



Samchun Chemicals

Material Safety Data Sheet

Aluminum sulfate, Octadecahydrate

Section 1 – PRODUCT AND COMPANY IDENTIFICATION

1. Product Identifier	Aluminum sulfate, octadecahydrate;
2. Recommended Use & Uses advised against	Sulfuric acid, Aluminum salt octahydrate Uses for Laboratory and R&D only
3. Information of Supplier	SAMCHUN PURE CHEMICAL CO.,LTD ADDRESS; (Mogok-dong) 117, Sandan-ro 16Beon-gil, Pyeongtaek-si, Gyeonggi-do, Korea Emergency Phone; 82-31-668-0700/3 Department; Safety & Environment dep. Web site; http://www.samchun.com

Section 2 – HAZARDS and DANGER IDENTIFICATION

1.GHS Classification- Identification	N/A
2. Label and Mark including Precautionary Statement	
◦Label elements	N/A
◦Signal word	N/A
◦Hazard · Danger statement	N/A
◦Precautionary statement	
Precaution	N/A
Measures	N/A
Storage	N/A
Dispose	N/A
3. Other Hazard-Risk which are not included in the classification criteria	
NFPA index(0~4steps) : Health=N/A, Fire=N/A, Reaction=N/A	

Section 3 – COMPOSITION AND INFORMATION ON INGREDIENTS

Chemical Name	Other Name	CAS No.	Content (%)
Aluminum sulfate, octadecahydrate	Sulfuric acid, Aluminum salt octahydrate	7784-31-8	100

Section 4 – FIRST AID MEASURES

1. Eye Contact	Rinse with plenty of water for at least 15minutes and get medical attention immediately.
2. Skin Contact	Take off contaminated cloths and shoes immediately, wash with plenty Of water and soap for at least 15minutes.
3. Inhalation	Move to fresh air immediately, if breathing is difficult, induce artificial respiration and immediate medical treatment is required.
4. Ingestion	Do not induce vomiting and Call a physician immediately.
5. Immediate medical attention and Notes for physician	Keep medical personnel aware of and take protective measures.

Section 5 – FIRE-FIGHT MEASURES

1. Suitable extinguish media	Extinguishing Media: Dry chemical, carbon dioxide, water, regular foam Inappropriate Extinguishing Media: N/A
2. Special hazards arising from the substance	Thermal decomposition products: sulfur oxides

3. Special protective equipment and Precautions for fire-fighters

Move containers from fire area if you can do without risk. When extinguishing a fire, be sure to wear personal protective equipment. If it is not possible to extinguish the fire, withdraw immediately. Keep containers cool by spraying with water for a long time, even after the fire is out. Isolate hazardous areas and deny access to people.

Section 6 – ACCIDENTAL RELEASE MEASURES

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| 1. Personal precautions and Emergency procedures | Don't touch leakages and avoid inhale and skin contact, ventilate and use air respiratory in closed room, remove ignition source. |
| 2. Environmental precautions | Minimize leak/spill, collect and keep leak/spill in container |
| 3. Methods and material for containment and cleaning up | Remove residue with high-efficient cleaner |

Section 7 – HANDING AND STORAGE

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| 1. Precautions for safe Handling | Skin contact, inhalation of vapors and prevent intrusion to the eye, all containers will be grounded. |
| 2. Conditions for safe storage | Keep container tightly closed in a dry, cool and well-ventilated place. Keep away from incompatible materials. |

Section 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

1. Occupational exposure limit, biological exposure limit

National law of Safety management of

Occupational Health and Safety Act

-TWA: 2 mg/m³ Aluminum (soluble salt)

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| 2. Appropriate Engineering controls | Check conditions of exposure criteria, operation local ventilation during work |
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3. Personal protective equipment

