3600 mg/m <sup>3</sup> , 2	2000 ppm	
Long-term value: 1800 mg/m <sup>3</sup> , 1000 ppm			
·DNELs			
Hydrocar	<ul> <li>DIVELS</li> <li>Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, &lt;5% n-hexane</li> </ul>		
Oral		699 mg/kg bw/day (Consumer)	
Dermal	DNEL Long term-systemic	699 mg/kg bw/day (Consumer)	
		773 mg/kg bw/day (Worker)	
Inhalative	DNEL Long term-systemic	608 mg/m3 (Consumer)	
	2035 mg/m3 (Worker)		
• Additional information: The lists valid during the making were used as basis.			
<ul> <li>General p Wash hand Do not inh</li> <li>Respirator In case of l use self-co Filter AX/I Use suitab Filter A/P2</li> <li>Protection Wear glow</li> </ul>	ntained respiratory protectiv P2 le respiratory protective devi 2 <b>o f hands:</b>	nd of work. on use respiratory filter device. In case of intensive or longer exposure	
Selection of Material of The selection and varies resistance of application Nitrile rub Recommen	of the glove material on cons of gloves on of the suitable gloves doo from manufacturer to manuf of the glove material can not a.	ideration of the penetration times, rates of diffusion and the degradation es not only depend on the material, but also on further marks of quality facturer. As the product is a preparation of several substances, the be calculated in advance and has therefore to be checked prior to the al: $\geq 0.5$ mm (Contd. on page 5) GB –	

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For continuous contact we recommend gloves with breakthrough time of at least 240 minutes, with the preference given to a breakthrough time greater than 480 minutes. For short-term or splash guard we recommend the same. We are aware that suitable gloves that offer this level of protection may not be available. In that case, a shorter breakthrough time are acceptable as long as the procedures governing maintenance and timely replacement are followed. The thickness of the gloves is not a good measure of the resistance of the gloves against a chemical substance, because this depends on the exact composition of the material from which the gloves are made.

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

### · Eye protection:

Safety glasses



Tightly sealed goggles

· Body protection: Use protective suit. (EN-13034/6)

9.1 Information on basic physical and c	hemical properties
General Information	
Appearance:	
Form:	Aerosol
Colour:	According to product specification
Odour:	Characteristic
Odour threshold:	Not determined.
pH-value:	Not determined.
Change in condition	
Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range	:-44 °C
Flash point:	-97 °C
Flammability (solid, gas):	Not applicable.
Auto-ignition temperature:	Product is not selfigniting.
Explosive properties:	Product is not explosive. However, formation of explosive air/ vapour mixtures are possible.
Explosion limits:	
Lower:	0.8 Vol %
Upper:	10.9 Vol %
Vapour pressure at 20 °C:	8300 hPa
Density at 20 °C:	0.66 g/cm <sup>3</sup>
Relative density	Not determined.
Vapour density	Not determined.
Evaporation rate	Not applicable.
Solubility in / Miscibility with	
water:	Not miscible or difficult to mix.
Partition coefficient: n-octanol/water:	Not determined.
Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.

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· Solvent content: Organic solvents:	75.0 %	
Solids content: • 9.2 Other information	24.4 % No further relevant information available.	

# **SECTION 10: Stability and reactivity**

· 10.1 Reactivity No further relevant information available.

· 10.2 Chemical stability

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- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- $\cdot$  10.3 Possibility of hazardous reactions No dangerous reactions known.
- $\cdot$  10.4 Conditions to avoid No further relevant information available.
- $\cdot$  10.5 Incompatible materials: No further relevant information available.
- · 10.6 Hazardous decomposition products: No dangerous decomposition products known.

### **SECTION 11: Toxicological information**

### · 11.1 Information on toxicological effects

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

### · LD/LC50 values relevant for classification:

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane

Oral	-5840 mg/kg (rat)	LD50
Oral	5840 mg/kg (rat)	LD50

Dermai LD50 $>2920 \text{ mg/kg}$ (rabbit)	Dermal	LD50	>2920 mg/kg	(rabbit)
--	--------	------	-------------	----------

Inhalative LC50/4h >25 mg/l (rat)

### · Primary irritant effect:

 $\cdot$  Skin corrosion/irritation

- Causes skin irritation.
- · Serious eye damage/irritation Based on available data, the classification criteria are not met.
- · Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- · 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
- May cause drowsiness or dizziness.
- · STOT-repeated exposure Based on available data, the classification criteria are not met.
- · Aspiration hazard

May be fatal if swallowed and enters airways.

## **SECTION 12: Ecological information**

· 12.1 Toxicity	
-----------------	--

<ul> <li>Aquatic toxicity:</li> </ul>	:
Hydrocarbons, (	C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane
NOELR (72h)	3 mg/l (Pseudokirchneriella subcapitata)
EL50(48h)	3 mg/l (Daphnia magna)
EL50 (72h)	30-100 mg/l (Pseudokirchneriella subcapitata)
LL50 (96h)	11.4 mg/l (Oncorhynchus mykiss (96h))
NOEC (21 days)	0.17 mg/l (Daphnia magna)
LOEC (21 days)	0.32 mg/l (Daphnia magna)
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12.2 Persistence and degradability Easily biodegradable	
<b>12.3 Bioaccumulative potential</b> No further relevant information available.	
<b>12.4 Mobility in soil</b> No further relevant information available.	
Ecotoxical effects:	
Remark: Harmful to fish	
Additional ecological information:	
General notes:	
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water	
Do not allow product to reach ground water, water course or sewage system.	
Danger to drinking water if even small quantities leak into the ground.	
Harmful to aquatic organisms	
12.5 Results of PBT and vPvB assessment	
<b>PBT:</b> Not applicable.	
<b>vPvB:</b> Not applicable.	
<b>12.6 Other adverse effects</b> No further relevant information available.	

