

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier****Name of product**k3 Silikon-Spray
Code-Nr. 989102**1.2. Relevant identified uses of the substance or mixture and uses advised against
Recommended intended purpose(s)**

Technical Aerosols

1.3. Details of the supplier of the safety data sheet**Manufacturer/distributor**Krapp Eisen GmbH & Co. KG
Lindenstraße 105-106, D-49393 Lohne
Phone ++49 (0)4442/940-0, Fax ++49 (0)4442/940-111
E-Mail info@krapp.de
Internet www.krapp.de**Advice**Abteilung Vertrieb
Phone 04442/940-0**1.4. Emergency telephone number****Emergency advice**Giftnotruf Bonn: Bei Vergiftungen (in case of poisoning)
Phone ++49(0)228-19 240**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]**

Hazard classes and Hazard categories	Hazard Statements	Classification procedure
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Aerosol 1	H222, H229
Skin Irrit. 2	H315
STOT SE 3	H336
Aquatic Chronic 2	H411

Hazard Statements

H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.

2.2. Label elements**Labelling according to Regulation (EC) No 1272/2008 [CLP/GHS]**

GHS02



GHS07



GHS09

Signal word

Danger

**Hazard Statements**

H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.

Precautionary Statements

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.
P261	Avoid breathing 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.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P332 + P313	If skin irritation occurs: Get medical advice/attention.
P362	Take off contaminated clothing.
P403 + P235	Store in a well-ventilated place. Keep cool.
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 hazardous or special waste collection point.

Hazardous ingredients for labeling

Naphtha (petroleum) hydrotreated , free of aromatics (note P: < 0,1% benzene)

2.3. Other hazards

Product has an anesthetic effect.

Information pertaining to special dangers for human and environment

In use, may form flammable/explosive vapour-air mixture.

Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

SECTION 3: Composition/ information on ingredients**3.1. Substances**

not applicable

3.2. Mixtures**Description**

Silikonspray auf Lösemittelbasis

Hazardous ingredients

CAS No	EC No	Name	[% weight]	Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]
64-17-5	200-578-6	ethanol	10 - 20	Flam. Liq. 2, H225
74-98-6	200-827-9	propane	20 - 30	Flam. Gas 1, H220 / Press. Gas
106-97-8	203-448-7	butane	20 - 30	Flam. Gas 1, H220 / Press. Gas



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Hazardous ingredients (continued)

CAS No	EC No	Name	[% weight]	Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]
110-54-3	203-777-6	n-hexane	< 2	Flam. Liq. 2, H225 / Repr. 2, H361f / Asp. Tox. 1, H304 / STOT RE 2, H373 / Skin Irrit. 2, H315 / STOT SE 3, H336 / Aquatic Chronic 2, H411
110-82-7	203-806-2	cyclohexane	< 2	Flam. Liq. 2, H225 / Asp. Tox. 1, H304 / Skin Irrit. 2, H315 / STOT SE 3, H336 / Aquatic Acute 1, H400 / Aquatic Chronic 1, H410
64742-49-0	265-151-9	Naphtha (petroleum) hydrotreated , free of aromatics (note P: < 0,1% benzene)	20 - 40	Flam. Liq. 2, H225 / Asp. Tox. 1, H304 / Skin Irrit. 2, H315 / STOT SE 3, H336 / Aquatic Chronic 2, H411
36148-62-9		Dimethylpolysiloxan	5 - 20	

REACH

CAS No	Name	REACH registration number
64-17-5	ethanol	01-2119457610-43-XXXX
64742-49-0	Naphtha (petroleum) hydrotreated , free of aromatics (note P: < 0,1% benzene)	01-2119475514-35-xxxx

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Remove contaminated soaked clothing immediately.

In case of inhalation

Remove the casualty into fresh air and keep him immobile.
In the event of symptoms refer for medical treatment.

In case of skin contact

In case of contact with skin wash off with soap and water.
Consult a doctor if skin irritation persists.

In case of eye contact

In case of contact with eyes rinse with plenty of water carefully. In the event of persistent symptoms seek medical treatment.

In case of ingestion

Do not induce vomiting.
Refer to medical treatment.

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

Physician's information / possible symptoms

The following symptoms may occur:

Unconsciousness
Delirious state
Headache
Confusion

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

No information available.



SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Foam

Dry fire-extinguishing substance

Carbon dioxide

Water spray jet

Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

Fire gas of organic material has to be classed invariably as respiratory poison.

In case of fire formation of dangerous gases possible.

Carbon dioxide (CO₂)

5.3. Advice for firefighters

Special protective equipment for fire-fighters

Use breathing apparatus with independent air supply (isolated).

Fire-fighting operations, rescue and clearing work under effect of combustion and smoulder gases just may be done with breathing apparatus.

Additional information

Vapours are heavier than air and will spread on the ground.

Cool endangered containers with water spray jet.

Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Ensure adequate ventilation.

Use personal protective clothing.

Keep away sources of ignition.

6.2. Environmental precautions

Inform pollution control authorities if product gets into the sewerage systems or open waters.

Do not discharge into the drains/surface waters/groundwater.

6.3. Methods and material for containment and cleaning up

Take up with absorbent material.

After taking up the material dispose according to regulation.

6.4. Reference to other sections

Safe handling: see section 7

Disposal: see section 13

Personal protection equipment: see section 8

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Ventilate closed rooms at ground level.

Care for thoroughly room ventilation, if necessary use in well ventilated area with local exhaust ventilation at workplace.

**General protective measures**

Avoid contact with eyes and skin

Do not inhale aerosols

Hygiene measures

At work do not eat, drink and smoke.

Wash hands before breaks and after work.

Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking

Do not spray on a naked flame or any incandescent material.

Vapours can form an explosive mixture with air.

Take precautionary measures against static discharges.

Avoid effect of heat.

7.2. Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

Keep in closed original container.

Adhere to administrative regulations relating to storage of compressed gas cylinders / containers.

Advice on storage compatibility

Do not store together with oxidizing agents.

Further information on storage conditions

Protect from heat and direct solar radiation.

Storage temperature may not exceed 50°C (=122°F).

Store container at cool and aired place.

Store in a dry place.

7.3. Specific end use(s)**Recommendation(s) for intended use**

See section 1.2

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****Ingredients with occupational exposure limits to be monitored**

CAS No	Name	Code	[mg/m ³]	[ppm]	Remark
106-97-8	Butane	8 hours Short-term	1450 1810	600 750	EH40/2005
110-82-7	Cyclohexane	8 hours Short-term	350 1050	1050 300	EH40/2005
64-17-5	ethanol	8 hours	1920	1000	EH40/2005
110-54-3	n-hexane	8 hours	72	20	EH40/2005

Indicative occupational exposure limit values (91/322/EEC, 2000/39/EC, 2006/15/EC or 2009/161/EU)

CAS No	Name	Code	[mg/m ³]	[ppm]	Remark
110-54-3	n-hexane	8 hours	72	20	
110-82-7	cyclohexane	8 hours	700	200	

DNEL-/PNEC-values**DNEL worker**

CAS No	Substance name	Value	Code	Remark
64-17-5	ethanol	950 mg/m ³	DNEL acute inhalative (systemic)	
		343 mg/kg	DNEL long-term dermal (systemic)	
		1900 mg/m ³	DNEL acute inhalative (local)	

**Additional advice**

The statutory local and national regulations have to be observed.

8.2. Exposure controls**Respiratory protection**

In case of insufficient ventilation or long-term effect use breathing apparatus.

Short term: filter apparatus, filter A

Hand protection

In the cases of special applications, it is recommended to check the chemical resistance with the manufacturer of the gloves.

Chemical protective gloves must be chosen carefully in view of their design and depending on the dependence on the concentration and amounts of dangerous goods used in the specific working tasks.