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| ◦ Respiratory protection | Respiratory protection should be certified by the Health and Safety Authority. It is concerned about the harmfulness of the human body depending on the working environment, it should wear respirator, air-purifying respirator. There is no hazard due to chemicals, no protection is required under normal conditions |
| ◦ Eye-protection | There is no hazard due to chemicals, no protection is required under normal conditions. Install eye wash facilities and emergency eyewash stations near chemical handling sites |
| ◦ Hand protection | There is no hazard due to chemicals, no protection is required under normal conditions |
| ◦ Skin and body protection | There is no hazard due to chemicals, no protection is required under normal conditions |

Section 9 – PHYSICAL AND CHEMICAL PROPERTIES

1. Physical state and color	Solid(White)	2. Odor	Odorless
3. threshold	N/A	4. pH	3~4(2% solution)
5. Melting/Freezing point	86°C	6. Boiling point/range	N/A
7. Flashing point	N/A	8. Evaporation speed	N/A
9. Flammability(solid, gas)	N/A	10. Flash or Explosion limit upper / lower	N/A
11. Vapor pressure	N/A	12. Solubility	Soluble
13. Vapor density	N/A	14. Gravity	1.69
15. n-octanol-water Partition coefficient	N/A	16. Self ignition temp(°C)	N/A
17. Cracking temp(°C)	N/A	18. Viscosity	N/A
19. Molecular Weight	666.4		

Section 10 – STABILITY AND REACTIVITY

1. Chemical stability and Possibility of Hazardous Reactions	Stable under normal temp. and pressure Not polymerize
2. Conditions to Avoid	Avoid heat, sparks, flames and other sources of ignition. Avoid contact with incompatible materials
3. Incompatible Materials	Base, metal
4. Hazardous Decomposition Products	Thermal decomposition products: sulfur oxides

Section 11 – TOXICOLOGICAL INFORMATION

1. Information on the likely routes of exposure.

N/A

2. Health hazard information

◦Acute toxic	Oral : LD50 9000mg/kg Rat Skin : N/A Inhalation : N/A
◦Serious skin corrosive / irritation	N/A
◦Serious eye damage / irritation	N/A
◦Respiratory sensitization	N/A
◦Skin sensitization	N/A
◦Carcinogenicity	N/A
◦Germ cell Mutagenicity	N/A
◦Reproductive toxic	N/A
◦Specific target organ toxicity (single exposure)	N/A
◦Specific target organ toxicity (repeated exposure)	N/A
◦Aspiration hazard	N/A

Section 12 – ECOLOGICAL INFORMATION

1. Aquatic and Terrestrial eco toxicity	Fish toxicity : N/A Invertebrate toxicity : N/A Sea algae : N/A
2. Persistence and degradability	Persistence : N/A Degradability : N/A
3. Bioaccumulative potential	Concentrations : N/A Bioaccumulative : N/A
4. Mobility in soil	N/A
5. Other adverse effects	N/A

Section 13 – Disposable considerations

1. Waste methods	Dispose in accordance with local regulations.
2. Waste warning	Dispose prohibited substances and waste separately from others.

Section 14 – TRANSPORT INFORMATION

1. UN No.	Non-described
2. Proper shipping Name	Non-described
3. Hazard class	Non-described
4. Packing group	Non-described
5. Marine pollutant	Non-described

**6.Particular safety
Measures for
transportation**

Non-described

Section 15 – REGULATORY INFORMATION

1.Occupation safety and health acts	Standard material of exposure Test material of working environment (Test period; 6months) Hazardous material of administration objective Special diagnosis material of health (Diagnosis period; 12months)
2. Chemical Substances Control Act	Non-described
3. National law of Safety management of hazardous material	Non-described
4.National law of management of Wastes	Designated Waste
5.Other domestic and foreign law	N/A

Section 16 – OTHER INFORMATION

1. Material source	A chemical information MSDS Safety and Health Agency National Institute of Environmental Research Chemical Information Systems Korea Industrial Technology National Fire Hazardous Materials Information System
1. The 1st edition	2002.07.30
2. Revision and The final revision	6 / 2019.01.25
. Other references	

*** The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.**