

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 15.02.2019



Version number 5

Revision: 15.02.2019

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

- 1.1 Product identifier
Ceramic spray
- Trade name:
- 1.2 Relevant identified uses of the substance or mixture and uses advised against
Identified use: intended for professional use only!
- Application of the substance / the mixture
Coating
- 1.3 Details of the supplier of the safety data sheet
- Manufacturer/Supplier:
Alexander BINZEL
Schweißtechnik GmbH & Co.KG
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- Further information obtainable from:
Technical Documentation
- 1.4 Emergency telephone number:
Giftinformationszentrum der Länder Rheinland-Pfalz und Hessen
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Universitätsmedizin der Johannes Gutenberg-Universität Mainz

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.
Eye Irrit. 2 H319 Causes serious eye irritation.
STOT SE 3 H336 May cause drowsiness or dizziness.
- 2.2 Label elements
- Labelling according to Regulation (EC) No 1272/2008
The product is classified and labelled according to the CLP regulation.
- Hazard pictograms
 
GHS02 GHS07
- Signal word
Danger
- Hazard-determining components of labelling:
acetone
- Hazard statements
H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
- Precautionary statements
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.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- 2.3 Other hazards
- Results of PBT and vPvB assessment
- PBT:
Not applicable.
- vPvB:
Not applicable.

SECTION 3: Composition/information on ingredients

- 3.2 Chemical characterisation: Mixtures
- Description:
Mixture: consisting of the following components.

- Dangerous components:

CAS: 67-64-1 EINECS: 200-662-2 Index number: 606-001-00-8 Reg.nr.: 01-2119471330-49	acetone	Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336	25-50%
CAS: 74-98-6 EINECS: 200-827-9 Index number: 601-003-00-5 Reg.nr.: 01-2119486944-21	propane	Flam. Gas 1, H220; Press. Gas (Comp.), H280	25-50%
CAS: 106-97-8 EINECS: 203-448-7 Index number: 601-004-01-8 Reg.nr.: 01-2119474691-32	butane	Flam. Gas 1, H220; Press. Gas (Comp.), H280	25-50%

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CAS: 78-93-3	butanone	Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336	2.5-10%
EINECS: 201-159-0			
Index number: 606-002-00-3			
Reg.nr.: 01-2119457290-43			

- 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**
- General information:** Immediately remove any clothing soiled by the product. Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident. Do not leave affected persons unattended. Personal protection for the First Aider. Take affected persons out of danger area and lay down. In case of unconsciousness place patient stably in side position for transportation. Supply fresh air; consult doctor in case of complaints.
- After inhalation:** Immediately wash with water and soap and rinse thoroughly. Seek medical treatment in case of complaints.
- After skin contact:** Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor. Protect unharmed eye.
- After eye contact:** If symptoms persist consult doctor.
- After swallowing:** No further relevant information available.
- 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.

SECTION 5: Firefighting measures

- 5.1 Extinguishing media**
- Suitable extinguishing agents:** CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam. Use fire extinguishing methods suitable to surrounding conditions.
- For safety reasons unsuitable extinguishing agents:** Water with full jet
- 5.2 Special hazards arising from the substance or mixture** Nitrogen oxides (NOx)
Carbon monoxide (CO)
CO2
Formation of toxic gases is possible during heating or in case of fire.
- 5.3 Advice for firefighters** Do not inhale explosion gases or combustion gases.
- Protective equipment:** Collect contaminated fire fighting water separately. It must not enter the sewage system.
- Additional information** Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures** Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation. Avoid contact with skin and eyes. Keep away from ignition sources.
- 6.2 Environmental precautions:** Inform respective authorities in case of seepage into water course or sewage system. Do not allow to enter sewers/ surface or ground water. Prevent from spreading (e.g. by damming-in or oil barriers).
- 6.3 Methods and material for containment and cleaning up:** Do not flush with water or aqueous cleansing agents. Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose contaminated material as waste according to item 13.
- 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** Store in cool, dry place in tightly closed receptacles. Ensure good ventilation/exhaustion at the workplace. Prevent formation of aerosols.
- Information about fire - and explosion protection:** Keep ignition sources away - Do not smoke.

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Protect against electrostatic charges.

