# ADVANCED MATERIALS

#### **Safety Data Sheet**

#### Micral® AM-550

This material safety datasheet has been prepared according to Brazilian legislation and ABNT NBR 14725:2023 GHS (Globally Harmonized System)

Issue Date 21/Feb/2023 Revision Number 1.3.1

Print Date 20/Oct/2025

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product Name: Micral® AM-550

Chemical Name Aluminum Hydroxide

Pure substance/mixture Substance

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended Use Flame retardant

Uses advised against None known.

1.3. Details of the supplier of the safety data sheet

**Company:** J.M. Huber Corporation

3100 Cumberland Boulevard, Suite 600

Atlanta, GA 30339 USA Tel: +1 678 247-7300

Internet www.huberadvancedmaterials.com

Contact E-Mail www.huberadvancedmaterials.com/contact

1.4. Emergency telephone

number

CHEMTREC: +1 800 424 9300 or International 1+703-527-3887

#### **SECTION 2: Hazards identification**

Brazil Ministry of Transport This product is not part of the Hazardous Products Classification established by

the Brazilian Federal Department of Transportation's Administrative Ruling 204

from 5/20/1997.

2.1. Classification of the substance or mixture

Physical Hazards Not classified.

Health Hazards Not classified.

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**Environmental Hazard** Not classified.

2.2. Label elements

Symbols/Pictograms None.

**Signal Word** None.

**Hazard Statements** None

**Precautionary Statements** 

Employ good industrial hygiene practice Prevention

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

Do not breathe dust

Wear protective gloves/protective clothing/eye protection/face protection

IF ON SKIN: Wash with plenty of soap and water Response

Store away from incompatible materials Storage

**Disposal** Dispose of contents/containers in accordance with local regulations

Additional Information: None.

Hazards not otherwise classified Not classified.

(HNOC)

## **SECTION 3: Composition/information on ingredients**

Pure substance/mixture Substance

ſ	Chemical Name	hemical Name CAS Number		EU REACH	GHS Classification	Weight-%	
L				registration number			
[	Aluminum Hydroxide	21645-51-2	A	01-2119529246-39	Not classified.	100	

#### **SECTION 4: First aid measures**

#### 4.1. Description of first aid measures

**General Advice** When in doubt or if symptoms are observed, get medical advice. Ensure that

medical personnel are aware of the material(s) involved and take precautions to

protect themselves.

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In case of eye contact, remove contact lens and rinse immediately with plenty of **Eye Contact** 

water, also under the eyelids, for at least 15 minutes.

Wash with plenty of soap and water. **Skin Contact** 

Rinse mouth thoroughly with water. Ingestion

Inhalation If breathing is difficult, remove victim to fresh air and keep at rest in a position

comfortable for breathing.

Not an expected route of exposure. **Aspiration hazard** 

4.2. Most important symptoms

and effects, both acute and delayed

Signs and symptoms may include coughing, gasping, choking and difficulty breathing.

medical attention and special

treatment needed

**4.3.** Indication of any immediate Treatment should be symptomatic and supportive.

## **SECTION 5: Firefighting measures**

None known Flammable Properties

5.1. Extinguishing media

Suitable Extinguishing

Media

Water spray (fog). Foam. Dry chemical. Carbon dioxide (CO2).

**Unsuitable Extinguishing** 

Media

None known.

**5.2. Special hazards arising from** None known.

the substance or mixture

5.3. Advice for firefighters

Special protective equipment for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing.

Fire-fighting measures In case of fire and/or explosion do not breathe fumes.

## **SECTION 6: Accidental release measures**

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6.1. Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

Use personal protection recommended in Section 8

Avoid dust formation

Keep unauthorized personnel away

For non-emergency personnel Keep unauthorized personnel away.

For emergency responders Keep unauthorized personnel away

Use personal protection recommended in Section 8

**6.2. Environmental precautions** Avoid runoff to waterways and sewers.

6.3. Methods and material for containment and cleaning up Large Spill: Do not dry sweep dust. Wet dust with water before sweeping or use a vacuum to collect dust Small Spill: Vacuum or sweep material and place in a

disposal container

6.4. Reference to other sections Section 8: Exposure controls and personal protection. See Section 13 for

additional waste treatment information.

