according to 1907/2006/EC, Article 31

Printing date 10.02.2021 Version number 15 Revision: 10.02.2021

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

· 1.1 Product identifier

· Trade name: **Spray Silicone Grease**

88555 · Article number:

· UFI: AUXC-260E-D78X-1JX0

· 1.2 Relevant identified uses of the substance or mixture and

uses advised against

No further relevant information available.

· Application of the substance / the

mixture Grease

· 1.3 Details of the supplier of the safety data sheet

· Manufacturer/Supplier: AKEMI chemisch technische Spezialfabrik GmbH

Laboratory

Tel. +49(0)911-642960 Lechstrasse 28 Fax. +49(0)911-644456 D 90451 Nürnberg e-mail info@akemi.de

· Further information obtainable from:

· 1.4 Emergency telephone

Product Safety Department AKEMI chemisch technische Spezialfabrik GmbH number:

Tel. +49(0)911-64296-59

Reachable during the following office hours: Monday – Thursday from 07:30 a.m. to 16:30 p.m.

Friday from 07:30 a.m. to 13:30 p.m.

+44 (171) 635 91 91

National Poison Inform, Centre

Medical Toxicology Unit Avalonley Road

London SE14 5ER

SECTION 2: Hazards identification

· 2.1 Classification of the substance or mixture

· Classification according to Regulation (EC) No 1272/2008

Aerosol 1 H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.

Skin Irrit. 2 H315 Causes skin irritation.

STOT SE 3 H336 May cause drowsiness or dizziness.

Asp. Tox. 1 H304 May be fatal if swallowed and enters airways. Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

· Response: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin

with water [or shower].

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

IF exposed or concerned: Get medical advice/attention.

Store in a well-ventilated place. Keep cool. · Storage:

Store in a well-ventilated place. Keep container tightly closed.

Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

· 2.2 Label elements

· Labelling according to Regulation

(EC) No 1272/2008

· Hazard pictograms

The product is classified and labelled according to the CLP regulation.



GHS02 GHS07

· Signal word Danger

· Hazard-determining components of

labelling: Hydrocarbons, C7-Co, iso-alkanes

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AKEMI®



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ade name: Spray Silicone Gre	ase	
		(Contd. of page
· Hazard statements	H222-H2	229 Extremely flammable aerosol. Pressurised container: May burs
		heated.
	H315	Causes skin irritation.
	H336	May cause drowsiness or dizziness.
	H412	Harmful to aquatic life with long lasting effects.
Precautionary statements	P101	If medical advice is needed, have product container or label at har
	P102	Keep out of reach of children.
	P103	Read carefully and follow all instructions.
	P210	Keep away from heat, hot surfaces, sparks, open flames and otlignition 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 mist/vapours/spray.
	P273	Avoid release to the environment.
	P280	Wear protective gloves.
	P302+P3	352 IF ON SKIN: Wash with plenty of water.
	P304+P3	340 IF INHALED: Remove person to fresh air and keep comfortable breathing.
	P312	Call a PŎISON CENTER/doctor if you feel unwell.
	P403+P2	233 Store in a well-ventilated place. Keep container tightly closed.
	P410+P4	412 Protect from sunlight. Do not expose to temperatures exceeding
		°C/122 °F.
	P501	Dispose of contents/container in accordance with local/region
		national/international regulations.
· 2.3 Other hazards	The prod	duct does not contain any organic halogen compounds (AOX), nitrat
	heavy m	etal compounds or formaldehydes.
· Results of PBT and vPvB asse	ssment	•
· PBT:	Not appl	icable.
· vPvB:	Not appl	

SECTION 3: Composition/information on ingredients

· 3.2 Chemical characterisation: Mixtures

Description: Mixture: consisting of the following components.