- 7.2 Conditions for safe storage, including any incompatibilities

- Storage:

- Requirements to be met by storerooms and receptacles:

- Information about storage in one common storage facility:

- Further information about storage conditions:

- Storage class:

- 7.3 Specific end use(s)

Store only in the original receptacle.

Observe official regulations on storing packagings with pressurised containers.

Store away from foodstuffs.

Protect from frost.

Store in dry conditions.

Keep container tightly sealed.

Protect from heat and direct sunlight.

Recommended storage temperature: 5-30 °C

2 B

No further relevant information available.

SECTION 8: Exposure controls/personal protection

- Additional information about design of technical facilities:

No further data; see item 7.

- 8.1 Control parameters

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

67-64-1 acetone

WEL Short-term value: 3620 mg/m³, 1500 ppm
Long-term value: 1210 mg/m³, 500 ppm

106-97-8 butane

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)

78-93-3 butanone

WEL Short-term value: 899 mg/m³, 300 ppm
Long-term value: 600 mg/m³, 200 ppm
Sk, BMGV

- Regulatory information

WEL: EH40/2018

- Ingredients with biological limit values:

78-93-3 butanone

BMGV 70 µmol/L
Medium: urine
Sampling time: post shift
Parameter: butan-2-one

- Additional information:

The lists valid during the making were used as basis.

- 8.2 Exposure controls

- Personal protective equipment:

- General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

- Respiratory protection:

When used properly and under normal conditions, breathing protection is not required.

Use suitable respiratory protective device in case of insufficient ventilation.

Filter A/P2

Respiratory protection - Gas filters and combination filters according to EN 141

- Protection of hands:



Protective gloves

Check protective gloves prior to each use for their proper condition.

Only use chemical-protective gloves with CE-labelling of category III.

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

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

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

- Material of gloves

Recommended materials:

Butyl rubber, BR

Recommended thickness of the material: ≥ 0.5 mm

Penetration time (min.): < 480

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.

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- **Penetration time of glove material** The determined penetration times according to EN 374 part III are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to 50% of the penetration time, is recommended.
- **As protection from splashes gloves made of the following materials are suitable:** Nitrile rubber, NBR
Recommended thickness of the material: ≥ 0.1 mm
Penetration time (min.): < 10
- **Eye protection:**  Tightly sealed goggles
- **Body protection:** Protective goggles and facial protection - Classification according to EN 166
protective clothing (EN 13034)

SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**
 - Form: Aerosol
 - Colour: White
- **Odour:** Characteristic
- **Odour threshold:** Not determined.
- **pH-value:** Not determined.
- **Change in condition**
 - Melting point/freezing point: Undetermined.
 - Initial boiling point and boiling range: Not applicable, as aerosol.*
- **Flash point:** Not applicable, as aerosol.*
- **Flammability (solid, gas):** Not applicable.
- **Ignition temperature:** Not determined.
- **Decomposition temperature:** Not determined.
- **Auto-ignition temperature:** Product is not selfigniting.
- **Explosive properties:** Not determined.
- **Explosion limits:**
 - Lower: 1.5 Vol %
 - Upper: 13.0 Vol %
- **Density at 20 °C:** 0.73 g/cm³
- **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.
- **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.

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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:

67-64-1 acetone

Oral	LD50	5,800 mg/kg (rat)
Dermal	LD50	20,000 mg/kg (rabbit)
Inhalative	LC50/4 h	76 mg/l (rat)

78-93-3 butanone

Oral	LD50	2,193 mg/kg (rat) (OECD 423)
Dermal	LD50	>5,000 mg/kg (rabbit) (OECD 402)
Inhalative	LC50	mg/l (Skeletonema costatum)
	LC50/4 h	34 mg/l (rat)

- Primary irritant effect:

- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.

- **Serious eye damage/irritation** Causes serious eye irritation.

- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.

