



Martinal® TM-2550

MoEL's Public Notice No. 2016-19 Standards for Classification and Labeling of Chemical Substances and Safety Data Sheet (SDS)

Issue Date 21/Feb/2023

Print Date 17/Feb/2025

Revision Number 1.2

Page 1 of 9

Section 1: PRODUCT AND COMPANY IDENTIFICATION

A. Product name Martinal® TM-2550

Chemical Name Aluminum Hydroxide

Pure substance/mixture Mixture

Aluminum Hydroxide

CAS Number 21645-51-2

Weight-% >99

Surface Treatment

CAS Number --

Weight-% <1

B. Recommended use and Limitations on use

Recommended Use Flame retardant Smoke suppressant

Uses advised against None known

C. Supplier information

Company Name J.M. Huber Corporation
3100 Cumberland Boulevard, Suite 600
Atlanta, GA 30339 USA
Tel: +1 678 247-7300

E-mail www.huberadvancedmaterials.com/contact

Internet www.huberadvancedmaterials.com

Contact person CHEMTREC

Emergency phone number +1 800 424 9300 International +1 703 527 3887

Section 2: HAZARDS IDENTIFICATION

A. Hazard category/Classification

Physical Hazards Not classified.

Health Hazards Not classified.

Environmental Hazards Not classified.

Issue Date 21/Feb/2023

Print Date 17/Feb/2025

Revision Number 1.2

Page 2 of 9

B. Warning label items including precautionary statement**Label Elements****Symbols/Pictograms** None**Signal Words** None**Hazard Statements** None**Precautionary statement****Prevention**

Employ good industrial hygiene practice
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

Response IF ON SKIN: Wash with plenty of soap and water**Storage** Store away from incompatible materials**Disposal** Dispose of contents/containers in accordance with local regulations**Additional Information:** None.**C. Other hazards not included in the hazard category criteria (e.g. dust explosion hazard)**

None known

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS**Pure substance/mixture**

Mixture

Chemical Name	CAS Number	S. Korea (KECL)	Korean GHS Classification	Weight-%
Aluminum Hydroxide	21645-51-2	KE-00980	Not classified.	>99
Surface Treatment	--	Y	Not classified.	<1

Section 4: FIRST AID MEASURES**A. In case of eye contact** Rinse with water. Get medical attention if irritation develops and persists.**B. In case of skin contact** Wash off with soap and water. Get medical attention if irritation develops and persists.**C. In case of inhalation** Move to fresh air. Call a physician if symptoms develop or persist.**D. In case of swallowing** Rinse mouth. Get medical attention if symptoms occur.**E. Note to physician** Treat symptomatically.

Section 5: FIRE FIGHTING MEASURES**A. Suitable (and unsuitable) extinguishing media**

Suitable extinguishing media Water fog. Foam. Dry chemical powder. Carbon dioxide (CO₂).
Unsuitable extinguishing media None known

B. Specific hazards arising from the chemical (example: hazardous combustion products)

Explosion hazard: None known

C. Specific methods of fire-fighting

Self-contained breathing apparatus and full protective clothing must be worn in case of fire. In the event of fire and/or explosion do not breathe fumes. Move container from fire area if it can be done without risk.

Section 6: SPILLAGE, ACCIDENTAL RELEASE MEASURES

A. Personal precautions, protective equipment and emergency measures Ensure adequate ventilation. Avoid dust formation. See section 8 for more information.

B. Environmental precautions Not considered to be harmful to aquatic life. Avoid discharge into drains, water courses or onto the ground.

C. Methods and materials for containment and cleaning up Vacuum or sweep material and place in a disposal container.

Section 7: HANDLING AND STORAGE**A. Precautions for safe handling**

In case of exposure to environments exceeding the occupational exposure limit, wear a respirator in compliance with national legislation.

B. Conditions for safe storage (including any incompatibilities)

Keep container tightly closed in a dry and well-ventilated place

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**A. Exposure limit values, biological limit values, etc****Aluminum Hydroxide**

ACGIH
OSHA

TLV/TWA 8-hr: 1 mg/m³ (respirable fraction)
TWA: 15 mg/m³ (Total Dust)

Issue Date 21/Feb/2023

Print Date 17/Feb/2025

Revision Number 1.2

Page 4 of 9

5 mg/m³ (Respirable Dust)**B. Engineering Controls****Engineering Measures**

Ensure adequate ventilation, especially in confined areas
Provide a good standard of controlled ventilation (10 to 15 air changes per hour)

C. Personal protective equipment

- **Eye protection** If contact is likely, safety glasses with side shields are recommended.
- **Hand protection** For prolonged or repeated skin contact use suitable protective gloves.
- **Body protection** Wear suitable protective clothing.