· Dangerous components:		
CAS: 106-97-8 EINECS: 203-448-7 Index number: 601-004-00-0 Reg.nr.: 01-2119474691-32	butane, pure Flam. Gas 1A, H220; Flam. Liq. 1, H224 Press. Gas (Comp.), H280	25-50%
EC number: 921-728-3 Reg.nr.: 01-2119471305-42	Hydrocarbons, C7-Co, iso-alkanes Flam. Liq. 2, H225 Asp. Tox. 1, H304 Aquatic Chronic 2, H411 Skin Irrit. 2, H315; STOT SE 3, H336	12.5-25%
CAS: 74-98-6 EINECS: 200-827-9 Index number: 601-003-00-5 Reg.nr.: 01-2119486944-21	propane Flam. Gas 1A, H220 Acute Tox. 1, H330 Press. Gas (Comp.), H280	12.5-25%
CAS: 75-28-5 EINECS: 200-857-2 Index number: 601-004-01-8 Reg.nr.: 01-2119485395-27	isobutane (containing ≥ 0,1% butadiene (203-450-8)) Flam. Gas 1A, H220; Flam. Liq. 1, H224 Press. Gas (Comp.), H280	1-5%
· Additional information:	For the wording of the listed hazard phrases refer to section 16.	

SECTION 4: First aid measures

· 4.1 Description of first aid measures

· After inhalation: Supply fresh air; consult doctor in case of complaints.

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· After skin contact: Generally the product does not irritate the skin.

· After eye contact:
· After swallowing:

Rinse opened eye for several minutes under running water.
Do not induce vomiting; call for medical help immediately.

4.2 Most important symptoms and effects, both acute and

delayed

Headache Dizziness

Dizziness

4.3 Indication of any immediate medical attention and special

treatment needed No further relevant information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

· <u>Suitable extinguishing agents:</u> CO2, powder or water spray. Fight larger fires with water spray or alcohol

resistant foam.

· For safety reasons unsuitable

extinguishing agents:

5.2 Special hazards arising from

Water with full jet

5.2 Special nazards arising from

the substance or mixture In case of fire, the following can be released:

Carbon monoxide (CO)

Formation of toxic gases is possible during heating or in case of fire.

5.3 Advice for firefighters

· Protective equipment: Mount respiratory protective device.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and

<u>emergency procedures</u> Wear protective equipment. Keep unprotected persons away.

• <u>6.2 Environmental precautions:</u> Do not allow to penetrate the ground/soil.

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. See Section 7 for information on safe handling.

• 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

<u>handling</u> Keep away from heat and direct sunlight.

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

· Information about fire - and

explosion protection: Fumes can combine with air to form an explosive mixture.

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

Keep ignition sources away - Do not smoke.

Protect from heat.

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.

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· 7.2 Conditions for safe storage, including any incompatibilities

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:

Further information about storage

conditions:

Protect from frost.

Keep container tightly sealed. Do not seal receptacle gas tight.

Store away from foodstuffs.

Store in cool, dry conditions in well sealed receptacles.

Protect from heat and direct sunlight.

· Storage class:

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

SECTION 8: Exposure controls/personal protection

· 8.1 Control parameters

· Additional information about design

of technical facilities: No further data; see item 7.

· Ingredients with limit values that require monitoring at the workplace:

106-97-8 butane, pure

WEL Short-term value: 1810 mg/m³, 750 ppm Long-term value: 1450 mg/m³, 600 ppm Carc (if more than 0.1% of buta-1.3-diene)

· DNELs

Hydrocarbons, C7-Co, iso-alkanes

Oral	DNEL (Langzeit-wiederholt)	699 mg/kg bw/day (BEV)
Dermal	DNEL (Langzeit-wiederholt)	773 mg/kg bw/day (ARB)
		699 mg/kg bw/day (BEV)
Inhalative	DNEL (Langzeit-wiederholt)	2,035 mg/m³ Air (ARB)
		608 mg/m³ Air (BEV)

· Additional information: The lists valid during the making were used as basis.

· 8.2 Exposure controls

· Personal protective equipment:

· General protective and hygienic

Do not eat, drink, smoke or sniff while working. measures:

Use skin protection cream for skin protection.

Clean skin thoroughly immediately after handling the product.

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

In case of brief exposure or low pollution use respiratory filter device. In case of Respiratory protection:

intensive or longer exposure use self-contained respiratory protective device.

Short term filter device:

Filter AX

· Protection of hands: Preventive skin protection by use of skin-protecting agents is recommended.

After use of gloves apply skin-cleaning agents and skin cosmetics.

