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MATERIAL SAFETY DATA SHEET (MSDS)

SECTION 1 Product identifiers

Product name : Ammonium bromide, GR 99.5% Product Code: A 2047 CAS-No. : 12124-97-9

SECTION 2: Hazards identification

SECTION 2: Hazards identification	
2.1 Classification of the substance or m	ixture
Classification according to Regulation (EC) No 1272/2008
Eye irritation (Category 2), H319	
For the full text of the H-Statements me	ntioned in this Section, see Section 16
2.2 Label elements	
	1070/0000
Labelling according Regulation (EC) No) 12/2/2006
Pictogram	
Signal Word	Warning
Hazard statement(s)	
H319	Causes serious eye irritation.
Precautionary statement(s)	
P264	Wash skin thoroughly after handling.
P280	Wear eye protection/ face protection.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes.
	Remove contact lenses, if present and easy to do. Continue
	rinsing.
P337 + P313	If eye irritation persists: Get medical advice/ attention.
Supplemental Hazard	none
Statements	
Reduced Labeling	(<= 125 ml)
Pictogram	
Signal Word	Warning
Hazard statement(s)	none
Precautionary	none

Hazard statement(s) Precautionary statement(s) Supplemental Hazard Statements 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

none

none

SECTION 3: Composition/information on ingredients

3.1 Substances Formula : H4BrN Molecular weight : 97,94 g/mol CAS-No. : 12124-97-9 EC-No. : 235-183-8

Component	Classification	Concentration
ammonium bromide		
CAS-No. 12124-97-9	Eye Irrit. 2; H319	<= 100 %
EC-No. 235-183-8		

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first-aid measures
General advice
Show this material safety data sheet to the doctor in attendance.
If inhaled
After inhalation: fresh air.
In case of skin contact
In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with

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water/ shower. In case of eye contact After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses. If swallowed After swallowing: immediately make victim drink water (two glasses at most). Consult a physician. 4.2 Most important symptoms and effects, both acute and delayed The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11 4.3 Indication of any immediate medical attention and special treatment needed No data available **SECTION 5: Firefighting measures** 5.1 Extinguishing media Suitable extinguishing media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Unsuitable extinguishing media For this substance/mixture no limitations of extinguishing agents are given. 5.2 Special hazards arising from the substance or mixture Nitrogen oxides (NOx) Hydrogen bromide gas Not combustible. Ambient fire may liberate hazardous vapours. 5.3 Advice for firefighters In the event of fire, wear self-contained breathing apparatus. 5.4 Further information Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system. **SECTION 6: Accidental release measures** 6.1 Personal precautions, protective equipment and emergency procedures Advice for non-emergency personnel: Avoid inhalation of dusts. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8. 6.2 Environmental precautions Do not let product enter drains. 6.3 Methods and materials for containment and cleaning up Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions

(see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts. 6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
For precautions see section 2.2.
7.2 Conditions for safe storage, including any incompatibilities
Storage conditions
Tightly closed. Dry.
Air sensitive. Hygroscopic.
Storage class
Storage class
Storage class (TRGS 510): 11: Combustible Solids
7.3 Specific end use(s)
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

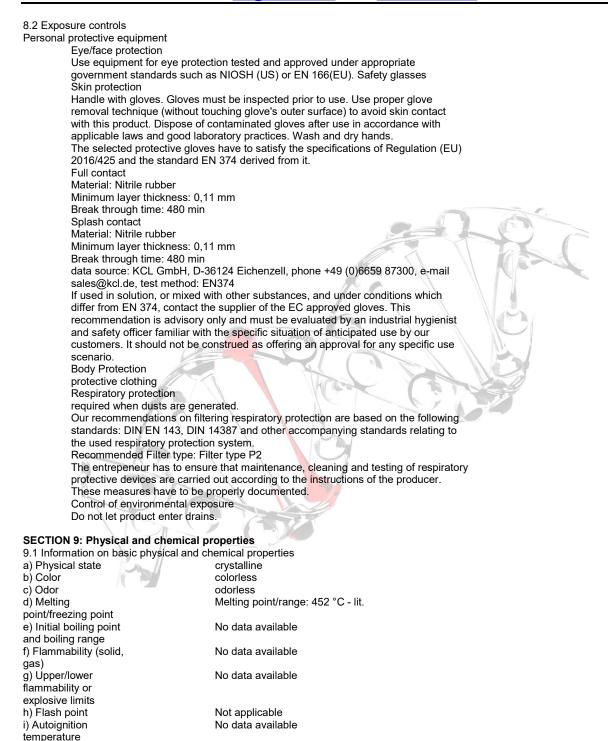
Ingredients with workplace control parameters

