Otto Chemie Pvt Ltd

An ISO 9001 : 2015 & GMP Certified Company Office : No 603, 6th Floor, Tardeo AC Market, 87, Tardeo Road, Tardeo, Mumbai, Maharashtra 400034, India (BHARAT) Tel : + 91 98200 41841 Email : <u>info@ottokemi.com</u> Web : <u>www.ottokemi.com</u>

MATERIAL SAFETY DATA SHEET (MSDS)

SECTION 1: Product identifiers

Product Name Aluminium nitrate, 98% Product Code A 1745 CAS No: 7784-27-2

1.2. Relevant identified uses of the substance or mixture and uses advised against Use : Industrial. For professional use only.
1.3. Details of the supplier of the safety data sheet Company identification OTTO CHEMIE PVT LTD No 603, 6th Floor, Tardeo AC Market, 87, Tardeo Road, Tardeo, Mumbai, Maharashtra 400034, India (BHARAT)

1.4. Emergency telephone number Phone no. : + 91 98200 41841 (10 : 00 am - 06 : 00 pm)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture Serious eye damage, (Category 1) H318: Causes serious eye damage. 2.2 Label elements Labelling according Regulation (EC) No 1272/2008 Pictogram Signal Word Hazard Statements H318 Precautionary Statements P280 P305 + P351 + P338 Under the substance or mixture Causes serious eye damage. Wear eye protection/ face protection IF IN EYES: Rinse cautiously with w

Wear eye protection/ face protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. none

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. Ecological information:

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. Toxicological information:

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.

SECTION 3: Composition/information on ingredients

3.1 Substances	
Formula	: AIN3O9 · 9H2O
Molecular weight	: 375,13 g/mol
CAS-No.	: 7784-27-2
EC-No.	: 236-751-8

Component	Classification	Concentration
Aluminium nitrate nonahydrate		
CAS-No 7784-27-2	Eye Dam. 1; H318	<= 100 %
EC-No. 236-751-8		

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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 water/ shower. In case of eye contact After eye contact: rinse out with plenty of water. Immediately 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) Aluminum oxide 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.

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Storage class Storage class (TRGS 510): 13: Non 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 8.2 Exposure controls Personal protective equipment Eye/face protection Use equipment for eve protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Tightly fitting safety goggles Skin protection This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de). Full contact substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de). Splash contact **Body Protection** protective clothing Respiratory protection required when dusts are generated. Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system. Recommended Filter type: Filter type P2 The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented. Control of environmental exposure Do not let product enter drains. **SECTION 9: Physical and chemical properties** 9.1 Information on basic physical and chemical properties crystalline a) Physical state b) Color colorless c) Odor of nitric acid d) Melting Melting point/range: 73 °C - lit. point/freezing point e) Initial boiling point 135 °C - (decomposition) and boiling range f) Flammability (solid, The product is not flammable. gas). g) Úpper/lower No data available flammability or explosive limits h) Flash point does not flash i) Autoignition No data available temperature j) Decomposition No data available temperature k) pH 2,5 - 3,5 at 50 g/l at 25 °C I) Viscosity Viscosity, kinematic: No data available Viscosity, dynamic: No data available

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m) Water solubility

n) Partition coefficient: n-octanol/water o) Vapor pressure p) Density 1,72 g/cm3 at 20 °C Relative density q) Relative vapor density r) Particle characteristics s) Explosive properties t) Oxidizing properties 9.2 Other safety information No data available 41,9 g/l at 20 °C - Regulation (EC) No. 440/2008, Annex, A.6completely soluble42,9 g/l at 25 °C - Regulation (EC) No. 440/2008, Annex, A.6- completely soluble Not applicable for inorganic substances

No data available No data available

No data available

No data available

Not classified as explosive. The substance or mixture is not classified as oxidizing.

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: Reducing agents Cyanides Esters Strong acids Isocyanates Powdered metals sulfur 10.4 Conditions to avoid Avoid moisture. no information available 10.5 Incompatible materials various metals, Mild steel 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 other Toxic Effects on Humans: Not available.

SECTION 12: Ecological information

12.1 Toxicity	
Toxicity to fish	semi-static test LC50 - Danio rerio (zebra fish) - > 0,105 mg/l - 96 h
	(OECD Test Guideline 203)
	Remarks: (above the solubility limit in the test medium)
	(in analogy to similar products)
	The value is given in analogy to the following substances:
	ALUMINIUM SULFATE TETRADECAHYDRATE
Toxicity to bacteria	Remarks: (in analogy to similar products)
	The value is given in analogy to the following substances:

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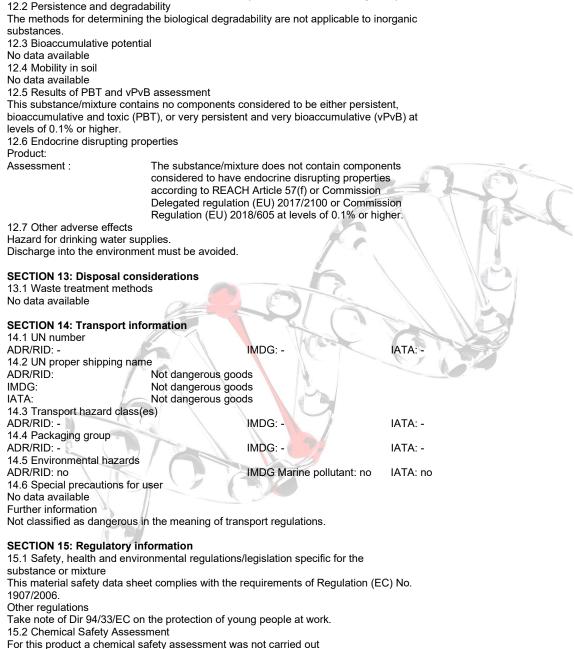
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> aluminium(III) chloride, anhydrous (Aluminium nitrate nonahydrate)



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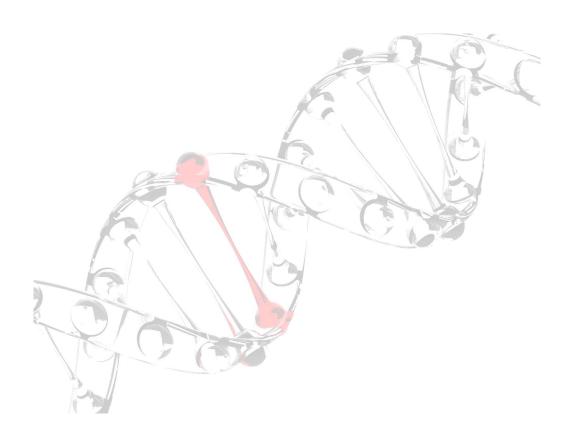
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SACTION 16: Other Information

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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