

Safety Data Sheet

according to HPR, Schedule 1

Printing date 01/13/2023

Reviewed on 01/13/2023

1 Identification

Product identifier

- Trade name: **ATTBLIME AB2-G**
- Article number: 5360-0634, 5360-0633
- Application of the substance / the mixture: Flattening agent, Matting agent

Details of the supplier of the safety data sheet

- Manufacturer/Supplier: Graichen Produktions- und Vertriebs GmbH
Darmstädter Str.127
D-64625 Bensheim
Tel.: +49(0)6251 / 7707880
Fax: +49(0)6251 / 77901
e-Mail: ehs@graichen-bensheim.de
http://www.graichen.net
- Information department: Product Safety Department
Emergency medical information for poisoning:
Graichen: During business hours :+49(0)6251 7707880
Graichen: Outside business hours:+49(0)172 7478476
USA / CAN : 800-424-9300 (available 24 hrs)
Advice center for poisoning in Mainz Tel: +49(0)6131/19240 Poison information:+49(0) 700/GIFTINFO

2 Hazard identification

Classification of the substance or mixture

- Flammable Liquids - Category 2 H225 Highly flammable liquid and vapour.
- Eye Irritation - Category 2A H319 Causes serious eye irritation.
- Specific Target Organ Toxicity - Single Exposure - Category 3 H336 May cause drowsiness or dizziness.
- Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

Label elements

- GHS label elements: The product is classified and labeled according to the Globally Harmonized System (GHS).
- Hazard pictograms:  
GHS02 GHS07
- Signal word: Danger
- Hazard-determining components of labeling: propan-2-ol
Highly flammable liquid and vapour.
Causes serious eye irritation.
May cause drowsiness or dizziness.
Harmful to aquatic life with long lasting effects.
- Hazard statements: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Ground and bond container and receiving equipment.
Use explosion-proof [electrical/ventilating/lighting] equipment.
Use non-sparking tools.
Take actions to prevent static discharges.
Avoid breathing dust/fume/gas/mist/vapours/spray.
Wash thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Avoid release to the environment.
Wear protective gloves/protective clothing/eye protection/face protection.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Call a poison center/doctor if you feel unwell.
If eye irritation persists: Get medical advice/attention.
In case of fire: Use CO₂, powder or water spray to extinguish.
Store in a well-ventilated place. Keep container tightly closed.
Store in a well-ventilated place. Keep cool.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.
- Precautionary statements: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Ground and bond container and receiving equipment.
Use explosion-proof [electrical/ventilating/lighting] equipment.
Use non-sparking tools.
Take actions to prevent static discharges.
Avoid breathing dust/fume/gas/mist/vapours/spray.
Wash thoroughly after handling.
Use only outdoors or in a well-ventilated area.
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Call a poison center/doctor if you feel unwell.
If eye irritation persists: Get medical advice/attention.
In case of fire: Use CO₂, powder or water spray to extinguish.
Store in a well-ventilated place. Keep container tightly closed.
Store in a well-ventilated place. Keep cool.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.

Information pertaining to particular dangers for man and environment:

- NFPA ratings (scale 0 - 4)  Health = 2
Fire = 3
Reactivity = 0

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HMIS-ratings (scale 0 - 4)

HEALTH	2	Health = 2
FIRE	3	Fire = 3
REACTIVITY	0	Reactivity = 0

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3 Composition/Information on ingredients

Chemical characterization: Mixtures

Dangerous components:

CAS: 67-63-0	propan-2-ol ⚠ Flammable Liquids - Category 2, H225; ⚠ Eye Irritation - Category 2A, H319; Specific Target Organ Toxicity - Single Exposure - Category 3, H336	15 – 40% w/w
CAS: 109-87-5	dimethoxymethane ⚠ Flammable Liquids - Category 2, H225	10 – 30% w/w
CAS: 287-92-3	cyclopentane ⚠ Flammable Liquids - Category 2, H225; Aquatic Chronic 3, H412	10 – 30% w/w

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.
After skin contact:	Generally the product does not irritate the skin.
After eye contact:	Rinse opened eye for several minutes under running water.
After swallowing:	Seek immediate medical advice.
Information for doctor:	
Most important symptoms and effects, both acute and delayed	No further relevant information available.
Indication of any immediate medical attention and special treatment needed	No further relevant information available.

