



# SAFETY DATA SHEET

**MATERION**

## 1. Identification

Product identifier	Aluminium Isopropoxide	
Other means of identification		
SDS number	2ON	
Materion Code	2ON	
CAS number	555-31-7	
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	414.212.0290	
E-mail	advancedmaterials@materion.com	
Contact person	Laura Hamilton	
Emergency phone number	Chemtrec	800.424.9300

## 2. Hazard(s) identification

Physical hazards	Flammable solids	Category 1
Health hazards	Serious eye damage/eye irritation	Category 2
	Specific target organ toxicity, single exposure	Category 3 narcotic effects
Environmental hazards	Not classified.	
OSHA defined hazards	Not classified.	

### Label elements



Signal word	Danger
Hazard statement	Flammable solid. Causes serious eye irritation. May cause drowsiness or dizziness.
Precautionary statement	
Prevention	Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Ground and bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/ equipment. Avoid breathing dust/fume/gas/mist/spray. Wash hands thoroughly after handling. Wear protective gloves/eye protection/face protection.
Response	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. In case of fire: Use dry chemical powder for extinction. In case of fire: Use alcohol resistant foam for extinction.
Storage	Store in a well-ventilated place. Keep container tightly closed. Store locked up.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
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	%
Aluminium Isopropoxide		555-31-7	100

### 4. First-aid measures

<b>Inhalation</b>	Move into fresh air and keep at rest. Get medical attention. If breathing stops, provide artificial respiration.
<b>Skin contact</b>	Wash off immediately with plenty of water for at least 15 minutes. Get medical attention.
<b>Eye contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.
<b>Ingestion</b>	Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.
<b>Most important symptoms/effects, acute and delayed</b>	Not available.
<b>Indication of immediate medical attention and special treatment needed</b>	Treat symptomatically.
<b>General information</b>	Get medical attention if any discomfort continues.

### 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Dry chemical, CO2, water spray or alcohol resistant foam. Water spray should be used to cool containers.
<b>Unsuitable extinguishing media</b>	None known.
<b>Specific hazards arising from the chemical</b>	Container may explode in heat of fire.
<b>Special protective equipment and precautions for firefighters</b>	Not available.
<b>Fire fighting equipment/instructions</b>	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.
<b>General fire hazards</b>	Heating may cause an explosion.

### 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Wear necessary protective equipment. Ensure adequate ventilation. Avoid generation and spreading of dust.
<b>Methods and materials for containment and cleaning up</b>	Sweep up or gather material and place in appropriate container for disposal. Put material in suitable, covered, labeled containers.
<b>Environmental precautions</b>	Avoid release to the environment.

### 7. Handling and storage

<b>Precautions for safe handling</b>	Wear necessary protective equipment. Do not get in eyes, on skin, on clothing. Avoid inhalation of dust. Avoid ingestion. Avoid generation and spreading of dust.
<b>Conditions for safe storage, including any incompatibilities</b>	Store in tightly closed original container in a dry, cool and well-ventilated place. Keep away from heat, sparks and open flame. Flammable solid storage.

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. ACGIH Threshold Limit Values

Material	Type	Value	Form
Aluminium Isopropoxide (CAS 555-31-7)	TWA	1 mg/m <sup>3</sup>	Respirable fraction.

#### US. NIOSH: Pocket Guide to Chemical Hazards

Material	Type	Value
Aluminium Isopropoxide (CAS 555-31-7)	TWA	2 mg/m <sup>3</sup>

#### US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants

Material	Type	Value
Aluminium Isopropoxide (CAS 555-31-7)	PEL	2 mg/m <sup>3</sup>

**Biological limit values** No biological exposure limits noted for the ingredient(s).

**Appropriate engineering controls** Not available.

### Individual protection measures, such as personal protective equipment

**Eye/face protection** Tightly fitting safety goggles.

#### Skin protection

**Hand protection** Wear protective gloves.

#### Other

Use protective gloves, goggles and suitable protective clothing.

#### Respiratory protection

When airborne exposures exceed or have the potential to exceed the occupational exposure limits, approved respirators must be used as specified by an Industrial Hygienist or other qualified professional. Respirator users must be medically evaluated to determine if they are physically capable of wearing a respirator. Quantitative and/or qualitative fit testing and respirator training must be satisfactorily completed by all personnel prior to respirator use. Users of tight fitting respirators must be clean shaven on those areas of the face where the respirator seal contacts the face. Use pressure-demand airline respirators when performing jobs with high potential exposures such as changing filters in a baghouse air cleaning device.