### **SECTION 7: Handling and storage**

7.1. Precautions for safe

Minimize dust generation and accumulation

handling

Provide local exhaust ventilation Handle in accordance with good industrial hygiene and safety practice

including any incompatibilities

7.2. Conditions for safe storage, Store away from incompatible materials. Keep container tightly closed and dry.

Flame retardant. 7.3. Specific end use(s)

## **SECTION 8: Exposure controls/personal protection**

8.1. Control parameters

Occupational exposure limits

**PNEC (Predicted No Effect** 

No information available

Concentration)

**Biological Limit Values** None

DNEL (Derived No Effect Level) Consumer - oral, long-term - local and systemic 4.74 mg/kg bw/day

Worker - inhalative, long-term - local and systemic 10.74 mg/m<sup>3</sup>

8.2. Exposure controls

Ensure adequate ventilation, especially in confined areas **Engineering Measures** 

Provide a good standard of controlled ventilation (10 to 15 air changes per hour)

Personal protective equipment

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**Eye/Face Protection** Wear safety glasses with side shields (or goggles).

**Skin and Body Protection** Wear suitable protective clothing.

For operations where prolonged or repeated skin contact may occur, impervious **Hand Protection** 

gloves should be worn.

**Respiratory Protection** 

Thermal hazards

In case of inadequate ventilation wear respiratory protection.

None known.

**Hygiene Measures** Follow general hygiene considerations recognized as common good workplace

practices. The worker should wash daily at the end of each work shift, and prior to

eating, drinking, smoking, etc.

**Environmental Exposure** 

**Controls** 

Dispose of in accordance with local regulations.

## **SECTION 9: Physical and chemical properties**

#### 9.1. Information on basic physical and chemical properties

Solid. **Physical State** 

Color White

Odor Odorless

**Odor Threshold** No information available

8.4 - 10.2 5% Water suspension pH:

Melting point / Freezing point ca 300 °C / 572 °F (101.3 kPa)

5396 °F (2980 °C) 101.3 kPa **Initial boiling point** 

**Flash Point** Not applicable

**Evaporation Rate** Not applicable

**Vapor Pressure** Not applicable

**Relative Vapor Density** Not applicable

**Relative Density** 2.4 g/cm3, 20° C

**Water Solubility** Insoluble

Partition coefficient No information available

**Autoignition Temperature** Not applicable

392 °F (200 °C) **Decomposition Temperature** 

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**Viscosity** Not applicable

**Explosive Properties** None

**Oxidizing Properties** Not applicable

**VOC Content (%)** Not applicable

Solubility in other solvents No information available

9.2. Other information

## **SECTION 10: Stability and reactivity**

None. 10.1. Reactivity

Stable under normal conditions. 10.2. Chemical stability

10.3. Possibility of hazardous

reactions

None under normal processing.

10.4. Conditions to avoid Incompatible materials.

Strong acids 10.5. Incompatible materials

10.6. Hazardous decomposition None known.

products

## **SECTION 11: Toxicological information**

**General Information** Users are advised to consider national Occupational Exposure Limits or other

equivalent values.

Information on Likely Routes of Exposure

Inhalation Do not breathe dust. Inhalation of dust may cause irritation of the respiratory

system.

Skin Contact with dust can cause mechanical irritation or drying of the skin.

Avoid contact with eyes. Dust contact with the eyes can lead to mechanical Eyes

irritation.

Ingestion Ingestion is not a likely route of exposure.

Not an expected route of exposure. **Aspiration hazard** 

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Symptoms related to the physical, chemical and toxicological characteristics Signs and symptoms may include coughing, gasping, choking and difficulty

breathing. Contact with eyes may cause irritation.

**Symptoms** Low hazard for usual industrial or commercial handling

11.1. Information on toxicological effects

Aluminum Hydroxide - 21645-51-2

Oral LD50 > 2000 mg/kg Rat

**IARC** Not Listed

**Acute Toxicity** Based on available data, the classification criteria are not met.

**Chronic Toxicity** Based on available data, the classification criteria are not met.

**Chronic Effects** Based on available data, the classification criteria are not met.

Serious eye damage/eye

irritation

Non-irritant, Rabbit.

No information available. **Respiratory Sensitization** 

Skin Corrosion/Irritation Non-irritant, Rabbit.

Skin Sensitization Based on available data, the classification criteria are not met. Not a skin

sensitizer. Guinea pig.