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.
For safety reasons unsuitable extinguishing agents:	Full jet water
Special hazards arising from the substance or mixture	No further relevant information available.
Advice for firefighters	
Protective equipment:	No special measures required.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures	Not required.
Environmental precautions:	Do not allow product to reach sewage system or any water course. Prevent seepage into sewage system, workpits and cellars. Inform respective authorities in case of seepage into water course or sewage system.
Methods and material for containment and cleaning up:	Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Ensure adequate ventilation.
Reference to other sections	See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

7 Handling and storage

Handling:	
Precautions for safe handling	No special precautions are necessary if used correctly.
Information about protection against explosions and fires:	Keep ignition sources away - Do not smoke. Protect against electrostatic charges.
Conditions for safe storage, including any incompatibilities	
Requirements to be met by storerooms and receptacles:	Store in a cool location.
Information about storage in one common storage facility:	Store away from foodstuffs.
Further information about storage conditions:	Store in cool, dry conditions in well sealed receptacles. Store receptacle in a well ventilated area.

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. 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: 67-63-0 propan-2-olEL STEL: 400 ppm
TWA: 200 ppmEV STEL: 400 ppm
TWA: 200 ppm**CAS: 109-87-5 dimethoxymethane**EL STEL: 1250 ppm
TWA: 1000 ppmEV TWA: 3,110 mg/m³, 1,000 ppm**CAS: 287-92-3 cyclopentane**EL TWA: 600 ppm
EXEV TWA: 1,720 mg/m³, 600 ppm

. 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.
Not required.

. Breathing equipment:

Protective gloves

. 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: Fluid

Color: Colorless

. Odor: Mild

. Odor threshold: Not determined.

. pH-value at 20 °C (68 °F): 6.9

. Change in condition

Boiling point/Boiling range: 52 °C (125.6 °F)

. Flash point: -18 °C (-0.4 °F)

. Flammability (solid, gaseous): Not applicable.

. Ignition temperature: 365 °C (689 °F)

. Decomposition temperature: Not determined.

. Auto igniting: Product is not selfigniting.

. Danger of explosion: Not determined.

. Explosion limits:

Lower: 1.6 Vol %

Upper: 17.6 Vol %

. Vapor pressure at 20 °C (68 °F): 530 hPa (397.5 mm Hg)

. Density at 20 °C (68 °F): 0.802 g/cm³ (6.6927 lbs/gal)

. Relative density: Not determined.

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. Vapor density	Not determined.
. Evaporation rate	Not determined.
. 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:	92.0 %
Solids content:	8.0 %
. 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:

. LD/LC50 values that are 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)

CAS: 109-87-5 dimethoxymethane

Oral	LD50	6,453 mg/kg (rat)
Dermal	LD50	> 5,000 mg/kg (rabbit)

. Primary irritant effect:

. on the skin:

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

Ätz-/Reizwirkung auf die Haut (4h)	(rabbit) (Acute Dermal Irritation/Corrosion) leicht reizend
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. on the eye:

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

Schwere Augenschädigung/-reizung	(rabbit) (Acute Eye Irritation/Corrosion) mäßig reizend
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. Sensitization: No sensitizing effects known.

. 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)

. Carcinogenic categories

. IARC (International Agency for Research on Cancer)

CAS: 67-63-0 propan-2-ol	3
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. NTP (National Toxicology Program)

None of the ingredients is listed.

. Reproductive toxicity

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

Oral NOAEL, Parents	500 mg/kg (rat) (Two-Generation Reproduction Toxicity)
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. Specific target organ toxicity - repeated exposure

CAS: 67-63-0 propan-2-olSTOT RE | mg/kg/day (rat)
at least 104 w 6h/d, 5d/w

12 Ecological information

. Toxicity

. Aquatic toxicity:

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: 109-87-5 dimethoxymethane

EC50 (48h)	> 1,000 mg/l (daphnia magna/gr. Wasserfloh)
LC50 (96h)	> 1,000 mg/l (Brachydanio rerio)

. Persistence and degradability

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

Biodegradability 30d | 70 – 84 % (aerob) ((Derterm. of the "Ready" Biodegr. Closed Bottle))

CAS: 109-87-5 dimethoxymethane

Biodegradability 30d | 88 %

. Behavior in environmental systems:

. Bioaccumulative potential

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

Log Pow | 0.05

. Mobility in soil No further relevant information available.

