

Safety Data Sheet

acc. to OSHA HCS

Printing date 01/13/2023

Reviewed on 01/13/2023

1 Identification

Product identifier

- Trade name: **ATTBLIME - AB24**
- Application of the substance / the mixture
Coating material
Flattening agent, Matting agent

Details of the supplier of the safety data sheet

- Manufacturer/Supplier: Graichen
Produktions- und Vertriebs-GmbH
Darmstädter Str. 127 - 129
D-64625 Bensheim
Tel.: +49(0)6251/73103
Fax: +49(0)6251/77901
e-mail: info@graichen-bensheim.de
homepage: http://www.graichen.net
- Information department: Product Safety Department
- Emergency telephone number: Emergency medical information for poisoning:
Graichen: During business hours :+49(0)6251 7707880
Graichen: Outside business hours:+49(0)172 7478476
Poison Information Center Mainz - 24h -
Tel.: +49 (0) 6131 19240
USA / CAN : 800-424-9300 (available 24 hrs)

2 Hazard(s) identification

Classification of the substance or mixture

- Flammable Aerosols 1 H222 Extremely flammable aerosol.
Gases under Pressure - Compressed gas H280 Contains gas under pressure; may explode if heated.

Label elements

- GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
Hazard pictograms



GHS02 GHS04

- Signal word: Danger
- Hazard statements: Extremely flammable aerosol.
Contains gas under pressure; may explode if heated.
- Precautionary statements: Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Do not spray on an open flame or other ignition source.
Pressurized container: Do not pierce or burn, even after use.
Protect from sunlight. Store in a well-ventilated place.
Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

Information pertaining to particular dangers for man and environment:

- NFPA ratings (scale 0 - 4)
- | | | |
|------------|----------|----------------|
| Health = 0 | Fire = 4 | Reactivity = 0 |
|------------|----------|----------------|
- HMIS-ratings (scale 0 - 4)
- | | | |
|------------|----------|----------------|
| HEALTH 0 | FIRE 4 | REACTIVITY 3 |
| Health = 0 | Fire = 4 | Reactivity = 3 |

Other hazards

- Results of PBT and vPvB assessment
- PBT: Not applicable.
vPvB: Not applicable.

3 Composition/information on ingredients

Chemical characterization: Mixtures

- Description: Active substance with propellant

Dangerous components:

| | | |
|---------------|--|----------|
| CAS: 106-97-8 | butane (containing ≤ 0,1 % butadiene (106-99-0)) | 25 – 50% |
| | Flammable Gases 1, H220; Gases under Pressure - Compressed gas, H280 | |
| CAS: 74-98-6 | propane | 10 – 25% |
| | Flammable Gases 1, H220; Gases under Pressure - Compressed gas, H280 | |

- Additional information: For the wording of the listed hazard phrases refer to section 16.

4 First-aid measures

Description of first aid measures

- After inhalation: Supply fresh air; consult doctor in case of complaints.
In case of unconsciousness place patient stably in side position for transportation.
Use a respiration bag or breathing device.
- After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.

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- | | |
|---|---|
| <ul style="list-style-type: none"> . After swallowing: . Information for doctor: . Most important symptoms and effects, both acute and delayed . Indication of any immediate medical attention and special treatment needed | <p>Seek immediate medical advice. A person vomiting while lying on their back should be turned onto their side.</p> <p>No further relevant information available.</p> <p>No further relevant information available.</p> |
|---|---|

5 Fire-fighting measures

- . **Extinguishing media**
- . Suitable extinguishing agents: CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- . **Special hazards arising from the substance or mixture**
- . **Advice for firefighters**
- . Protective equipment: Do not inhale explosion gases or combustion gases. Wear self-contained respiratory protective device.
- . **Additional information**
- . Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.
- . Collect contaminated fire fighting water separately. It must not enter the sewage system.