Mutagenicity in vitro. Not genotoxic in bacteria and mammalian cell systems.

in vivo. Mutagenicity (micronucleus test). Rat. Negative. (weight of evidence

approach).

Germ cell mutagenicity No information available.

Based on available data, the classification criteria are not met. **Reproductive Effects** 

**Reproductive Toxicity** Based on available data, the classification criteria are not met.

Based on available data, the classification criteria are not met. Carcinogenicity

Specific target organ toxicity -

Single exposure

Not classified.

Specific target organ toxicity -

Repeated exposure

No information available.

Mixture versus substance

information

No information available.

### **SECTION 12: Ecological information**

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Not considered to be harmful to aquatic life. Avoid release to the environment. 12.1. Ecotoxicity

Aluminum Hydroxide - 21645-51-2

WGK Classification (AwSV) 5220 WGK: nwg

12.2. Persistence and

degradability

The methods for determining biodegradability are not applicable to inorganic

substances.

**12.3. Bioaccumulative potential** Not likely to bioaccumulate.

Partition coefficient No information available.

**Bioconcentration factor** 

(BCF)

Not available.

12.4. Mobility in soil No information available.

12.5. Results of PBT and vPvB

assessment

This substance does not meet the criteria for classification as PBT or vPvB.

12.6. Other adverse effects No information available

## **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

**Contaminated Packaging** Empty containers should be taken to an approved waste handling site for recycling

or disposal.

Waste codes should be assigned by the user based on the application for which Waste codes

the product was used

**Disposal Methods** Disposal should be in accordance with applicable regional, national and local laws

and regulations

Aluminum Hydroxide - 21645-51-2

European Waste Catalog 060299

## **SECTION 14: Transport information**

Mode of Transportation (Road, Water, Air, Rail)

Not regulated **ADR** 

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Not regulated **RID** 

**ADN** Not regulated

**IATA** Not regulated

IMDG/IMO Not regulated

**ICAO** Not regulated

14.1. UN number None

14.2. UN proper shipping name None

14.3. Transport hazard class(es) None

14.4. Packing group None

14.5. Environmental hazards No

14.6. Special precautions for Not applicable

user

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

## **SECTION 15: Regulatory information**

#### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### **Global Inventories**

Chemical Name	CAS Number	EC No	EU REACH registrati on number	Australia (AIIC)	Canada (DSL)	China (IECSC)	Japan	S. Korea (KECL)	Mexico		Philippine s (PICCS)	Taiwan	TSCA: United States
Aluminum Hydroxide	21645-51- 2	244-492-7	01-211952 9246-39	Y	Y	Y	(1)-17 (ENCS); ISHL	KE-00980	Y	Y	Y	Y	А

X / Y: Complies ; A: Active ; - / N: Exempt / Not Listed

## **SECTION 16: Other information**

Huber Engineered Materials (HEM) Global Regulatory Affairs Prepared by

regulatory.affairs@huber.com

**Reason for Version** Brasil: ABNT NRB 14725-4: 2023.

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#### **Training Advice**

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

#### Abbreviations and acronyms

IARC (International Agency for Research on Cancer)
IATA (International Air Transport Association)
IMDG (International Maritime Dangerous Goods)

IUCLID (International Uniform Chemical Information Database) WHMIS (Workplace Hazardous Materials Information System)

DOT (Department of Transportation)

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

TWA (Time-Weighted Average)

CLP (The Classification, Labeling and Packaging of Substances and Mixtures Regulation (EC

1272/2008))

PPE (Personal Protection Equipment)

NIOSH (National Institute for Occupational Safety and Health)

TDG (Transport of Dangerous Goods) Canada

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act)

RQ (Reportable Quantity) (RQ/% in mixture)

STEL (Short Term Exposure Limit) TLV® (Threshold Limit Value) DNEL (Derived No Effect Level)

SVHC (Substances of Very High Concern) BOD (Biochemical oxygen demand)

COD (Chemical oxygen demand)
ICAO (International Civil Aviation Organization)

IMDG (International Maritime Dangerous Goods) SCBA (Self-Contained Breathing Apparatus) Positive Pressure

PNEC (Predicted No Effect Concentration)
GHS (Globally Harmonized System)
TSCA (Toxic Substances Control Act)

#### **Disclaimer**

The information provided in 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text

**End of Safety Data Sheet**