

Safety Data Sheet

acc. to OSHA HCS

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: Flattig 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 telephone number: 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(s) identification

Classification of the substance or mixture

- Flammable Liquids 2 H225 Highly flammable liquid and vapor.
- Eye Irritation 2A H319 Causes serious eye irritation.
- Specific Target Organ Toxicity - Single Exposure 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:

Hazard statements

propan-2-ol
Highly flammable liquid and vapor.
Causes serious eye irritation.
May cause drowsiness or dizziness.
Harmful to aquatic life with long lasting effects.
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting/equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Avoid breathing dust/fume/gas/mist/vapors/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/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.

Information pertaining to particular dangers for man and environment:

NFPA ratings (scale 0 - 4)



Health = 2
Fire = 3
Reactivity = 0

HMIS-ratings (scale 0 - 4)



Health = 2
Fire = 3
Reactivity = 0

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- . **Other hazards**
- . Results of PBT and vPvB assessment
- . PBT: Not applicable.
- . vPvB: Not applicable.

3 Composition/information on ingredients

. **Chemical characterization: Mixtures**

. Dangerous components:

CAS: 67-63-0	propan-2-ol ⚠ Flammable Liquids 2, H225; ⚠ Eye Irritation 2A, H319; Specific Target Organ Toxicity - Single Exposure 3, H336	25 – 50%
CAS: 109-87-5	dimethoxymethane ⚠ Flammable Liquids 2, H225	25 – 50%
CAS: 287-92-3	cyclopentane ⚠ Flammable Liquids 2, H225; Aquatic Chronic 3, H412	10 – 25%

. 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: No further relevant information available.
- . 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**: No special measures required.
- . Protective equipment:

6 Accidental release measures

. **Personal precautions, protective equipment and emergency procedures**

- . **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.
- . **Protective Action Criteria for Chemicals**

. PAC-1:

CAS: 67-63-0	propan-2-ol	400 ppm
CAS: 109-87-5	dimethoxymethane	230 ppm
CAS: 287-92-3	cyclopentane	1800* ppm

. PAC-2:

CAS: 67-63-0	propan-2-ol	2000* ppm
CAS: 109-87-5	dimethoxymethane	2500* ppm
CAS: 287-92-3	cyclopentane	3800* ppm

. PAC-3:

CAS: 67-63-0	propan-2-ol	12000** ppm
CAS: 109-87-5	dimethoxymethane	15000** ppm

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CAS: 287-92-3 | cyclopentane

23000*** ppm

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.
- . 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-ol

PEL	Long-term value: 980 mg/m ³ , 400 ppm
REL	Short-term value: 1225 mg/m ³ , 500 ppm Long-term value: 980 mg/m ³ , 400 ppm
TLV	Short-term value: 400 ppm Long-term value: 200 ppm BEI, A4

CAS: 109-87-5 dimethoxymethane

PEL	Long-term value: 3100 mg/m ³ , 1000 ppm
REL	Long-term value: 3100 mg/m ³ , 1000 ppm
TLV	Long-term value: 1000 ppm

CAS: 287-92-3 cyclopentane

REL	Long-term value: 1720 mg/m ³ , 600 ppm
TLV	Long-term value: 1000 ppm EX

. Ingredients with biological limit values:

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

BEI	40 mg/L Medium: urine Time: end of shift at end of workweek Parameter: Acetone (background, nonspecific)
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. Additional information: The lists that were valid during the creation were used as basis.

Exposure controls

- . Personal protective equipment: Wash hands before breaks and at the end of work.
- . General protective and hygienic measures: 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

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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.

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 %
VOC content: 92.00 %

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)

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. Primary irritant effect:

. on the skin:

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

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

. on the eye:

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

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

. 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

. NTP (National Toxicology Program)

None of the ingredients is listed.

. OSHA-Ca (Occupational Safety & Health Administration)

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)

. Specific target organ toxicity - repeated exposure

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

STOT RE | mg/kg/day (rat)

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

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

14 Transport information

. UN-Number	
. DOT, ADR, IMDG, IATA	UN1993
. UN proper shipping name	
. DOT	Flammable liquids, n.o.s. (Methylal, Cyclopentane)
. ADR	1993 FLAMMABLE LIQUID, N.O.S. (METHYLAL, CYCLOPENTANE)
. IMDG, IATA	FLAMMABLE LIQUID, N.O.S. (METHYLAL, CYCLOPENTANE)
. Transport hazard class(es)	
. DOT	
	
. Class	3 Flammable liquids
. Label	3
. ADR	
	
. Class	3 (F1) Flammable liquids
. Label	3
. IMDG, IATA	
	
. Class	3 Flammable liquids
. Label	3
. Packing group	
. DOT, ADR, IMDG, IATA	II
. Environmental hazards:	
Not applicable.	
. Special precautions for user	
. Hazard identification number (Kemler code):	Warning: Flammable liquids
. EMS Number:	33
. Stowage Category	F-E,S-E
	B
. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	
Not applicable.	
. Transport/Additional information:	
. ADR	
. Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
. IMDG	
. Limited quantities (LQ)	1L
. Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
. UN "Model Regulation":	
UN 1993 FLAMMABLE LIQUID, N.O.S. (METHYLAL, CYCLOPENTANE), 3, II	

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

. 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: 67-63-0 | propan-2-ol 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
. Hazard pictograms The product is classified and labeled according to the Globally Harmonized System (GHS).



GHS02 GHS07

. Signal word
Danger

. Hazard-determining components of labeling:
. Hazard statements

propan-2-ol
Highly flammable liquid and vapor.
Causes serious eye irritation.
May cause drowsiness or dizziness.
Harmful to aquatic life with long lasting effects.
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting/equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Avoid breathing dust/fume/gas/mist/vapors/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/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

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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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

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

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

BEI: Biological Exposure Limit

Flammable Liquids 2: Flammable liquids – Category 2

Eye Irritation 2A: Serious eye damage/eye irritation – Category 2A

Specific Target Organ Toxicity - Single Exposure 3: Specific target organ toxicity (single exposure) – Category 3

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

* Data compared to the previous version altered.