6 Accidental release measures

- . **Personal precautions, protective equipment and emergency procedures**
- . Keep away from ignition sources
- . Wear protective equipment. Keep unprotected persons away.
- . Wear protective clothing.
- . **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.
- . Keep contaminated washing water and dispose of appropriately.
- . **Methods and material for containment and cleaning up:**
- . Ensure adequate ventilation.
- . Do not flush with water or aqueous cleansing agents
- . **Reference to other sections**
- . See Section 8 for information on personal protection equipment.
- . See Section 13 for disposal information.
- . **Protective Action Criteria for Chemicals**

. PAC-1:

| | | |
|---------------|---|--------------|
| CAS: 106-97-8 | butane (containing ≤ 0,1 % butadiene (106-99-0)) | 5500* ppm |
| CAS: 74-98-6 | propane | 5500* ppm |
| CAS: 75-28-5 | isobutane (containing ≤ 0,1 % butadiene (106-99-0)) | 5500* ppm |
| CAS: 74-84-0 | ethane | 65000*** ppm |
| CAS: 109-66-0 | pentane | 3000* ppm |
| | 1-Buten | 750 ppm |
| | 2-Buten | 750 ppm |
| CAS: 115-07-1 | propene | 1,500 ppm |

. PAC-2:

| | | |
|---------------|---|---------------|
| CAS: 106-97-8 | butane (containing ≤ 0,1 % butadiene (106-99-0)) | 17000** ppm |
| CAS: 74-98-6 | propane | 17000** ppm |
| CAS: 75-28-5 | isobutane (containing ≤ 0,1 % butadiene (106-99-0)) | 17000** ppm |
| CAS: 74-84-0 | ethane | 230000*** ppm |
| CAS: 109-66-0 | pentane | 33000*** ppm |
| | 1-Buten | 2900* ppm |
| | 2-Buten | 1,100 ppm |
| CAS: 115-07-1 | propene | 2800* ppm |

. PAC-3:

| | | |
|---------------|---|---------------|
| CAS: 106-97-8 | butane (containing ≤ 0,1 % butadiene (106-99-0)) | 53000*** ppm |
| CAS: 74-98-6 | propane | 33000*** ppm |
| CAS: 75-28-5 | isobutane (containing ≤ 0,1 % butadiene (106-99-0)) | 53000*** ppm |
| CAS: 74-84-0 | ethane | 400000*** ppm |
| CAS: 109-66-0 | pentane | 200000*** ppm |
| | 1-Buten | 17000*** ppm |
| | 2-Buten | 6,600 ppm |
| CAS: 115-07-1 | propene | 17000** ppm |

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7 Handling and storage

Handling:

- . Precautions for safe handling: Open and handle receptacle with care. Ensure good ventilation/exhaustion at the workplace.
- . Information about protection against explosions and fires: Keep ignition sources away - Do not smoke. Protect against electrostatic charges. Pressurized 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. Do not spray on a naked flame or any incandescent material.
- . **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 pressurized containers. Prevent any seepage into the ground.
- . Information about storage in one common storage facility: Store away from foodstuffs. Store away from oxidizing agents.
- . Further information about storage conditions: Keep receptacle tightly sealed. Store in cool, dry conditions in well sealed receptacles. Protect from heat and direct sunlight.
- . **Specific end use(s)**: No further relevant information available.

8 Exposure controls/personal protection

- . **Additional information about design of technical systems:** No further data; see item 7.
- . **Control parameters**

. Components with limit values that require monitoring at the workplace:

CAS: 106-97-8 butane (containing ≤ 0,1 % butadiene (106-99-0))

| | |
|----------|---|
| REL | Long-term value: 1900 mg/m ³ , 800 ppm |
| TLV (EX) | Short-term value: 1000 ppm |

CAS: 74-98-6 propane

| | |
|-----|--|
| PEL | Long-term value: 1800 mg/m ³ , 1000 ppm |
| REL | Long-term value: 1800 mg/m ³ , 1000 ppm |
| TLV | see Appendix F Minimal oxygen content (D, EX) |

