



1. Identification

Product identifier **Aluminum sulfide (Al₂S₃) pieces**
Other means of identification
SDS number MKE-0316
Materion Code MKE-0316
CAS number 1302-81-4
Synonyms Aluminum sulfide (Al₂S₃) * Dialuminium trisulphide * Dialuminium trisulfide

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name Materion Advanced Chemicals Inc.
Address 407 N 13th Street
1316 W. St. Paul Avenue
Milwaukee, WI 53233
United States
Telephone 414.212.0257
E-mail advancedmaterials@materion.com
Contact person Noreen Atkinson
Emergency phone number Chemtrec 800.424.9300

2. Hazard(s) identification

Physical hazards Substances and mixtures which, in contact with water, emit flammable gases Category 2
Health hazards Not classified.
Environmental hazards Not classified.
OSHA defined hazards Not classified.

Label elements



Signal word Danger
Hazard statement In contact with water releases flammable gas.
Precautionary statement
Prevention Keep away from any possible contact with water, because of violent reaction and possible flash fire. Handle under inert gas. Protect from moisture. Wear protective gloves/eye protection/face protection.
Response Brush off loose particles from skin. Immerse in cool water/wrap in wet bandages.
Storage Store in a dry place. Store in a closed container.
Disposal Not available.
Hazard(s) not otherwise classified (HNOC) None known.
Supplemental information None.

3. Composition/information on ingredients

Substances

Chemical name	Common name and synonyms	CAS number	%
Aluminum sulfide	Aluminum sulfide (Al ₂ S ₃) Dialuminium trisulphide Dialuminium trisulfide	1302-81-4	100

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation	Move to fresh air. Call a physician if symptoms develop or persist.
Skin contact	Brush off loose particles from skin. Immerse in cool water/wrap in wet bandages. Get medical attention if irritation develops and persists.
Eye contact	Rinse with water. Get medical attention if irritation develops and persists.
Ingestion	Get medical advice/attention if you feel unwell.
Most important symptoms/effects, acute and delayed	Not available.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Treat symptomatically.

5. Fire-fighting measures

Suitable extinguishing media	Not available.
Unsuitable extinguishing media	Water.
Specific hazards arising from the chemical	In contact with water releases flammable gas.
Special protective equipment and precautions for firefighters	Wear suitable protective equipment.
Fire fighting equipment/instructions	In the event of fire, cool tanks with water spray. Do not get water inside container.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Local authorities should be advised if significant spillages cannot be contained. Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate personal protective equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation.
Methods and materials for containment and cleaning up	Stop the flow of material, if this is without risk. Do not get water on spilled substance or inside containers. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water. For waste disposal, see section 13 of the SDS.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling	Keep away from any possible contact with water, because of violent reaction and possible flash fire. Handle under inert gas.
Conditions for safe storage, including any incompatibilities	Keep container tightly closed. Store in a cool, dry place out of direct sunlight. Store in a dry place. Never allow product to get in contact with water during storage.

8. Exposure controls/personal protection

Occupational exposure limits

US. ACGIH Threshold Limit Values

Material	Type	Value	Form
Aluminum sulfide (CAS 1302-81-4)	TWA	1 mg/m ³	Respirable fraction.

Biological limit values	No biological exposure limits noted for the ingredient(s).
Appropriate engineering controls	General ventilation normally adequate.

Individual protection measures, such as personal protective equipment

Eye/face protection	Wear eye/face protection.
Skin protection	
Hand protection	Not normally needed.
Other	Wear suitable protective clothing. Wear protective gloves.
Respiratory protection	No personal respiratory protective equipment normally required.
Thermal hazards	Not available.

General hygiene considerations Wash hands before breaks and immediately after handling the product. Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties**Appearance**

Physical state	Solid.
Form	Solid.
Color	Not available.

Odor Not available.

Odor threshold Not available.

pH Not available.

Melting point/freezing point Not available.

Initial boiling point and boiling range Not available.

Flash point Not available.

Evaporation rate Not available.

Flammability (solid, gas) Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower (%) Not available.