The protection gloves to be used have to comply with the specifications of the directive 89/686/EC and the directive derived decree EN374, respectively, e.g. the above listed protection glove type. The mentioned permeation times' data were generated and verified with material samples of the recommended protection glove type in the scope of laboratory anylyses of the company KCL

GmbH in compliance with EN374.

This recommendation refers exclusively to the material safety data sheet referenced product delivered by Akemi and the indicated field of application. In (Contd. on page 5)



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case of product dilution or in case of mixture with different substances or chemicals, and in condition of EN374 deviation the producer of CE-approved protection gloves must be contacted for detailed information (e.g., KCL GmbH, Germany, 36124 Eichenzell, internet: http://www.kcl.de).



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Nitrile rubber, NBR · Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove material

Value for the permeation: Level ≤ 480

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

· For the permanent contact gloves

made of the following materials are

suitable:

Fluorocarbon rubber (Viton)

Butyl rubber, BR

· As protection from splashes gloves made of the following materials are suitable:

Nitrile rubber, NBR Butyl rubber, BR

· Not suitable are gloves made of

the following materials:

Leather gloves

Strong material gloves

· Eye protection:



Tightly sealed goggles

· Body protection: Use protective suit.

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

General Information

· Appearance:

Form: Aerosol

Colour: According to product specification

Odour: Specific type · Odour threshold: Not determined. · pH-value: Not applicable

· Change in condition

Melting point/freezing point: Undetermined. Initial boiling point and boiling range: -44.5 °C

· Flash point: -97 °C

· Flammability (solid, gas): Not applicable.

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· <u>Ignition temperature:</u>	365 °C
· Decomposition temperature:	Not determined.
· Auto-ignition temperature:	Product is not selfigniting.
· Explosive properties:	Product is not explosive. However, formation of explosive air/vapour mixtur are possible.
· Explosion limits: Lower: Upper:	0.7 Vol % 10.9 Vol %
· Vapour pressure at 20 °C:	4 hPa
 Density at 20 °C: Relative density Vapour density Evaporation rate 	0.62 g/cm³ Not determined. Not determined. Not applicable.
· Solubility in / Miscibility with water:	Not miscible or difficult to mix.
· Partition coefficient: n-octanol/water:	Not determined.
· Viscosity: Dynamic: Kinematic:	Not determined. Not determined.
· <u>Solvent content:</u> Organic solvents:	77.8 %
Solids content:	0.9 %
9.2 Other information	No further relevant information available.

SECTION 10: Stability and reactivity

· 10.1 Reactivity No further relevant information available.

· 10.2 Chemical stability · Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

10.3 Possibility of hazardous

reactions No dangerous reactions known.

· 10.4 Conditions to avoid No further relevant information available. · 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

	riodic toxi	Oity	based of available data, the oldssmouther officing the flot met.	
	· LD/LC50 values relevant for classification:			
106-97-8 butane, pure			٦	
	Inhalative LC50/4 h 658 mg/l (rat)			٦
	Hydrocarbons, C7-Co, iso-alkanes			
	Oral	LD50	>5,000 mg/kg (rat)	٦
	Dermal	LD50	>2,000 mg/kg (rabbit)	
	Inhalative	LC50/4 h	21 mg/l (rat)	
			(Contd. on page	7)



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74-98-6 propane

Inhalative LC50/4 h >20 mg/l (rat)

· Primary irritant effect:

· Skin corrosion/irritation Causes skin irritation.

• Serious eye damage/irritation
• Respiratory or skin sensitisation

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

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

· Additional toxicological information:

· CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)

Germ cell mutagenicity
 Carcinogenicity
 Reproductive toxicity
 Based on available data, the classification criteria are not met.
 Based on available data, the classification criteria are not met.
 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

	Λ	4.	4	•	:4.
٠	Aaı	uatic	tox	ΊC	IJΙ

Hydrocarbons, C7-Co, iso-alkanes

EL50/48h 2.4 mg/l (daphnia magna)

EL50/72h 29 mg/l (Pseudokirchneriella subcapitata)

LL50/96h 18.4 mg/l (Oncorhynchus mykiss)

NOELR/72h 6.3 mg/l (Pseudokirchneriella subcapitata)

NOEC/21d 0.17 mg/l (daphnia magna)

· 12.2 Persistence and

degradabilityNo further relevant information available.