- . Additional information: The lists that were valid during the creation were used as basis.
- . **Exposure controls**
- . Personal protective equipment:
- . General protective and hygienic measures: Wash hands before breaks and at the end of work.
- . Breathing equipment: Use suitable respiratory protective device in case of insufficient ventilation.
- . Protection of hands: 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.
- . 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.
- . Eye protection: Tightly sealed goggles

9 Physical and chemical properties

Information on basic physical and chemical properties

- . General Information
- . Appearance:
 - Form: Aerosol
 - Color: White
- . Odor: Characteristic
- . Odor threshold: Not determined.
- . pH-value at 20 °C (68 °F): 7

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| | |
|---|--|
| . Change in condition Boiling point/Boiling range: | -44.5 °C (-48.1 °F) |
| . Flash point: | -97 °C (-142.6 °F) |
| . Flammability (solid, gaseous): | Not applicable. |
| . Ignition temperature: | 230 °C (446 °F) |
| . Decomposition temperature: | Not determined. |
| . Auto igniting: | Product is not selfigniting. |
| . Danger of explosion: | Product is not explosive. However, formation of explosive air/vapor mixtures are possible. |
| . Explosion limits: Lower: Upper: | 1.5 Vol % 10.9 Vol % |
| . Vapor pressure at 20 °C (68 °F): | 8,300 hPa (6.200 mm Hg) |
| . Density at 20 °C (68 °F): | 0.7071 g/cm ³ (5.9007 lbs/gal) |
| . Relative density | Not determined. |
| . Vapor 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. |
| . Solvent content: Organic solvents: VOC content: VOC (EU) (%) | 58.6 % 59.34 % 59.5 % |
| Solids content: | 40.5 % |
| . Other information | No further relevant information available. |

10 Stability and reactivity

- . **Reactivity** No further relevant information available.
- . **Chemical stability**
- . Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- . **Possibility of hazardous reactions** No dangerous reactions known.
- . **Conditions to avoid** No further relevant information available.
- . **Incompatible materials:** No further relevant information available.
- . **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- . **Information on toxicological effects**
- . Acute toxicity:
- . Primary irritant effect:
 - . on the skin: No irritant effect.
 - . on the eye: Irritating effect.
- . Sensitization: No sensitizing effects known.
- . Additional toxicological information:

- . Carcinogenic categories

| | |
|---|---|
| . IARC (International Agency for Research on Cancer) | |
| CAS: 115-07-1 propene | 3 |
| . NTP (National Toxicology Program) | |
| None of the ingredients is listed. | |
| . OSHA-Ca (Occupational Safety & Health Administration) | |
| None of the ingredients is listed. | |

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12 Ecological information

. Toxicity

| | |
|---|--------------------|
| . Aquatic toxicity: | |
| CAS: 106-97-8 butane (containing ≤ 0,1 % butadiene (106-99-0)) | |
| EC50 (96h) | 7.71 mg/l (Algae) |
| LC50 (96h) | 27.98 mg/l (Fisch) |
| CAS: 74-98-6 propane | |
| EC50 (96h) | 7.71 mg/l (Algae) |
| LC50 (96h) | 27.98 mg/l (Fisch) |
| CAS: 75-28-5 isobutane (containing ≤ 0,1 % butadiene (106-99-0)) | |
| EC50 (96h) | 7.71 mg/l (Algae) |
| LC50 (96h) | 27.98 mg/l (Fisch) |
| CAS: 74-84-0 ethane | |
| EC50 (96h) | 7.71 mg/l (Algae) |
| LC50 (96h) | 27.98 mg/l (Fisch) |

- . **Persistence and degradability** Heavily biodegradable
- . **Behavior in environmental systems:**
 - . Bioaccumulative potential May be accumulated in organism
 - . Mobility in soil No further relevant information available.
- . **Additional ecological information:**
- . General notes: Water hazard class 1 (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.
- . **Results of PBT and vPvB assessment**
- . PBT: Not applicable.
- . vPvB: Not applicable.
- . **Other adverse effects** No further relevant information available.