Flammability limit - upper (%) Not available.

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressure Not available.

Vapor density Not available.

Relative density Not available.

Solubility(ies)

Solubility (water) Not available.

Partition coefficient (n-octanol/water) Not available.

Auto-ignition temperature Not available.

Decomposition temperature Not available.

Viscosity Not available.

Other information

Molecular formula Al₂S₃

10. Stability and reactivity

Reactivity Not available.

Chemical stability Material is stable under normal conditions.

Possibility of hazardous reactions Hazardous polymerization does not occur.

Conditions to avoid	Moisture. Contact with water liberates flammable gas.
Incompatible materials	None known.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Due to lack of data the classification is not possible.
Skin contact	Due to lack of data the classification is not possible.
Eye contact	Due to lack of data the classification is not possible.
Ingestion	Due to lack of data the classification is not possible.

Symptoms related to the physical, chemical and toxicological characteristics Not available.

Information on toxicological effects

Acute toxicity	Not available.
Skin corrosion/irritation	Due to lack of data the classification is not possible.
Serious eye damage/eye irritation	Due to lack of data the classification is not possible.
Respiratory or skin sensitization	
Respiratory sensitization	Due to lack of data the classification is not possible.
Skin sensitization	Due to lack of data the classification is not possible.
Germ cell mutagenicity	Due to lack of data the classification is not possible.

Carcinogenicity This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity	Due to lack of data the classification is not possible.
Specific target organ toxicity - single exposure	Due to lack of data the classification is not possible.
Specific target organ toxicity - repeated exposure	Due to lack of data the classification is not possible.
Aspiration hazard	Due to lack of data the classification is not possible.

12. Ecological information

Ecotoxicity	No ecotoxicity data noted for the ingredient(s).
Persistence and degradability	No data is available on the degradability of this product.
Bioaccumulative potential	Not available.
Mobility in soil	Not available.
Other adverse effects	Not available.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

Waste from residues / unused products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging

Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT

UN number	UN3134
UN proper shipping name	Water-reactive solid, toxic, n.o.s.
Transport hazard class(es)	
Class	4.3
Subsidiary risk	6.1(PGI, II)
Label(s)	4.3, 6.1
Packing group	II
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Special provisions	IB5, IP2, T3, TP33
Packaging exceptions	151
Packaging non bulk	212
Packaging bulk	242

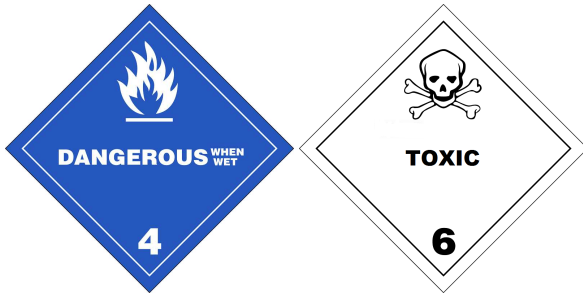
IATA

UN number	UN3134
UN proper shipping name	Water-reactive solid, toxic, n.o.s.
Transport hazard class(es)	
Class	4.3
Subsidiary risk	6.1(PGI, II)
Packing group	II
Environmental hazards	No.
ERG Code	4PW
Special precautions for user	Not available.
Other information	
Passenger and cargo aircraft	Allowed with restrictions.
Cargo aircraft only	Allowed with restrictions.

IMDG

UN number	UN3134
UN proper shipping name	WATER-REACTIVE SOLID, TOXIC, N.O.S.
Transport hazard class(es)	
Class	4.3
Subsidiary risk	6.1(PGI, II)
Packing group	II
Environmental hazards	
Marine pollutant	No.
EmS	F-G, S-N
Special precautions for user	Not available.

DOT



IATA; IMDG



15. Regulatory information

US federal regulations

CERCLA/SARA Hazardous Substances - Not applicable.

All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Immediate Hazard - No
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - Yes

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical

Yes

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA)

Not regulated.

US state regulations

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

16. Other information, including date of preparation or last revision

Issue date 01-28-2014

Revision date 01-09-2018

Version # 03

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