


# Material Safty Data Sheet

## 1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product Name	AD119
1.2 Recommended use of the chemical and restrictions on use	
Recommended use of the product	Construction acryl sealant
Restrictions on use of the product	Not available
1.3 Supplier information	
Company Name	DAEHEUNG CHEMICAL CO., LTD.
Address	52, Sandan-ro15beon-gil,Pyeongtaeksi,Gyeonggi-do
Emergency telephone number	+82-31-663-5251
1.4 Manufacturer's information	
Company Name	MAGACHEM
Address	842, Hyundai-kia-ro, bibongmyeon ,Hwaseongsi, Gyeonggi-do
Emergency telephone number	+82-31-355-2239

## 2. HAZARD IDENTIFICATION

2.1 Hazard, Risk classification	Skin corrosion / irritation: Category 2 Serious eye damage / eye irritation: Category 2 Specific target organ toxicity (repeated exposure): Category 2
2.2 GHS label elements	
Symbol	
Signal word	Warning
Harmful Risk phrases	H315 Causes skin irritation H373 May cause damage to organs through prolonged or repeated exposure exposure cause the hazard
Precautions	
Prevention	P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P260 Do not breathe dust/fume/gas/mist/vapours/spray. P280 Wear protective gloves/ protective clothing/ eye protection/face protection.
Corresponding	P308 + P313 If exposed or concerned: Get medical advice/attention. P314 Get medical advice/attention if you feel unwell.
Storage	P405 Store locked up.
Disposal	P501 – Dispose of contents/container to ...
Titanium dioxide	
Health	No available
Fire	No available
Reactivity	No available
ALUMINUMHYDROXIDE	
Health	1
Fire	0

Reactivity	0
Water	
Health	0
Fire	0
Reactivity	0

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Name	Comon Name	CAS No	Contents(%)
Titanium dioxide	ANATASE	13463-67-7	1 ~ 5
ALUMINUMHYDROXIDE	ALUMINUMHYDROXIDE	21645-51-2	10 ~ 50
Acrylic emulsion of water	-	-	20 ~ 50
Water	Dihydrogen oxide	7732-18-5	1 ~ 30

### 4. FIRST AID MEASURES

4.1 Eye contact	Get emergency medical attention. In contact with the substance, rinse immediately with plenty of water for at least 20 minutes.
4.2 In case of skin contact	If you feel uncomfortable, seek medical advice and advice. In contact with the substance, rinse immediately with plenty of water for at least 20 minutes.
4.3 Inhalation	Prevent spread of contamination on mild skin contact When exposed to large amounts of steam and mist, move to fresh air. Take specific treatment if needed.
4.4 Ingestion	About whether I should induce vomiting Take the advice of a doctor. Rinse your mouth with water immediately.

### 5. FIRE FIGHTING MEASURES

5.1. Suitable (improper) extinguishing media	
Suitable (improper) extinguishing media	Use alcohol foam, carbon dioxide or water spray for digestion related to this Use dry sand or soil for digestion.
5.2. Specific hazards arising from chemicals	Can decompose at high temperature to produce toxic gas Container may explode on heating Non-flammable, the substance itself is not burned but decomposes on heating and may cause corrosive / toxic fumes
5.3. Advice for firefighters	Cool containers with water until well after fire is out. Keep unauthorized personnel out. Do not access if the tank on fire. Wear appropriate protective equipment. Keep containers cool with water spray. Use fire fighting procedures suitable for surrounding area.

### 6. ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, protective equipment and emergency procedures	Do not breathe dust / fume / gas / mist / vapors / spray. Remove all ignition sources. Do not touch a damaged container or spill without adequate protection. Cover with plastic sheet to prevent diffusion Note the substances and conditions to avoid
6.2. Environmental precautions	

Prevent entry into waterways, sewers, basements and confined areas.

### 6.3. How to clean or remove

Absorb spillage with inert materials (eg dry sand or earth) and place in a chemical waste container.

Absorb liquid and rinse contaminated area with detergent and water.

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## 7. HANDLING AND STORAGE

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### 7.1. Precautions for safe handling

Avoid direct physical contact.

Get the manual before use.

Refer to Engineering controls and personal protective equipment.

Do not handle until all safety precautions have been read and understood.

### 7.2. Safe storage

Store in lockable storage area.

The empty drum should be completely drained, properly blocked and immediately returned to the drum regulator or properly positioned.

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## 8. EXPOSURECONTROLS & PERSONAL PROTECTION

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### 8.1. Exposure standards for chemicals, biological exposure standards, etc.