Glove material specification [make/type, thickness, permeation time/life, wetting resistance]: butyl rubber, 0,7mm; 480min

Eye protection

tightly fitting goggles

Other protection measures

protective clothing

Appropriate engineering controls

Care for thoroughly room ventilation, if necessary use in well ventilated area with local exhaust ventilation at workplace.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties****Appearance**

aerosol

Colour

colourless

Odour

characteristic

Odour threshold

not determined

Important health, safety and environmental information

	Value	Temperature	at	Method	Remark
pH value	not determined				
boiling point	not applicable				
Melting point / Freezing point	not determined				
Flash point	not applicable				Aerosol
Vapourisation rate	not determined				
Flammable (solid)	not applicable				
Flammability (gas)	not determined				
Ignition temperature	> 250 °C				
Self ignition temperature					The product is not self-igniting.
Lower explosion limit	0,6 Vol-%				



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	Value	Temperature	at	Method	Remark
Upper explosion limit	not determined				
Vapour pressure	3,5 bar	20 °C			
Relative density	0,67 g/cm ³	20 °C			
Vapour density	not determined				
Solubility in water					low soluble
Solubility/other	not determined				
Partition coefficient n-octanol/water (log P O/W)	not determined				
Decomposition temperature	not determined				
Viscosity dynamic	not determined				
Viscosity kinematic	not determined				
Solvent content	> 40 %				
Oxidising properties	No information available.				
Explosive properties	No information available.				
9.2. Other information	No information available.				

SECTION 10: Stability and reactivity

10.1. Reactivity

No information available.

10.2. Chemical stability

No information available.

10.3. Possibility of hazardous reactions

No dangerous reactions known.

10.4. Conditions to avoid

Keep away from heat.

Formation of explosive gas/air mixtures.

10.5. Incompatible materials

Substances to avoid

Oxidising agent, strong

10.6. Hazardous decomposition products

No hazardous decomposition products known.

**Thermal decomposition**

Remark No decomposition if used as directed.

SECTION 11: Toxicological information**11.1. Information on toxicological effects****Acute toxicity/Irritation/Sensitization**

	Value/Validation	Species	Method	Remark
Skin irritation	irritant			

Experiences made from practice

Often and long skin contact may cause degreasing and desiccation of the skin which may cause skin irritation.

Vapours may cause dizziness, headaches and tiredness

According to our experience and current information, the product has no detrimental effects on health if handled and used correctly

Irritates respiratory tract.

Inhalation causes narcotic effect/intoxication.

Additional information

The product is to be handled with the caution usual with chemicals.

Other hazardous properties may not be excluded.

SECTION 12: Ecological information**12.1. Toxicity**

No information available.

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

No information available.

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. Other adverse effects**General regulation**

Toxic to aquatic life with long lasting effects.

Do not allow uncontrolled leakage of product into the environment.

Product is not allowed to be discharged into aquatic environment.

SECTION 13: Disposal considerations**13.1. Waste treatment methods****Waste code No.**

16 05 05

Name of waste

gases in pressure containers other than those mentioned in 16 05 04

Recommendations for the product

Remove in accordance with local official regulations.

**Recommendations for packaging**

Dispose of according to the local waste regulations.

Packaging that cannot be cleaned should be disposed of like the product.

General information

For proper waste disposal a complete emptying of the tin is necessary.

Assignment to a waste code number / waste identification according to the EWC is to be carried out on a sector or process-specific basis.

SECTION 14: Transport information

	ADR/RID	IMDG	IATA-DGR
14.1. UN number	1950	1950	1950
14.2. UN proper shipping name	AEROSOLS	AEROSOLS (NAPHTHA (PETROLEUM))	Aerosols, flammable
14.3. Transport hazard class(es)	2.1	2.1	2.1
14.4. Packing group	-	-	-
14.5. Environmental hazards	No	No	No

14.6. Special precautions for user

Caution: Gases

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
not applicable

Land and inland navigation transport ADR/RID

Hazard label(s) 2.1

tunnel restriction code D

Classification code 5F

transport in "limited quantities" according to 3.4 ADR is possible

Marine transport IMDG

MARINE POLLUTANT

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****VOC standard**

VOC content 90 %

VOC value 584,3 g/L

15.2. Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.



SECTION 16: Other information

Recommended uses and restrictions

National and local regulations concerning chemicals shall be observed.

For industrial use only.

Further information

Each user is responsible for the implementation of the national special regulations.

The information contained herein is based on the state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product.

Please observe the following disclaimer! --- Our safety data sheets have been compiled according to effective EU-directives, WITHOUT taking into account the special national directives concerning the handling of hazardous substances.

H220	Extremely flammable gas.
H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H361f	Suspected of damaging fertility or the unborn child (state specific effect if known) (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).
H373	May cause damage to organs (or state all organs affected, if known) through prolonged or repeated exposure (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.