

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 15.07.2019

Version number 6

Revision: 15.07.2019

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

1.1 Product identifier

Trade name: **Blow-Up**

Article number: 90501, 90503

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

Sealant

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier: AKEMI chemisch technische Spezialfabrik GmbH
Lechstrasse 28
D 90451 Nürnberg

Tel. +49(0)911-642960
Fax. +49(0)911-644456
e-mail info@akemi.de

Further information obtainable from:

Laboratory

1.4 Emergency telephone number:

Product Safety Department AKEMI chemisch technische Spezialfabrik GmbH
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



GHS02 flame

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

Storage:

Store in a well-ventilated place. Keep cool.
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

Signal word

Danger

Hazard-determining components of labelling:

Not applicable.

Hazard statements

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

Precautionary statements

P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P103 Read label before use.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

(Contd. on page 2)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 15.07.2019

Version number 6

Revision: 15.07.2019

Trade name: Blow-Up

(Contd. of page 1)

- P211 Do not spray on an open flame or other ignition source.
 P251 Do not pierce or burn, even after use.
 P260 Do not breathe spray.
 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.
- Buildup of explosive mixtures possible without sufficient ventilation.

· Additional information:· **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 of substances listed below with nonhazardous additions.· Dangerous components:

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	12.5-25%
CAS: 75-28-5 EINECS: 200-857-2 Index number: 601-004-00-0 Reg.nr.: 01-2119485395-27	isobutane	⚠ Flam. Gas 1, H220; Flam. Liq. 1, H224 Press. Gas (Comp.), H280	12.5-25%
CAS: 106-97-8 EINECS: 203-448-7 Index number: 601-004-00-0 Reg.nr.: 01-2119474691-32	butane	⚠ Flam. Gas 1, H220; Flam. Liq. 1, H224 Press. Gas (Comp.), H280	12.5-25%

· 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.

· After skin contact:

Generally the product does not irritate the skin.

Rinse with warm water.

· After eye contact:

Rinse opened eye for several minutes under running water. Then consult a doctor.

· After swallowing:

Drink plenty of water and provide fresh air. Call for a doctor 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**· Suitable extinguishing agents:

CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

· For safety reasons unsuitable extinguishing agents:

Water with full jet

(Contd. on page 3)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 15.07.2019

Version number 6

Revision: 15.07.2019

Trade name: Blow-Up

(Contd. of page 2)

· **5.2 Special hazards 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.

· Additional information

Cool endangered receptacles with water spray.

SECTION 6: Accidental release measures

· **6.1 Personal precautions, protective equipment and emergency procedures**

Ensure adequate ventilation
Keep away from ignition sources.
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:**

Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.

· **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**

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 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:

Not required.

· Further information about storage conditions:

Protect from frost.
Keep container 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.

(Contd. on page 4)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 15.07.2019

Version number 6

Revision: 15.07.2019

Trade name: Blow-Up

(Contd. of page 3)

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:

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)

- Additional information: The lists valid during the making were used as basis.
- 8.2 Exposure controls**
- Personal protective equipment:
- General protective and hygienic measures: Wash hands before breaks and at the end of work.
Do not inhale gases / fumes / aerosols.
Filter AX
Use suitable respiratory protective device in case of insufficient ventilation.
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
- Respiratory protection:
- Protection of hands: No chemical-protective gloves required.
Avoid direct contact with the chemical/ the product/ the preparation by organisational measures.



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

- 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.
Butyl rubber, BR
- Penetration time of glove material The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
Value for the permeation: Level ≤ 3
- Eye protection:



Tightly sealed goggles

- Body protection: Protective work clothing

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

(Contd. on page 5)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 15.07.2019

Version number 6

Revision: 15.07.2019

Trade name: Blow-Up

(Contd. of page 4)

