

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

Printing date 13.01.2023

Version number 2202 (replaces version 2201)

Revision: 13.01.2023

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

1.1 Product identifier

Trade name: **ATTBLIME - AB2**

Article number: 5140-1265

1.2 Relevant identified uses of the substance or mixture and uses advised against

Sector of Use SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites

Product category PC9a Coatings and paints, thinners, paint removers

Process category PROC5 Mixing or blending in batch processes

Environmental release category ERC2 Formulation into mixture

Application of the substance / the mixture Flattening agent, Matting agent

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier: Manufacturer
Graichen Produktions- und Vertriebs-GmbH
Darmstädter Str. 127 - 129
D-64625 Bensheim
Tel.: +49(0)6251/73103
Fax: +49(0)6251/77901
e-mail: ehs@graichen-bensheim.de
homepage: http://www.graichen.net

Further information obtainable from: Industrial Safety Department

1.4 Emergency telephone number:

During and outside office hours:
Phone.: +49(0)2774/6153
Poison Information Centre Mainz - 24h -
Tel.: +49 (0) 6131 19240
Members of the public seeking specific information on poisons should contact:
In England and Wales: NHS 111 - dial 111
In Scotland: NHS 24 - dial 111

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 GB CLP regulation.

Hazard pictograms



GHS02 GHS07

Signal word

Danger

Hazard-determining components of labelling:

propan-2-ol

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.

P261

Avoid breathing dust/fume/gas/mist/vapours/spray.

P271

Use only outdoors or in a well-ventilated area.

P305+P351+P338

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P403+P233

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

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.

Additional information:

Buildup of explosive mixtures possible without sufficient ventilation.

2.3 Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

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SECTION 3: Composition/information on ingredients

3.2 Mixtures

Description: Active substance with propellant

Dangerous components:

CAS: 106-97-8 EINECS: 203-448-7	butane (containing ≤ 0,1 % butadiene (106-99-0)) ⚠ Flam. Gas 1A, H220; ⚠ Press. Gas (Comp.), H280	25 – 50%
CAS: 67-63-0 EINECS: 200-661-7	propan-2-ol ⚠ Flam. Liq. 2, H225; ⚠ Eye Irrit. 2, H319; STOT SE 3, H336	10 – 25%
CAS: 74-98-6 EINECS: 200-827-9	propane ⚠ Flam. Gas 1A, H220; ⚠ Press. Gas (Comp.), H280	10 – 25%
EC number: 920-750-0	Hydrocarbons, C7-C9, n-Alkanes, Isoalkanes, Cycloalkanes ⚠ Flam. Liq. 2, H225; ⚠ Asp. Tox. 1, H304; ⚠ Aquatic Chronic 2, H411; ⚠ STOT SE 3, H336	< 2.5%
CAS: 75-28-5 EINECS: 200-857-2	isobutane (containing ≤ 0,1 % butadiene (106-99-0)) ⚠ Flam. Gas 1A, H220; ⚠ Press. Gas (Comp.), H280	< 2.5%

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.
 After skin contact: Wash with water and acidic soap.
 After eye contact: Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
 After swallowing: Seek immediate medical advice.

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.

5.2 Special hazards arising from the substance or mixture

No further relevant information available.

5.3 Advice for firefighters

Protective equipment: No special measures required.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Keep away from ignition sources.

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.

6.3 Methods and material for containment and cleaning up:

Ensure adequate ventilation.

6.4 Reference to other sections

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

Information about fire - and explosion protection:

Open and handle receptacle with care.
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.
Do not spray onto a naked flame or any incandescent material.

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:

Store away from foodstuffs.

Further information about storage conditions:

Keep container tightly sealed.
Store in cool, dry conditions in well sealed receptacles.
Protect from heat and direct sunlight.

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

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SECTION 8: Exposure controls/personal protection**8.1 Control parameters**

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

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

WEL	Short-term value: 1810 mg/m ³ , 750 ppm Long-term value: 1450 mg/m ³ , 600 ppm Carc (if more than 0.1% of buta-1.3-diene)
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CAS: 67-63-0 propan-2-ol

WEL	Short-term value: 1250 mg/m ³ , 500 ppm Long-term value: 999 mg/m ³ , 400 ppm
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. DNELs

CAS: 67-63-0 propan-2-ol

Oral	DNEL Long-term - systemic effects	26 mg/kg bw/day (general (Allgemeinbevölkerung))
Dermal	DNEL Long-term - systemic effects	319 mg/kg bw/day (general (Allgemeinbevölkerung)) 888 mg/kg bw/day (Workers (Arbeitnehmer))
Inhalative	DNEL Long-term - systemic effects	89 mg/m ³ (general (Allgemeinbevölkerung)) 500 mg/m ³ (employee / Arbeitnehmer) 500 mg/m ³ (Workers (Arbeitnehmer))