· <u>12.3 Bioaccumulative potential</u> No further relevant information available.

• **12.4 Mobility in soil** No further relevant information available.

· Ecotoxical effects:

Remark: Harmful to fish

· Additional ecological information:

· General notes: Do not allow product to reach ground water, water course or sewage system.

Harmful to aquatic organisms

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for

water

· 12.5 Results of PBT and vPvB assessment

 $\begin{array}{ll} \cdot \underline{\mathsf{PBT:}} & \mathsf{Not \ applicable.} \\ \cdot \underline{\mathsf{vPvB:}} & \mathsf{Not \ applicable.} \end{array}$

12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

· 13.1 Waste treatment methods

· Recommendation Must not be disposed together with household garbage. Do not allow product to

reach sewage system.

Uncleaned packaging:

· Recommendation: Empty contaminated packagings thoroughly. They may be recycled after

thorough and proper cleaning.

Disposal must be made according to official regulations.

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SECTION 14: Transport information

· 14.1 UN-Number

· ADR, IMDG, IATA UN1950

14.2 UN proper shipping name

· ADR 1950 AEROSOLS · IMDG **AEROSOLS**

AEROSOLS, flammable · IATA

· 14.3 Transport hazard class(es)

· ADR



2 5F Gases. · Class

2.1 · Label

· IMDG, IATA



2.1 · Class · Label 2.1

14.4 Packing group

· ADR, IMDG, IATA Void

· 14.5 Environmental hazards:

· Marine pollutant: No

· 14.6 Special precautions for user

Warning: Gases. · Hazard identification number (Kemler code):

· EMS Number: F-D.S-U

SW1 Protected from sources of heat. · Stowage Code

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 C,

Clear of living quarters.

· Segregation Code SG69 For AEROSOLS with a maximum capacity of 1

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:

Segregation as for the appropriate subdivision of class 2.

14.7 Transport in bulk according to Annex II of Marpol

and the IBC Code Not applicable.

· Transport/Additional information:

· ADR

· Excepted quantities (EQ) Code: E0

Not permitted as Excepted Quantity

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· <u>IMDG</u>

· Limited quantities (LQ)

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
Qualifying quantity (tonnes) for the

application of upper-tier

requirements 500 t

· National regulations:

· Information about limitation of use: Employment restrictions concerning pregnant and lactating women must be

observed.

150 t

Employment restrictions concerning juveniles must be observed.

· Waterhazard class: Water hazard class 2 (Self-assessment): hazardous for water.

· VOC EU 513.4 g/l

15.2 Chemical safety

assessment: A Chemical Safety Assessment has not been carried out.

SECTION 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 H220 Extremely flammable gas.

H224 Extremely flammable liquid and vapour. H225 Highly flammable liquid and vapour.

H280 Contains gas under pressure; may explode if heated.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation. H330 Fatal if inhaled.

H336 May cause drowsiness or dizziness.

H411 Toxic to aquatic life with long lasting effects.

· Recommended restriction of use refer to Technical Data Sheet (TDS)

Department issuing SDS: Laboratory

· Contact: Dieter Zimmermann

· Abbreviations and acronyms: RID: Règlement international concernant le transport des marchandises dangereuses par chemin de

fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

ADR: Accord relatif au transport international des marchandises dangereuses par route (European

Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

DNEL: Derived No-Effect Level (REACH)

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LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative Flam. Gas 1A: Flammable gases – Category 1A

Aerosol 1: Aerosols – Category 1

Press. Gas (Comp.): Gases under pressure - Compressed gas

Flam. Liq. 1: Flammable liquids – Category 1 Flam. Liq. 2: Flammable liquids – Category 2 Acute Tox. 1: Acute toxicity – Category 1 Skin Irrit. 2: Skin corrosion/irritation – Category 2

STOT SE 3: Specific target organ toxicity (single exposure) - Category 3

Asp. Tox. 1: Aspiration hazard - Category 1

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

REACH directive 1907/2006/EC

Sources

• * Data compared to the previous version altered.

Adaptation in accordance with REACH directive 1907/2006/EC

GR