13 Disposal considerations

- . **Waste treatment methods**
- . Recommendation: Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- . **Uncleaned packagings:**
- . Recommendation: Disposal must be made according to official regulations.

14 Transport information

| | |
|---|---------------------|
| . UN-Number | |
| . DOT, ADR, IMDG, IATA | UN1950 |
| . UN proper shipping name | |
| . DOT | Aerosols, flammable |
| . ADR | 1950 AEROSOLS |
| . IMDG | AEROSOLS |
| . IATA | AEROSOLS, flammable |
| . Transport hazard class(es) | |
| . DOT | |
|  | |
| . Class | 2.1 Gases |
| . Label | 2.1 |
| ----- | |
| . ADR | |
|  | |
| . Class | 2.5F Gases |
| . Label | 2.1 |
| ----- | |
| . IMDG, IATA | |
|  | |
| . Class | 2.1 Gases |

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| | |
|---|---|
| . Label | 2.1 |
| . Packing group . DOT, ADR, IMDG, IATA | Void |
| . Environmental hazards: | Not applicable. |
| . Special precautions for user . Hazard identification number (Kemler code): . 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 | |
| . Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | Not applicable. |
| . Transport/Additional information: | |
| . ADR . Excepted quantities (EQ) | Code: E0 Not permitted as Excepted Quantity |
| . IMDG . Limited quantities (LQ) . Excepted quantities (EQ) | 1L Code: E0 Not permitted as Excepted Quantity |
| . UN "Model Regulation": | UN 1950 AEROSOLS, 2.1 |

15 Regulatory information

. **Safety, health and environmental regulations/legislation specific for the substance or mixture** No further relevant information available.
. Sara

| | |
|--|---|
| . Section 355 (extremely hazardous substances): | None of the ingredients is listed. |
| . Section 313 (Specific toxic chemical listings): | CAS: 115-07-1 propene |
| . TSCA (Toxic Substances Control Act): | All components have the value ACTIVE. |
| . Hazardous Air Pollutants | None of the ingredients is listed. |
| . Proposition 65 | |
| . Chemicals known to cause cancer: | None of the ingredients is listed. |
| . Chemicals known to cause reproductive toxicity for females: | None of the ingredients is listed. |
| . Chemicals known to cause reproductive toxicity for males: | None of the ingredients is listed. |
| . Chemicals known to cause developmental toxicity: | None of the ingredients is listed. |
| . Carcinogenic categories | |
| . EPA (Environmental Protection Agency) | None of the ingredients is listed. |
| . TLV (Threshold Limit Value) | CAS: 115-07-1 propene A4 |
| . MAK (German Maximum Workplace Concentration) | None of the ingredients is listed. |
| . NIOSH-Ca (National Institute for Occupational Safety and Health) | None of the ingredients is listed. |

. GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).

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. Hazard pictograms



GHS02 GHS04

. Signal word

Danger

. Hazard statements

Extremely flammable aerosol.

. Precautionary statements

Contains gas under pressure; may explode if heated.

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Do not spray on an open flame or other ignition source.

Pressurized container: Do not pierce or burn, even after use.

Protect from sunlight. Store in a well-ventilated place.

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

. Chemical safety assessment:

A Chemical Safety Assessment has not been carried out.

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.

. Department issuing SDS:

Environment protection department.

. Contact:

. Date of preparation / last revision

01/13/2023

. Abbreviations and acronyms:

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

DOT: US Department of Transportation

IATA: International Air Transport Association

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)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

REL: Recommended Exposure Limit

Flammable Gases 1: Flammable gases – Category 1

Flammable Aerosols 1: Aerosols – Category 1

Gases under Pressure - Compressed gas: Gases under pressure – Compressed gas

. * Data compared to the previous version altered.