Hygiene Measures

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Solid
Color	White
Odor	Odorless
Odor Threshold	No information available
pH:	Not available
Melting point / Freezing point	Not applicable
Boiling Point	No information available
Flash Point	Non-combustible
Evaporation Rate	Not applicable
Flammability (solid, gas)	Not applicable
Upper flammability limit:	No data available
Lower flammability limit:	No data available
Vapor Pressure	Not applicable
Vapor Density	Not applicable
Relative Density	2.4 g/cm ³ , 20° C
Water Solubility	Insoluble
Solubility in other solvents	No information available
Partition coefficient	Not applicable Not applicable Product/Substance is inorganic
Autoignition Temperature	Not applicable
Decomposition Temperature	200 °C (392 °F)
Viscosity	Not applicable
Kinematic viscosity	No data available.
Explosive Properties	Not applicable
Oxidizing Properties	Not oxidizing
VOC Content (%)	Not applicable

Section 10: STABILITY AND REACTIVITY

Issue Date 21/Feb/2023

Print Date 17/Feb/2025

Revision Number 1.2

Page 5 of 9

A. Stability and hazardous reaction potential**Stability** Stable under normal conditions**Hazardous reaction potential** None known**B. Conditions to avoid (e.g. static discharge, shock or Vibration, etc)** Avoid creating dust. Incompatible materials.**C. Incompatible materials** Strong oxidizing agents**D. Hazardous decomposition products** No hazardous decomposition products are known.**Section 11: TOXICOLOGICAL INFORMATION****A. Information on likely routes of exposure**

- **Mouth** Not an expected route of exposure
- **Eyes** Dust contact with the eyes can lead to mechanical irritation
- **Skin** Prolonged skin contact may cause temporary irritation.

B. Information on health hazards**Aluminum Hydroxide****Oral LD50** > 2000 mg/kg Rat**Aluminum Hydroxide****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.**Respiratory Sensitization** Based on available data, the classification criteria are not met.**Serious eye damage/eye irritation** Based on available data, the classification criteria are not met.**Skin Corrosion/Irritation** Prolonged or repeated contact may dry skin and cause irritation**Skin Sensitization** Based on available data, the classification criteria are not met.**Germ cell mutagenicity** Based on available data, the classification criteria are not met.**Reproductive Toxicity** Based on available data, the classification criteria are not met.

Issue Date 21/Feb/2023

Print Date 17/Feb/2025

Revision Number 1.2

Page 6 of 9

Carcinogenicity	This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.
Target Organ Effects	No information available.
Specific target organ toxicity - Single exposure	No information available.
Specific target organ toxicity - Repeated exposure	No information available.
Mixture versus substance information	No information available.

Section 12: ECOLOGICAL INFORMATION

A. Ecotoxicity

Hazardous to the aquatic environment, acute hazard	Not classified. Avoid runoff to waterways and sewers
---	---

Hazardous to the aquatic environment, long-term hazard	Not classified. Avoid runoff to waterways and sewers
---	---

B. Persistence/degradability No data available

C. Bioaccumulative potential No data available

D. Mobility in soil No data available

E. Other adverse effects No data available

Section 13: DISPOSAL CONSIDERATIONS

A. Method of disposal

Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose in accordance with all applicable regulations.

B. Disposal considerations (including disposal of contaminated containers or packaging) Disposal should be in accordance with applicable regional, national and local laws and regulations

Issue Date 21/Feb/2023

Print Date 17/Feb/2025

Revision Number 1.2

Page 7 of 9

Section 14: TRANSPORT INFORMATION**Mode of Transportation (Road, Water, Air, Rail)**

ADR	Not regulated
RID	Not regulated
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 user Not applicable

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not applicable**A. Method of disposal**

Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose in accordance with all applicable regulations.

B. Disposal considerations (including disposal of contaminated containers or packaging) Disposal should be in accordance with applicable regional, national and local laws and regulations

Section 15: REGULATORY INFORMATION**National Regulations****Aluminum Hydroxide**

CAS Number	21645-51-2
Weight-%	>99
Korean GHS Classification	Not classified.

Surface Treatment

CAS Number	--
Weight-%	<1
Korean GHS Classification	Not classified.

Other domestic and foreign regulations

Global Inventories

Chemical Name	CAS Number	EC No	EU REACH registration number	Australia (AIIIC)	Canada (DSL)	China (IECSC)	Japan	S. Korea (KECL)	Mexico	New Zealand	Philippines (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	A
Surface Treatment	--	--	Registered	Y	Y	Y	Y	Y	Y	Y	Y	Y	A

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

Section 16: OTHER INFORMATION

A. Source of Information

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)
 ADR (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
 RID (Agreement Concerning the International Carriage of Dangerous Goods by Rail)
 SCBA (Self-Contained Breathing Apparatus) Positive Pressure
 PNEC (Predicted No Effect Concentration)
 TSCA (Toxic Substances Control Act)
 GHS (Globally Harmonized System)

B. Issue Date

21/Feb/2023

Print Date

17/Feb/2025

Safety Data Sheet

Martinal® TM-2550

Issue Date 21/Feb/2023

Print Date 17/Feb/2025

Revision Number 1.2

Page 9 of 9

**C. Number of revisions and Date 1.2
of most recent revision**

D. Other

Prepared by

Huber Engineered Materials Global Regulatory Affairs
email: regulatory.affairs@huber.com

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