**Thermal hazards** Not available.

## 9. Physical and chemical properties

**Appearance** Powder.

**Physical state** Solid.

**Form** Not available.

**Color** White.

**Odor** Not available.

**Odor threshold** Not available.

**pH** Not available.

**Melting point/freezing point** 246.2 °F (119 °C)

**Initial boiling point and boiling range** 275 °F (135 °C) 13.3 hPa

267.8 °F (131 °C) 10.0 hPa

257.9 °F (125.5 °C) 7.3 hPa

235.4 °F (113 °C) 3.3 hPa

222.8 °F (106 °C) 2.0 hPa

201.2 °F (94 °C) 0.7 hPa

**Flash point** Not available.

**Evaporation rate** Not available.

Flammability (solid, gas)	Not available.
<b>Upper/lower flammability or explosive limits</b>	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	0.0002 kPa (77 °F (25 °C))
Vapor density	Not available.
Relative density	Not available.
<b>Solubility(ies)</b>	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
<b>Other information</b>	
Density	1.02 g/cm <sup>3</sup> estimated at 20 °C
Molecular formula	C <sub>3</sub> -H <sub>8</sub> -O. <sub>1</sub> /3Al
Molecular weight	204.23 g/mol
Specific gravity	1.03 at 20 °C

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Avoid heat, sparks, open flames and other ignition sources. Minimize dust generation and accumulation. Exposure to moisture.
<b>Incompatible materials</b>	Strong oxidizing substances. Strong acids. Halogens.
<b>Hazardous decomposition products</b>	Carbon oxides. Irritating and/or toxic fumes and gases may be emitted upon the product's decomposition.

## 11. Toxicological information

### Information on likely routes of exposure

Inhalation	Not available.
Skin contact	Not available.
Eye contact	Not available.
Ingestion	Not available.

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

### Information on toxicological effects

Acute toxicity

Product	Species	Test Results
Aluminium Isopropoxide (CAS 555-31-7)		
<b>Acute</b>		
<b>Oral</b>		
LD50	Rat	11300 mg/kg
Skin corrosion/irritation	Not available.	
Serious eye damage/eye irritation	Not available.	
<b>Respiratory or skin sensitization</b>		
Respiratory sensitization	Not available.	
Skin sensitization	Not available.	
Germ cell mutagenicity	Not available.	
<b>Carcinogenicity</b>		
<b>IARC Monographs. Overall Evaluation of Carcinogenicity</b>		
Not listed.		
<b>OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)</b>		
Not listed.		
<b>US. National Toxicology Program (NTP) Report on Carcinogens</b>		
Not listed.		
Reproductive toxicity	Not available.	
Specific target organ toxicity - single exposure	Not available.	
Specific target organ toxicity - repeated exposure	Not available.	
Aspiration hazard	Not available.	
<b>12. Ecological information</b>		
Ecotoxicity	There are no data on the ecotoxicity of this product.	
Persistence and degradability	Not available.	
Bioaccumulative potential	Not available.	
Mobility in soil	Not available.	
Other adverse effects	Not available.	
<b>13. Disposal considerations</b>		
Disposal instructions	Dispose of contents/container in accordance with local/regional/national/international regulations.	
Waste from residues / unused products	Not available.	
Contaminated packaging	Not available.	
<b>14. Transport information</b>		
<b>DOT</b>		
UN number	UN3181	
UN proper shipping name	Metal salts of organic compounds, flammable, n.o.s.	
Transport hazard class(es)		
Class	4.1	
Subsidiary risk	-	
Packing group	II	
Special precautions for user	Not available.	
<b>IATA</b>		
UN number	UN3181	

UN proper shipping name Metal salts of organic compounds, flammable, n.o.s.  
Transport hazard class(es)  
Class 4.1  
Subsidiary risk -  
Packing group II  
Environmental hazards No.  
Special precautions for user Not available.

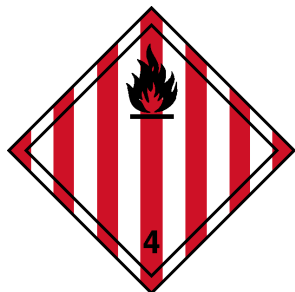
#### IMDG

UN number UN3181  
UN proper shipping name Metal salts of organic compounds, flammable, n.o.s.  
Transport hazard class(es)  
Class 4.1  
Subsidiary risk -  
Packing group II  
Environmental hazards  
Marine pollutant No.  
EmS Not available.  
Special precautions for user Not available.

#### DOT



#### IATA; IMDG



## 15. Regulatory information

### US federal regulations

#### Toxic Substances Control Act (TSCA)

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 1910.1001-1053)

Not listed.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**SARA 302 Extremely hazardous substance**

Not listed.

**SARA 311/312 Hazardous chemical**      Yes

**Classified hazard categories**      Flammable (gases, aerosols, liquids, or solids)  
Serious eye damage or eye irritation  
Specific target organ toxicity (single or repeated exposure)

**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.

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

**Issue date**      04-13-2021  
**Version #**      01  
**Disclaimer**      Not available.