. Ecotoxicological effects:

. Remark: Harmful to fish

. Additional ecological information:

. General notes: Harmful to aquatic organisms
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

. Uncleaned packagings:

. Recommendation: Non contaminated packagings can be treated like household garbage.

14 Transport information

. UN-Number

. DOT/TDG, ADR, IMDG, IATA UN1993

. UN proper shipping name

. DOT/TDG	Flammable liquids, n.o.s. (Methylal, Cyclopentane)
. ADR	1993 Flammable liquids, n.o.s. (Methylal, Cyclopentane)
. IMDG, IATA	FLAMMABLE LIQUID, N.O.S. (METHYLAL, CYCLOPENTANE)

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<p>. Transport hazard class(es) . DOT/TDG (Transport dangerous goods):</p>	
	
<p>. Class . Label</p>	<p>3 Flammable liquids 3</p>
<p>. ADR</p>	
	
<p>. Class . Label</p>	<p>3 (F1) Flammable liquids 3</p>
<p>. IMDG, IATA</p>	
	
<p>. Class . Label</p>	<p>3 Flammable liquids 3</p>
<p>. Packing group . DOT/TDG, ADR, IMDG, IATA</p>	
<p>II</p>	
<p>. Environmental hazards:</p>	
<p>Not applicable.</p>	
<p>. Special precautions for user</p>	
<p>. Hazard identification number (Kemler code): . EMS Number: . Stowage Category</p>	<p>Warning: Flammable liquids 33 F-E, S-E B</p>
<p>. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</p>	
<p>Not applicable.</p>	
<p>. Transport/Additional information:</p>	
<p>. ADR . Excepted quantities (EQ)</p>	
<p>Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml</p>	
<p>. IMDG . Limited quantities (LQ) . Excepted quantities (EQ)</p>	
<p>1L Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml</p>	
<p>. UN "Model Regulation":</p>	
<p>UN 1993 FLAMMABLE LIQUID, N.O.S. (METHYLAL, CYCLOPENTANE), 3, II</p>	

15 Regulatory information

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

<p>. Section 355 (extremely hazardous substances): None of the ingredients is listed.</p>	
<p>. Section 313 (Specific toxic chemical listings): CAS: 67-63-0 propan-2-ol</p>	
<p>. TSCA (Toxic Substances Control Act): All components have the value ACTIVE.</p>	
<p>. MAK (German Maximum Workplace Concentration) None of the ingredients is listed.</p>	
<p>. Canadian substance listings: Canadian Domestic Substances List (DSL)</p>	
CAS: 67-63-0	propan-2-ol
CAS: 109-87-5	dimethoxymethane
CAS: 287-92-3	cyclopentane

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. Canadian Non-Domestic Substances List (NDSL)	
CAS: 294-62-2	Cyclododecan
. Canadian Ingredient Disclosure list (limit 0.1%)	
None of the ingredients is listed.	
. Canadian Ingredient Disclosure list (limit 1%)	
CAS: 67-63-0	propan-2-ol
CAS: 109-87-5	dimethoxymethane
CAS: 287-92-3	cyclopentane
. GHS label elements	The product is classified and labeled according to the Globally Harmonized System (GHS).
. Hazard pictograms	
	GHS02 GHS07
. Signal word	Danger
. Hazard-determining components of labeling:	propan-2-ol
. Hazard statements	Highly flammable liquid and vapour. Causes serious eye irritation. May cause drowsiness or dizziness. Harmful to aquatic life with long lasting effects.
. Precautionary statements	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground and bond container and receiving equipment. Use explosion-proof [electrical/ventilating/lighting] equipment. Use non-sparking tools. Take actions to prevent static discharges. Avoid breathing dust/fume/gas/mist/vapours/spray. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a poison center/doctor if you feel unwell. If eye irritation persists: Get medical advice/attention. In case of fire: Use CO2, powder or water spray to extinguish. Store in a well-ventilated place. Keep container tightly closed. Store in a well-ventilated place. Keep cool. Store locked up. Dispose of contents/container in accordance with local/regional/national/international regulations.
. 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 the latest revision of the safety data sheet	01/13/2023
. Abbreviations and acronyms:	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) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative

* Data compared to the previous version altered.