

SAFETY DATA SHEET

Additive A36

1. Product and company identification

Product name : Additive A36
Product code : 29147-02
Date of issue/ Date of revision : 6/20/2025
Version : 1.03

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

Identified uses
Industrial use only. Additive
Uses advised against
Consumer use.

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Tel: +81 52-750-7560
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e-mail address of person responsible for this SDS : reach@blaser.com

Emergency telephone number (with hours of operation) : 0120 015 230 (24時間/7日)

2. Hazards identification

GHS Classification : HAZARDOUS TO THE AQUATIC ENVIRONMENT - ACUTE HAZARD - Category 1
HAZARDOUS TO THE AQUATIC ENVIRONMENT - CHRONIC HAZARD - Category 1

GHS label elements

Hazard pictograms :



Signal word : Warning

Hazard statements : H410 - Very toxic to aquatic life with long lasting effects.

Precautionary statements

General : Not applicable.

Prevention : P273 - Avoid release to the environment.

Response : P391 - Collect spillage.

2. Hazards identification

- Storage** : Not applicable.
- Disposal** : P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	Identifiers	CSCL	%
1,2-Ethanediamine, N1,N1,N2,N2-tetramethyl-, polymer with 1,1'-oxybis[2-chloroethane]	CAS: 31075-24-8	7-1532	≥10 - ≤25
2-phosphonobutane-1,2,4-tricarboxylic acid	CAS: 37971-36-1	2-2935	≤5.0
2-amino-2-methylpropanol	CAS: 124-68-5	9-118	≤3.0
2-aminobutan-1-ol	CAS: 96-20-8	2-316	<1.0

Additional information :

Neutralisation product: Equilibrium of Ionic Pairs according to REACH Annex V, 4.

4. First aid measures

- Inhalation** : Avoid breathing vapor or mist. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Continue to rinse for at least 10 minutes. Check for and remove any contact lenses. Get medical attention if irritation occurs.
- Ingestion** : Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training.
- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

5. Fire-fighting measures

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.

- Specific hazards arising from the chemical** : In a fire or if heated, a pressure increase will occur and the container may burst. This material is very toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

5. Fire-fighting measures

- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

7. Handling and storage

Handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Avoid release to the environment. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Storage

- Conditions for safe storage** : Store between the following temperatures: 0 to 40°C (32 to 104°F). Shelf life: (minimum) 24 months. Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental

7. Handling and storage

contamination. See Section 10 for incompatible materials before handling or use.

8. Exposure controls/personal protection

Appropriate engineering controls : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Occupational exposure limits

None.

Biological exposure indices

No exposure indices known.

Individual protection measures

- Respiratory protection** : A respirator is not needed under normal and intended conditions of product use. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators.
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. Wear suitable gloves tested to EN374. Nitrile gloves. thickness 0.3 mm (minimum) .
- Eye protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
- Skin protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved before handling this product.
Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved before handling this product.

9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

- Physical state** : Liquid.
- Color** : Yellow.
- Odor** : Characteristic.
- pH** : 6 to 7 [Conc. (% w/w): 5%]
- Melting point/freezing point** : Not available.
- Softening point** : Not available.
- Pour point** : <0°C
- Boiling point or initial boiling point and boiling range** : Not available.
- Flash point** : Closed cup: >170°C
Open cup: Not applicable.
- Flammability** : Not available.
- Lower and upper explosion limit/flammability limit** : Not available.
- Vapor pressure** : Not available.
- Relative vapor density** : Not available.

9. Physical and chemical properties

Relative density	: Not available.
Density	: 1.05 g/cm ³
Solubility in water	: Not available.
Miscible with water	: Yes.
Partition coefficient: n-octanol/water	: Not applicable.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
Viscosity	: Kinematic (40°C): 2 mm ² /s (2 cSt)
<u>Particle characteristics</u>	
Median particle size	: Not applicable.

10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: Shelf life: (minimum) 24 months.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: No specific data.
Incompatible materials	: No specific data.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. Toxicological information

Acute toxicity

Product/ingredient name	Result
1,2-Ethanediamine, N1,N1,N2, N2-tetramethyl-, polymer with 1,1'-oxybis [2-chloroethane]	Rat - Oral - LD50 1951 mg/kg
-	Rabbit - Dermal - LD50 >2000 mg/kg
-	Rat - Inhalation - LC50 Vapor 5.8 mg/l [4 hours]
2-phosphonobutane-1,2,4-tricarboxylic acid	Rat - Oral - LD50 >2000 mg/kg
-	Rabbit - Dermal - LD50 >2000 mg/kg
2-amino-2-methylpropanol	Rabbit - Dermal - LD50 >2000 mg/kg

Acute toxicity estimates

11. Toxicological information

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
Additive A36	>2000	>2000	N/A	73.3	N/A
1,2-Ethanediamine, N1,N1,N2,N2-tetramethyl-, polymer with 1,1'-oxybis[2-chloroethane]	1951	2500	N/A	11	N/A
2-phosphonobutane-1,2,4-tricarboxylic acid	2500	2500	N/A	N/A	N/A
2-amino-2-methylpropanol	N/A	2500	N/A	N/A	N/A
2-aminobutan-1-ol	500	N/A	N/A	N/A	N/A

Conclusion/Summary [Product] : Not available.