# SECTION 13: Disposal considerations

· 13.1 Waste treatment methods

 $\cdot$  Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

· Uncleaned packaging:

• Recommendation: Disposal must be made according to official regulations.

14.1 UN-Number ADR, ADN, IMDG, IATA	UN1950	
14.2 UN proper shipping name		
ADR, ADN	UN1950 AEROSOLS	
IMDG	AEROSOLS	
IATA	AEROSOLS, flammable	
14.3 Transport hazard class(es)		
ADR		
2		
Class	2 5F Gases.	
Label	2.1	
ADN ADN/R Class:	2 5E	
	2 5F	
IMDG, IATA		
V		
Class	2.1	
Label	2.1	
14.4 Packing group		
ADR, IMDG, IATA	Void	

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· 14.5 Environmental hazards: · Marine pollutant:	No
•	NO
<ul> <li>14.6 Special precautions for user</li> </ul>	Warning: Gases.
· Danger code (Kemler):	-
· EMS Number:	F-D,S-U
· Stowage Code	SW1 Protected from sources of heat.
	SW22 For AEROSOLS with a maximum capacity of 1
	litre: Category A. For AEROSOLS with a capacity above
	1 litre: Category B. For WASTE AEROSOLS: Category
Same atten Call	C, Clear of living quarters.
· Segregation Code	SG69 For AEROSOLS with a maximum capacity of 1
	litre: Segregation as for class 9. Stow "separated from" class 1 except for division 1.4. For AEROSOLS with a
	capacity above 1 litre: Segregation as for the appropriate
	subdivision of class 2. For WASTE AEROSOLS:
	Subdivision of class 2: For WASTE ALKOSOLS. Segregation as for the appropriate subdivision of class 2.
<ul> <li>14.7 Transport in bulk according to An Marpol and the IBC Code</li> </ul>	Not applicable.
•	Not applicable.
· Transport/Additional information:	
· ADR	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E0
	Not permitted as Excepted Quantity
· Transport category	2
• Tunnel restriction code	D
· IMDG	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E0
	Not permitted as Excepted Quantity
· UN "Model Regulation":	UN 1950 AEROSOLS, 2.1

## **SECTION 15: Regulatory information**

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

· Directive 2012/18/EU

· Named dangerous substances - ANNEX I None of the ingredients is listed.

· Seveso category P3a FLAMMABLE AEROSOLS

· Qualifying quantity (tonnes) for the application of lower-tier requirements 150 t

- $\cdot$  Qualifying quantity (tonnes) for the application of upper-tier requirements  $500\ t$
- REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

· National regulations:

Class	Share in %
NK	75-<100

- · VOC-CH 75.00 %
- · VOC-EU 493.5 g/l
- · Danish MAL Code 5-3
- $\cdot$  15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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	CCTION 16: Other information	
This information is based on our present knowledge. However, this shall not constitute a guarantee for any		
specific product features and shall not establish a legally valid contractual relationship.		
· Relevant phrases		
H22	20 Extremely flammable gas.	
H225 Highly flammable liquid and vapour.		
	80 Contains gas under pressure; may explode if heated.	
	04 May be fatal if swallowed and enters airways.	
	15 Causes skin irritation.	
	36 May cause drowsiness or dizziness.	
14	11 Toxic to aquatic life with long lasting effects.	
	breviations and acronyms:	
	P: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the rnational Transport of Dangerous Goods by Rail)	
	O: International Civil Aviation Organisation	
	R: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International	
	riage of Dangerous Goods by Road)	
	DG: International Maritime Code for Dangerous Goods	
	A: International Air Transport Association	
	S: Globally Harmonised System of Classification and Labelling of Chemicals	
EIN	ECS: European Inventory of Existing Commercial Chemical Substances	
ELI	NCS: European List of Notified Chemical Substances	
CAS	S: Chemical Abstracts Service (division of the American Chemical Society)	
	L-Code: Måleteknisk Arbejdshygiejnisk Luftbehov (Regulation for the labeling concerning inhalation hazards, Denmark)	
	EL: Derived No-Effect Level (REACH)	
	50: Lethal concentration, 50 percent	
	50: Lethal dose, 50 percent	
	F: Persistent, Bioaccumulative and Toxic B: very Persistent and very Bioaccumulative	
	n. Gas 1: Flammable gases – Category 1	
	osol 1: Aerosols – Category 1	
	ss. Gas C: Gases under pressure – Compressed gas	
	n. Liq. 2: Flammable liquids – Category 2	
	1 Irrit. 2: Skin corrosion/irritation – Category 2	
	T SE 3: Specific target organ toxicity (single exposure) – Category 3	
	. Tox. 1: Aspiration hazard – Category 1	
	atic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2	
	atic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard - Category 3	
Sor	irces st	
۲D	Pata compared to the previous version altered. *	