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temperature

j) Decomposition

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No data available

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k) pH I) Viscosity

m) Water solubility n) Partition coefficient: n-octanol/water o) Vapor pressure p) Density Relative density q) Relative vapour density r) Particle characteristics s) Explosive properties t) Oxidizing properties 9.2 Other safety information Surface tension 72,9 mN/m at 0,4g/l at 20 °C - Surface tension Dissociation constant 9.38 at 25 °C

5,0 - 6,5 at 50 g/l at 25 °C Viscosity, kinematic: No data available Viscosity, dynamic: No data available 970 g/l at 25 °C Not applicable for inorganic substances

1 hPa at 197,7 °C 2,43 g/cm3 at 25 °C - lit. No data available No data available

No data available

No data available No data available

SECTION 10: Stability and reactivity

10.1 Reactivity No data available 10.2 Chemical stability The product is chemically stable under standard ambient conditions (room temperature) 10.3 Possibility of hazardous reactions Risk of explosion with: halogen-halogen compounds Potassium Violent reactions possible with: Strong acids strong alkalis 10.4 Conditions to avoid Avoid moisture. no information available 10.5 Incompatible materials No data available 10.6 Hazardous decomposition products In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects Routes of Entry: Absorbed through skin. Dermal contact. Eye contact. Toxicity to Animals: Oral LD50 Rat: 1500 mg/kg; Dermal LD50 Rabbit: 2000mg/kg Inhalation LC50 Rat: > 50mg/L. Chronic Effects on Humans: CARCINOGENIC EFFECTS: Classified None. by NTP, None. by OSHA, None. by NIOSH. Other Toxic Effects on Humans: Hazardous in case of skin contact (irritant), of inhalation (lung irritant). Special Remarks on Toxicity to Animals: Not available. Special Remarks on Othronic Effects on Humans: Not available. Special Remarks on other Toxic Effects on Humans: Not available.

SECTION 12: Ecological information

12.1 Toxicity Toxicity to fish static test LC50 - Lepomis macrochirus (Bluegill) - > 1.000 mg/l - 96 h (US-EPA) Toxicity to daphnia and other aquatic invertebrates static test EC50 - Daphnia magna (Water flea) - >= 1.000 mg/l - 48

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(US-EPA) Remarks: (in analogy to similar products) The value is given in analogy to the following substances: sodium bromide Toxicity to algae static test ErC50 - Skeletonema costatum (marine diatom) - > 400 mg/l - 72 h (OECD Test Guideline 201) Remarks: (in analogy to similar products) The value is given in analogy to the following substances: sodium bromide Toxicity to bacteria static test EC50 - activated sludge - 1.739,4 mg/l - 3 h (OECD Test Guideline 209) Toxicity to fish(Chronic toxicity) semi-static test NOEC - Poecilia reticulata (guppy) - 10 mg/l - 124 d Remarks: (in analogy to similar products) (ECHA) The value is given in analogy to the following substances: sodium bromide Toxicity to daphnia and other aquatic invertebrates(Chronic toxicity) semi-static test NOEC - Daphnia magna (Water flea) - 7,5 mg/l - 21 d Remarks: (in analogy to similar products) (ECHA) The value is given in analogy to the following substances: sodium bromide 12.2 Persistence and degradability The methods for determining the biological degradability are not applicable to inorganic substances. 12.3 Bioaccumulative potential No data available 12.4 Mobility in soil No data available 12.5 Results of PBT and vPvB assessment This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher. 12.6 Endocrine disrupting properties Product: Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. 12.7 Other adverse effects No data available **SECTION 13: Disposal considerations** 13.1 Waste treatment methods Product See www.retrologistik.com for processes regarding the return of chemicals and containers, or contact us there if you have further questions. **SECTION 14: Transport information** 14.1 UN number ADR/RID: -IMDG: -

14.2 UN proper shipping name

IATA: -

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ADR/RID:	Not dangerous go	ods		
IMDG:	Not dangerous goods			
IATA:	Not dangerous goods			
14.3 Transport haz	zard class(es)			
ADR/RID: -		IMDG: -		IATA: -
14.4 Packaging gr	oup			
ADR/RID: -		IMDG: -		IATA: -
14.5 Environmenta	al hazards			
ADR/RID: no		IMDG Marine pollutant: no		IATA: no
14.6 Special preca	autions for user			
No data available				
Further information	า			
Not closelfied as d	angarous in the mas	ning of transport regulations		

Not classified as dangerous in the meaning of transport regulations.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.
Other regulations
Take note of Dir 94/33/EC on the protection of young people at work.
15.2 Chemical Safety Assessment
For this product a chemical safety assessment was not carried out

Section 16: Other Information

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.

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