Skin corrosion/irritation

Not available.

Conclusion/Summary [Product] : Not available.

Serious eye damage/eye irritation

Not available.

Conclusion/Summary [Product] : pH value - Used for classification

Respiratory corrosion/irritation

Not available.

Conclusion/Summary [Product] : Not available.

Respiratory or skin sensitization

Not available.

Skin

Conclusion/Summary [Product] : Not available.

Respiratory

Conclusion/Summary [Product] : Not available.

Germ cell mutagenicity

Not available.

Conclusion/Summary [Product] : Not available.

Carcinogenicity

Not available.

Conclusion/Summary [Product] : Not available.

Reproductive toxicity

Not available.

Conclusion/Summary [Product] : Not available.

11. Toxicological information

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

12. Ecological information

Ecotoxicity

Product/ingredient name

1,2-Ethanediamine, N1,N1,N2,
N2-tetramethyl-, polymer with 1,1'-oxybis
[2-chloroethane]

-

-

2-amino-2-methylpropanol

2-aminobutan-1-ol

-

Result

Acute - EC50

Daphnia
0.37 mg/l [48 hours]

Acute - LC50 - Fresh water

Fish
0.047 mg/l [96 hours]

Acute - NOEC - Fresh water

Fish
0.037 mg/l [96 hours]

LC50

Daphnia
193 mg/l [48 hours]

LC50

Fish - Goldfish
270 mg/l [4 days]

NOEC

Algae
0.11 mg/l [4 days]

Conclusion/Summary [Product] : Not available.

Persistence and degradability

Not available.

Conclusion/Summary [Product] : Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
2-aminobutan-1-ol	-	93%; <28 day(s)	Readily

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
2-phosphonobutane- 1,2,4-tricarboxylic acid	-1.36	-	Low
2-amino-2-methylpropanol	-0.63	-	Low
2-aminobutan-1-ol	-0.45	-	Low

Mobility in soil

**Soil/Water partition
coefficient** : Not available.

12. Ecological information

Hazardous to the ozone layer

Not applicable.

Other adverse effects

No known significant effects or critical hazards.

13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

14. Transport information

	UN	IMDG	IATA
UN number	UN3082	UN3082	UN3082
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (1,2-Ethanediamine, N1,N1,N2, N2-tetramethyl-, polymer with 1,1'-oxybis[2-chloroethane])	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (1,2-Ethanediamine, N1,N1,N2, N2-tetramethyl-, polymer with 1,1'-oxybis[2-chloroethane])	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (1,2-Ethanediamine, N1,N1, N2,N2-tetramethyl-, polymer with 1,1'-oxybis [2-chloroethane])
Transport hazard class(es)	9  	9  	9  
Packing group	III	III	III
Environmental hazards	Yes.	Yes.	Yes.

Additional information

- UN** : This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.
- IMDG** : This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.
- IATA** : This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8.

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14. Transport information

Transport in bulk according : Not available.
to IMO instruments

15. Regulatory information

Fire Service Law

Class	Category/ Product name
Specified flammables	Combustible liquid

Industrial Safety and Health Act

Not applicable.

Substance(s) requiring labelling

Ingredient name	%	Status	Reference number
2-Amino-2-methyl-1-propanol(2025-04)	≤3.0	Listed	2-110 (2025-04)

Chemicals requiring notification

Ingredient name	%	Status	Reference number
2-Amino-2-methyl-1-propanol(2025-04)	≤3.0	Listed	2-110 (2025-04)

Chemical substances that cause skin disorders, etc. and other chemical substances that must be handled with impermeable protective equipment etc. based on special chemical regulations. (Article 594-2 Paragraph 1 of Ordinance on ISH)

Ingredient name	CAS	%	Status	Remarks
2-amino-2-methylpropanol	124-68-5	≤3.0	Skin irritating hazardous substances	-

Corrosive liquid : Not listed

ISHL Enforcement Order : Not applicable.

Appendix 1 - Dangerous Substances

Pollutant Release and Transfer Registers (PRTR)

16. Other information

History

Date of printing : 6/20/2025

Date of revision : 6/20/2025

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Version : 1.03

Prepared by : Product Stewardship Blaser Swissslube AG

16. Other information

Key to abbreviations

: ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
N/A = Not available
SGG = Segregation Group
UN = United Nations

Procedure used to derive the classification

Classification	Justification
HAZARDOUS TO THE AQUATIC ENVIRONMENT - ACUTE HAZARD - Category 1	Calculation method
HAZARDOUS TO THE AQUATIC ENVIRONMENT - CHRONIC HAZARD - Category 1	Calculation method

References

: Not available.

Indicates information that has changed from previously issued version.

Notice to reader

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