• <u>Odour threshold:</u>	Not determined.
• <u>pH-value:</u>	Not determined.
• <u>Change in condition</u>	
<u>Melting point/freezing point:</u>	Undetermined.
<u>Initial boiling point and boiling range:</u>	Not applicable, as aerosol.
• <u>Flash point:</u>	Not applicable, as aerosol.
• <u>Flammability (solid, gas):</u>	Not applicable.
• <u>Ignition temperature:</u>	365 °C
• <u>Decomposition temperature:</u>	Not determined.
• <u>Auto-ignition temperature:</u>	Product is not selfigniting.
• <u>Explosive properties:</u>	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
• <u>Explosion limits:</u>	
<u>Lower:</u>	1.5 Vol %
<u>Upper:</u>	10.9 Vol %
• <u>Vapour pressure at 20 °C:</u>	3,500 hPa
• <u>Density at 20 °C:</u>	0.71 g/cm ³
• <u>Relative density</u>	Not determined.
• <u>Vapour density</u>	Not determined.
• <u>Evaporation rate</u>	Not applicable.
• <u>Solubility in / Miscibility with water:</u>	Not miscible or difficult to mix.
• <u>Partition coefficient: n-octanol/water:</u>	Not determined.
• <u>Viscosity:</u>	
<u>Dynamic:</u>	Not determined.
<u>Kinematic:</u>	Not determined.
• <u>Solvent content:</u>	
Organic solvents:	50 %
• 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.

(Contd. on page 6)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 15.07.2019

Version number 6

Revision: 15.07.2019

Trade name: Blow-Up

(Contd. of page 5)

· LD/LC50 values relevant for classification:

75-28-5 isobutane

Inhalative LC50/4 h >50 mg/l (rat)

106-97-8 butane

Inhalative LC50/4 h 658 mg/l (rat)

- Primary irritant effect:
- Skin corrosion/irritation Based on available data, the classification criteria are not met.
- 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 (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 Based on available data, the classification criteria are not met.
- 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: No further relevant information available.
- **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: Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
- **12.5 Results of PBT and vPvB assessment**
- PBT: Not applicable.
- vPvB: Not applicable.
- **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.

· European waste catalogue

20 00 00	MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS
20 01 00	separately collected fractions (except 15 01)
20 01 13*	solvents
15 00 00	WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED
15 01 00	packaging (including separately collected municipal packaging waste)
15 01 04	metallic packaging

- Uncleaned packaging:
- Recommendation: Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning.

(Contd. on page 7)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 15.07.2019

Version number 6

Revision: 15.07.2019

Trade name: Blow-Up

(Contd. of page 6)

SECTION 14: Transport information• **14.1 UN-Number**

• ADR, IMDG, IATA

UN1950

• **14.2 UN proper shipping name**

• ADR

1950 AEROSOLS

• IMDG

AEROSOLS

• IATA

AEROSOLS, flammable

• **14.3 Transport hazard class(es)**

• ADR



• Class

2 5F Gases.

• Label

2.1

• IMDG, IATA



• Class

2.1

• Label

2.1

• **14.4 Packing group**

• ADR, IMDG, IATA

Void

• **14.5 Environmental hazards:**

• Marine pollutant:

No

• **14.6 Special precautions for user**

• Danger code (Kemler):

Warning: Gases.

-

• EMS Number:

F-D,S-U

• Stowage Code

SW1 Protected from sources of heat.

SW2 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:

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

• 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

(Contd. on page 8)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 15.07.2019

Version number 6

Revision: 15.07.2019

Trade name: Blow-Up

(Contd. of page 7)

· <u>Excepted quantities (EQ)</u>	Code: E0 Not permitted as Excepted Quantity
· <u>UN "Model Regulation":</u>	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
- 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:
- Waterhazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.
- VOC EU 355.0 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.
H280 Contains gas under pressure; may explode if heated.
- Recommended restriction of use refer to Technical Data Sheet (TDS)
- Department issuing SDS: Laboratory
- Contact: Dieter Zimmermann
Elke Hake
Fon ++49 (0)911 64296-59
@mail E.Hake@akemi.de
- 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)
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO: International Civil Aviation Organisation
ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)
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. 1: Flammable liquids – Category 1

(Contd. on page 9)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 15.07.2019

Version number 6

Revision: 15.07.2019

Trade name: Blow-Up

(Contd. of page 8)

· * Data compared to the previous
version altered.

Adaptation in accordance with REACH directive 1907/2006/EC

GB