Hydrocarbons, C7-C9, n-Alkanes, Isoalkanes, Cycloalkanes

Oral	DNEL Long-term - systemic effects	699 mg/kg bw/day (Consumers (Verbraucher))
Dermal	DNEL Long-term - systemic effects	699 mg/kg bw/day (Consumers (Verbraucher)) 773 mg/kg bw/day (Workers (Arbeitnehmer))
Inhalative	DNEL Long-term - systemic effects	608 mg/m ³ (Consumers (Verbraucher)) 2,035 mg/m ³ (Workers (Arbeitnehmer))

. PNECs

CAS: 67-63-0 propan-2-ol

PNEC Soil (Boden)	28 mg/kg
PNEC fresh water sediment (Süßwassersediment)	552 mg/kg
PNEC fresh water (Süßwasser)	140.9 mg/l
PNEC marine water sediment	552 mg/kg
PNEC Marine water	140.9 mg/l
PNEC-STP	2,251 mg/l

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

8.2 Exposure controls

. Appropriate engineering controls No further data; see item 7.

. Individual protection measures, such as personal protective equipment

. General protective and hygienic measures:

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.
Avoid contact with the eyes and skin.

. Respiratory protection:

Not required.

. Hand protection

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

Recommended thickness of the material: ≥ 0.7 mm

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/face protection

Tightly sealed goggles

. Body protection:

Protective work clothing

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SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

. General Information	
. Physical state	Aerosol
. Colour:	White
. Odour:	Characteristic
. Odour threshold:	Not determined.
. Boiling point or initial boiling point and boiling range	-44.5 °C
. Flammability	Not applicable.
. Lower and upper explosion limit	
. Lower:	1.5 Vol % (CAS: 106-97-8 butane (containing ≤ 0,1 % butadiene (106-99-0)))
. Upper:	12 Vol % (CAS: 67-63-0 propan-2-ol)
. Flash point:	-97 °C
. Ignition temperature:	230 °C (CAS: 294-62-2 Cyclododecan)
. Decomposition temperature:	Not determined.
. pH at 20 °C	6.9
. Viscosity:	
. Dynamic:	Not determined.
. Solubility	
. water:	Insoluble.
. Partition coefficient n-octanol/water (log value)	Not determined.
. Vapour pressure at 20 °C:	8,300 hPa (CAS: 74-98-6 propane)
. Density and/or relative density	
. Density at 20 °C:	0.6815 g/cm ³
. Relative density	Not determined.
. Vapour density	Not determined.

9.2 Other information

. Appearance:	
. Form:	Aerosol
. Important information on protection of health and environment, and on safety.	
. Auto-ignition temperature:	Product is not selfigniting.
. Explosive properties:	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
. Solvent content:	
. Organic solvents:	90.4 %
. VOC (EU) (%)	
. Solids content:	5.0 %
. Change in condition	
. Evaporation rate	Not applicable.

Information with regard to physical hazard classes

. Explosives	Void
. Flammable gases	Void
. Aerosols	Extremely flammable aerosol. Pressurised container: May burst if heated.
. Oxidising gases	Void
. Gases under pressure	Void
. Flammable liquids	Void
. Flammable solids	Void
. Self-reactive substances and mixtures	Void
. Pyrophoric liquids	Void
. Pyrophoric solids	Void
. Self-heating substances and mixtures	Void
. Substances and mixtures, which emit flammable gases in contact with water	Void
. Oxidising liquids	Void
. Oxidising solids	Void
. Organic peroxides	Void
. Corrosive to metals	Void
. Desensitised explosives	Void

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.

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10.6 Hazardous decomposition products:

Hazardous thermal decomposition products may include: Formaldehyde, Carbon dioxide, Carbon monoxide, Methanol

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

LD/LC50 values relevant for classification:

CAS: 67-63-0 propan-2-ol

Oral	LD50	5,840 mg/kg (rat) (Acute Oral Toxicity)
Dermal	LD50	12,870 mg/kg (rab) (Acute Dermal Toxicity)
Inhalative	LC50/4h	72.6 mg/l (rat)
	LC50/6h	> 25 mg/l (rat) (Acute Inhalation Toxicity)

Hydrocarbons, C7-C9, n-Alkanes, Isoalkanes, Cycloalkanes

Oral	LD50	> 5,000 mg/kg (rat) (Acute Oral Toxicity)
Dermal	LD50	> 2,800 mg/kg (rabbit) (Acute Dermal Toxicity)
Inhalative	LC50/4h	> 23.3 mg/l (rat) (Acute Inhalation Toxicity)

Skin corrosion/irritation

CAS: 67-63-0 propan-2-ol

Ätz-/Reizwirkung auf die Haut (4h) (rabbit) (Acute Dermal Irritation/Corrosion)

Serious eye damage/irritation Causes serious eye irritation.

