

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 01.09.2021

Version number 1

Revision: 01.09.2021

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

1.1 Product identifier

- Trade name: **ATTBLIME - AB2**
- 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: DM Metrology Inc.
14-1860 Appleby Line, Suite 216
Burlington, ON L7L 6M6
Tel +1 905 691 1116
sales@dmmetrology.com
- Manufacturer: Graichen Produktions- und Vertriebs- GmbH
Darmstädterstraße 127-129
D-64625 Bensheim
Germany
Tel.: +49 6251 7707880
Fax: +49 6251 77901
E-Mail: ehs@graichen-bensheim.de
www.graichen.net

- Further information obtainable from:

Giftnotrufzentrale

1.4 Emergency telephone number:

During office hours: +49(0)6251/73103
Out of office hours: +49(0)172/7478476

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
- Hazard pictograms

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



GHS02 GHS07

- Signal word

Danger

- Hazard-determining components of labelling:

- Hazard statements: propan-2-ol
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:

CAS: 294-62-2 | Cyclododecan

- vPvB:

Not applicable.

SECTION 3: Composition/information on ingredients

3.2 Chemical characterisation: Mixtures

- Description: Active substance with propellant

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. 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%
CAS: 294-62-2 EINECS: 206-033-9	Cyclododecan non-classified PBT substance	2.5 – 10%
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 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.

. 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

. 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.

. Protection of hands:

Protective gloves
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

. 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.

. 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:

Value for the permeation: Level ≤ 0,7 mm 480min (8h) EN374

. Body protection:

Tightly sealed goggles
Protective work clothing

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

. General Information

. Appearance:

Form:	Aerosol
Colour:	Whitish
Odour:	Alcohol-like
Odour threshold:	Not determined.

. pH-value at 20 °C: 6.9

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. Change in condition Initial boiling point and boiling range: -44.5 °C	
. Flash point:	-97 °C
. Ignition temperature:	230 °C
. Decomposition temperature:	Not determined.
. Explosive properties:	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
. Explosion limits: Lower: Upper:	1.5 Vol % 12 Vol %
. Vapour pressure at 20 °C:	8,300 hPa
. Density at 20 °C: . Relative density . Vapour density . Evaporation rate	0.6815 g/cm ³ Not determined. Not determined. Not applicable.
. Solubility in / Miscibility with water:	Not determined.
. Partition coefficient: n-octanol/water:	Not determined.
. Viscosity: Dynamic:	Not applicable. Not determined.
. Solvent content: Organic solvents:	90.4 %
Solids content:	5.0 %
. 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:** Hazardous thermal decomposition products may include: Formaldehyde, Carbon dioxide, Carbon monoxide, Methanol

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:

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)

. Primary irritant effect:

. 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

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

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

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

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. 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)

. 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

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)

. Aspiration hazard

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

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)

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.

. 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:

CAS: 294-62-2 | Cyclododecan

. vPvB:

Not applicable.

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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.

. 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**

. 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:** Not applicable.. **14.6 Special precautions for user**. 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.
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)
. Excepted quantities (EQ)1L
Code: E0
Not permitted as Excepted Quantity. Transport category
. Tunnel restriction code2
D

. IMDG

. Limited quantities (LQ)

1L

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. 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

None of the ingredients is listed.
P3a FLAMMABLE AEROSOLS

150 t

500 t

. 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.

- . 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 (REACH)
 - PNEC: Predicted No-Effect Concentration (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.