- CMR effects (carcinogenicity, 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** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

- 12.1 Toxicity

- Aquatic toxicity:

67-64-1 acetone

IC50	20,000 mg/l (rabbit)
LC50/96 h	7,500 mg/l (Leuciscus idus (Aland))
	5,540 mg/l (Oncorhynchus mykiss (Regenbogenforelle))
EC50	8,300 mg/l (LEPOMUS MACROCHIRUS) (96h)
	7,500 mg/l (Selenastrum capricornutum) (96h)
EC50	>100 mg/l (daphnia) (48h)
LC 50	20,000 mg/l (rabbit)
LC50	12,600 mg/l (daphnia)
NOEC	1,700 mg/l (Pseudomonas putida)
NOEC	4,740 mg/l (Pseudokirchneriella subcapitata)

74-98-6 propane

EC50	7.71 mg/l (ALGAE) (96h)
LC50	27.98 mg/l (fish) (96h)

106-97-8 butane

EC50	7.71 mg/l (ALGAE) (96h)
LC 50	27.98 mg/l (fish) (96h)

78-93-3 butanone

LC50	2,990 mg/l (Pimephales promelas) (96h; OECD 203)
EC50	1,972 mg/l (Pseudokirchneriella subcapitata) (72h; OECD 201)
EC50	308 mg/l (Daphnia magna) (48h; OECD 202)
EC0	1,150 mg/l (Pseudomonas putida) (16h; DIN 38412)

- **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.

- Additional ecological information:

- General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- 12.5 Results of PBT and vPvB assessment

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

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- 12.6 Other adverse effects

No further relevant information available.

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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. Disposal according to official regulations

- European waste catalogue

15 01 04	metallic packaging
16 05 04*	gases in pressure containers (including halons) containing hazardous substances
15 01 10*	packaging containing residues of or contaminated by hazardous substances

- Uncleaned packaging:

- Recommendation:

Disposal must be made according to official regulations.

SECTION 14: Transport information

- 14.1 UN-Number

- ADR, IMDG, IATA

UN1950

- 14.2 UN proper shipping name

- ADR

- IMDG

- IATA

1950 AEROSOLS
AEROSOLS
AEROSOLS, flammable

- 14.3 Transport hazard class(es)

- ADR



- Class

- Label

2 5F Gases.
2.1

- IMDG, IATA



- Class

- Label

2.1
2.1

- 14.4 Packing group

- ADR, IMDG, IATA

Void

- 14.5 Environmental hazards:

Not applicable.

- 14.6 Special precautions for user

- Danger code (Kemler):

- EMS Number:

- Stowage Code

Warning: Gases.
-
F-D,S-U
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 C, Clear of living quarters.
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: Segregation as for the appropriate subdivision of class 2.

- Segregation Code

- 14.7 Transport in bulk according to Annex II of Marpol and the IBC

Code

Not applicable.

- Transport/Additional information:

- ADR

- Limited quantities (LQ)

- Excepted quantities (EQ)

1L
Code: E0
Not permitted as Excepted Quantity

- Transport category

- Tunnel restriction code

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- IMDG	1L
- Limited quantities (LQ)	Code: E0
- Excepted quantities (EQ)	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
 - Seveso category
 - Qualifying quantity (tonnes) for the application of lower-tier requirements
 - Qualifying quantity (tonnes) for the application of upper-tier requirements
 - REGULATION (EC) No 1907/2006 ANNEX XVII
 - National regulations:
 - Information about limitation of use:
 - **15.2 Chemical safety assessment:**
- None of the ingredients is listed.
P3a FLAMMABLE AEROSOLS
- 150 t
- 500 t
- Conditions of restriction: 3
- Employment restrictions concerning juveniles must be observed.
Employment restrictions concerning pregnant and lactating women must be observed.
Employment restrictions concerning women of child-bearing age must be observed.
- 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**
 - **Department issuing SDS:**
 - **Contact:**
 - **Abbreviations and acronyms:**
 - **Sources**
 - * **Data compared to the previous version altered.**
- H220 Extremely flammable gas.
H225 Highly flammable liquid and vapour.
H280 Contains gas under pressure; may explode if heated.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
- Technical Documentation
Technical Documentation
- ADR: Accord européen sur le transport 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)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Flam. Gas 1: Flammable gases – Category 1
Aerosol 1: Aerosols – Category 1
Press. Gas (Comp.): Gases under pressure – Compressed gas
Flam. Liq. 2: Flammable liquids – Category 2
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
- Internet:
- www.echa.europa.eu
- www.baua.de
IFA: Institute für Occupational Safety and Health of the German Social Accident Insurance:
- www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index.jsp
- www.dguv.de/ifa/gestis/gestis-dnel-liste

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