#### Domestic regulation

Titanium dioxide TWA – 10mg/m3

ALUMINUMHYDROXIDE TWA – 10mg/m3

Acrylic emulsion of water No available

Water No available

#### ACGIH regulation

Titanium dioxide TWA – 10mg/m3

ALUMINUMHYDROXIDE No available

Acrylic emulsion of water No available

Water No available

#### Biological exposure standard

Titanium dioxide No available

ALUMINUMHYDROXIDE No available

Acrylic emulsion of water No available

Water No available

### 8.2. Appropriate engineering controls

Use process isolation, local exhaust ventilation, or other engineering controls to keep air levels below exposure limits.

### 8.3. Personal protective equipment

#### Respiratory protection

Wear respiratory protection approved by the Korean Occupational Safety and Health Administration in accordance with physicochemical properties of the particulate matter to be exposed

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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### 9.1 Appearance

Physical Form Paste

Color Gray, Red, Black

9.2 Odor No available

9.3 Odor threshold No available

9.4 pH 7 ~ 9

9.5 Melting point / freezing point No available

9.6 Boiling point	No available
9.7 Flash point	No available
9.8 Evaporation Rate	No available
9.9 Flammability (solid, gas)	No available
9.10 Upper/lower flammability or explosive limits	No available
9.11 Vapor Pressure	No available
9.12 Solubility	No available
9.13 Vapor Density	No available
9.14 Specific gravity	No available
9.15 N-octanol/water partition coefficient	No available
9.16 Autoignition temperature	No available
9.17 Decomposition Temperature	No available
9.18 Viscosity	Paste
9.19 Molecular weight	No available

## 10. STABILITY AND REACTIVITY

10.1. Possibility of chemical stability and adverse reaction	Stable at normal temperature and pressure Some can ride but not easily ignite
10.2. Conditions to avoid	
Titanium dioxide	Heat source, spark, flame, etc.
ALUMINUMHYDROXIDE	Heat source, spark, flame, etc.
Acrylic emulsion of water	Heat source, spark, flame, etc.
Water	Heat, pollution
10.3. Substances to avoid	
Titanium dioxide	Flammable material, reducing material
ALUMINUMHYDROXIDE	Flammable material, irritant, toxic gas
Acrylic emulsion of water	Flammable material, irritant, toxic gas
Water	Water reactive material
10.4. Conditions to avoid	
Titanium dioxide	irritant, toxic gas
ALUMINUMHYDROXIDE	No available
Acrylic emulsion of water	No available
Water	No available

## 11. TOXICOLOGICAL INFORMATION

11.1. Information about possible routes of exposure	
Titanium dioxide	No available
ALUMINUMHYDROXIDE	Stimulation, lung abnormality Fever, constipation, blood disorders stimulus
Acrylic emulsion of water	No available
Water	No available
11.2 Health hazard information	
Acute toxicity	
Oral	
Titanium dioxide	LD50 > 10000 mg/kg Rat
ALUMINUMHYDROXIDE	LD50 > 5000 mg/kg Rat
Acrylic emulsion of water	No data
Water	LD50 90000 mg/kg Rat (LD50 > 90 ml/kg (Rat))
Dermal	

Titanium dioxide	LD50 > 10000 mg/kg Rat
ALUMINUMHYDROXIDE	No data
Acrylic emulsion of water	No data
Water	No available
Inhalation	
Titanium dioxide	LC50> 6.82 mg/l 4 hr Rat
ALUMINUMHYDROXIDE	No data
Acrylic emulsion of water	No data
Water	No available
Skin corrosion/irritation	
Titanium dioxide	Skin irritation tests in rabbits showed weak irritation or irritability
ALUMINUMHYDROXIDE	No data
Acrylic emulsion of water	No data
Water	No available
Serious eye damage/irritation	
Titanium dioxide	in rabbits, eye irritation tests result in mild irritation
ALUMINUMHYDROXIDE	No data
Acrylic emulsion of water	No data
Water	No available
Respiratory sensitization	No available
Skin sensitization	No available
Germ cell mutagenicity	No available
Carcinogenicity	
Industrial Safety and Health Act	No available
Notice of Ministry of Employment and Labor	
Titanium dioxide	2
ALUMINUMHYDROXIDE	No data
Acrylic emulsion of water	No data
Water	No data
IARC	No available
Titanium dioxide	Group 2B
ALUMINUMHYDROXIDE	No data
Acrylic emulsion of water	No data
Water	No data
OSHA	No available
ACGIH	No available
Titanium dioxide	A4
ALUMINUMHYDROXIDE	No data
Acrylic emulsion of water	No data
Water	No data
NTP	No available
EU CLP	No available
11.8. Reproductive toxicity	No available
11.9. Specific target organ toxicity(single exposure):	
	No available
11.10. Specific target organ toxicity(repeated exposure):	
	No available
11.11. Aspiration hazard	No available