CAS: 67-63-0 propan-2-ol

Schwere Augenschädigung/-reizung (rabbit) (Acute Eye Irritation/Corrosion)

Reproductive toxicity

CAS: 67-63-0 propan-2-ol

Oral NOAEL, Parents 500 mg/kg (rat) (Two-Generation Reproduction Toxicity)

STOT-single exposure May cause drowsiness or dizziness.

STOT-repeated exposure

CAS: 67-63-0 propan-2-ol

STOT RE mg/kg/day (rat)

Additional toxicological information:

CAS: 67-63-0 propan-2-ol

NOAEL, maternal	400 mg/kg KG/day (rat)
NOAEL, parents	500 mg/kg KG/day (Two-Generation Reproduction Toxicity)
	853 mg/kg KG/day (rat) (One-Generation Reproduction Toxicity Study)

11.2 Information on other hazards

Endocrine disrupting properties

None of the ingredients is listed.

SECTION 12: Ecological information

12.1 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: 67-63-0 propan-2-ol

EC50	> 100 mg/l (Bacteria)
EC50 (48h)	> 100 mg/l (daphnia magna/gr. Wasserfloh)
EC50 (72h)	> 100 mg/l (Scenedesmus subspicatus)
EC50 (96h)	> 1,000 mg/l (Scenedesmus subspicatus) (Freshwater Alga and Cyanobacteria, Growth Inhibiti)
LC50 (24h)	9,714 mg/l (daphnia magna/gr. Wasserfloh) (Daphnia sp. Acute Immobilisation Test)
	9,640 mg/l (Pimephales promelas (fettköpf. Ellritze)) (Fish, Acute Toxicity Test)
LC50 (48h)	> 100 mg/l (Leuciscus idus (Goldorfe))
LC50 (96h)	> 9,640 – 10,000 mg/l (Pimephales promelas (fettköpf. Ellritze)) (Fish, Acute Toxicity Test)
LOEC (8d)	1,000 mg/l (Algae)
EC50 (3h)	> 1,000 mg/l (activated sludge) (Mikroorganismen/Wirkung auf Belebtschlamm)
NOEC (21d)	30 mg/l (daphnia magna/gr. Wasserfloh) (Daphnia magna Reproduction Test)
NOEC (96h)	1,000 mg/l (Scenedesmus subspicatus) (Freshwater Alga and Cyanobacteria, Growth Inhibiti)

CAS: 74-98-6 propane

EC50 (96h)	7.71 mg/l (Algae)
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LC50 (96h)	27.98 mg/l (Fisch)
Hydrocarbons, C7-C9, n-Alkanes, Isoalkanes, Cycloalkanes	
LL50 (96h)	> 13.4 mg/l (Oncorhynchus mykiss)
EL50 (48h)	3 mg/l (daphnia magna/gr. Wasserfloh)
EL50 (72h)	10 – 30 mg/l (Pseudokirchneriella subcapitata - Algen)
NOELR (72h)	10 mg/l (Pseudokirchneriella subcapitata - Algen)
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)
12.2 Persistence and degradability	
CAS: 67-63-0 propan-2-ol	
Biodegradability 30d 70 – 84 % (aerob) ((Derterm. of the "Ready" Biodegr. Closed Bottle))	
12.3 Bioaccumulative potential	
CAS: 67-63-0 propan-2-ol	
Log Pow	0.05
12.4 Mobility in soil	No further relevant information available.
12.5 Results of PBT and vPvB assessment	
PBT:	Not applicable.
vPvB:	Not applicable.
12.6 Endocrine disrupting properties	The product does not contain substances with endocrine disrupting properties.
12.7 Other adverse effects	
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.	

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

HP3 | Flammable

HP4 | Irritant - skin irritation and eye damage

HP5 | Specific Target Organ Toxicity (STOT)/Aspiration Toxicity

Uncleaned packaging:

- Recommendation: Disposal must be made according to official regulations.
Recommended cleansing agents: Water, if necessary together with cleansing agents.

SECTION 14: Transport information**14.1 UN number or ID 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 Gases.
Label 2.1

14.4 Packing group

ADR, IMDG, IATA Void

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. 14.5 Environmental hazards:	Not applicable.
. 14.6 Special precautions for user	Warning: Gases.
. Hazard identification number (Kemler code):	-
. EMS Number:	F-D,S-U
. Stowage Code	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.
. 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 Maritime transport in bulk according to IMO instruments	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
. 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
 - . Seveso category
 - . Qualifying quantity (tonnes) for the application of lower-tier requirements
 - . Qualifying quantity (tonnes) for the application of upper-tier requirements
 - . **15.2 Chemical safety assessment:**
- None of the ingredients is listed.
P3a FLAMMABLE AEROSOLS
- 150 t
- 500 t
- 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.

- . Department issuing SDS: Environment protection department.
- . 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
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 (UK REACH)
PNEC: Predicted No-Effect Concentration (UK REACH)
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. 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
Asp. Tox. 1: Aspiration hazard – Category 1
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

* Data compared to the previous version altered.