## 12. ECOLOGICAL INFORMATION

### 12.1. Toxicity

#### Fish

Titanium dioxide	No data
ALUMINUMHYDROXIDE	LC50 > 100 mg/l 96 hr etc (Salmo trutta)
Acrylic emulsion of water	No data
Water	No data

#### Shellfish

Titanium dioxide	EC50 > 1000 mg/l 48 hr
ALUMINUMHYDROXIDE	No data
Acrylic emulsion of water	No data
Water	No data

#### Birds

Titanium dioxide	EC50 > 1000 mg/l 48 hr
ALUMINUMHYDROXIDE	No data
Acrylic emulsion of water	No data
Water	No data

### 12.2. Persistence and degradability

#### Persistence

Titanium dioxide	No data
ALUMINUMHYDROXIDE	No data
Acrylic emulsion of water	No data
Water	log Kow -1.38

#### degradability

Titanium dioxide	No data
ALUMINUMHYDROXIDE	No data
Acrylic emulsion of water	No data
Water	No data

### 12.3. Bioaccumulation

#### Enrichment

Titanium dioxide	No data
ALUMINUMHYDROXIDE	No data
Acrylic emulsion of water	No data
Water	No data

#### Biodegradable

Titanium dioxide	No data
ALUMINUMHYDROXIDE	No data
Acrylic emulsion of water	No data
Water	No data

### 12.4. Soil mobility

Titanium dioxide	No data
ALUMINUMHYDROXIDE	No data
Acrylic emulsion of water	No data
Water	No data

### 12.5. Other harmful effects

Titanium dioxide	No data
ALUMINUMHYDROXIDE	No data
Acrylic emulsion of water	No data
Water	No data

### 13. DISPOSAL CONSIDERATIONS

13.1. Disposal method	Dispose of contents and container in accordance with local regulations.
13.2 Disposal considerations	Dispose of contents/container to ...

### 14. TRANSPORT INFORMATION

14.1 UN Number (UN No.)	UN transport hazard classification not available
14.2. UN proper shipping name	Not applicable
14.3. Transport hazard class(es)	Not applicable
14.4. Packing group	Not applicable
14.5. Environmental hazards	No data
14.6 Special safety measures that the user needs or needs to know about transportation or transportation	
Emergency measures in case of fire	Not applicable
Emergency Action	Not applicable
14.7 Other International Transportation Regulations	
Air Transport (IATA-DGR)	Not subject to IATA regulations.

### 15. REGULATORY INFORMATION

15.1 Regulation by the Industrial Safety and Health Act	
Titanium dioxide	Toxic substances to be managed Working environment Measured material (measurement cycle: 6 months) Exposure standard setting substance
ALUMINUMHYDROXIDE	Toxic substances to be managed Working environment Measured material (measurement cycle: 6 months) Special medical examination target substance (diagnosis period: 12 months) Exposure standard setting substance
15.2 Regulation by Chemical Substance Control Act	No data
15.3 Regulation under dangerous goods safety management law	No data
15.4 Regulation by waste management law	Designated waste
15.5 Other domestic and foreign regulations	
Domestic regulation	
Residual Organic Pollutant Control Act	Not available
Foreign regulation	
OSHA regulations	Not applicable
CERCLA regulations	Not applicable
US Administration Information(EPCRA 302 regulations)	Not applicable
US Administration Information(EPCRA 304 regulations)	Not applicable
US Administration Information(EPCRA 313 regulations)	Not applicable
US Administration Information(Rotterdam Convention material)	Not applicable
US Administration Information(Stockholm Convention substance)	Not applicable
US Administration Information(Montreal Protocol substance)	Not applicable
EU Classification information(Confirmed classification result)	Not applicable

EU Classification information(Danger phrases) Not applicable

EU Classification information(Safety phrases) Not applicable

## 16. OTHER INFORMATION

### 16.1. Indication of changes

The Safety Data Sheet has been reviewed and the data therein were revised and laid out according the requirements of the Commission Regulation (EU) No. 453/2010

16.2 Date First 2015-05-03

### 16.3 Revision number and date

Revision number 1 times

Revision Date 2017-08-01

### 16.4 Etc.

- The MSDS (Material Safty Data Sheet) is edited or partially corrected by referring to the MSDS provided by KOSHA (Korea Occupational Safty and Health Agency)







