

**Martinal® TM 3620**

Japan-JIS Z 7253:2012
Occupational Safety and Health Act
GHS (Globally Harmonized System)

Issue Date: 24/Aug/2021
Print Date: 24/Aug/2021

Revision Number: 1.1.1
Page 1 of 8

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name:	Martinal® TM 3620
Pure substance/mixture	Substance
Aluminum Hydroxide	
CAS Number	21645-51-2
Weight-%	>99
Recommended Use	Additive : Flame retardant
Company:	MARTINSWERK GmbH Kölner Strasse 110 50127 Bergheim Germany Tel. : +49-2271-90.22.78 Fax. : +49-2271-90.27.17
Internet	www.hubermaterials.com
E-mail	hubermaterials@huber.com
Emergency Telephone Number	CHEMTREC: +1 800 424 9300 or International +1 703 527 3887 +81 03-3560-7316

2. HAZARD IDENTIFICATION

Japan GHS Classification	
Physical Hazards	Not classified
Health Hazard	Not classified
Environmental Hazards	Not classified
GHS label elements	
Symbols/Pictograms	None
Signal Word	None
Hazard statements	None
Precautionary Statements	
Prevention	Do not handle until all safety precautions have been read and understood Employ good industrial hygiene practice Do not breathe dust
Response	IF exposed or concerned: Get medical advice/attention

Safety Data Sheet

Martinal® TM 3620

Issue Date: 24/Aug/2021

Print Date: 24/Aug/2021

Revision Number: 1.1.1

Page 2 of 8

Wash with plenty of soap and water

StorageStore away from incompatible materials.
Keep in a dry place**Disposal**

Dispose of contents/container to an approved waste disposal plant

Additional Information:

None

3. COMPOSITION/INFORMATION ON INGREDIENTS

Pure substance/mixture

Substance

Chemical Name	CAS Number	Japan	Japan GHS Classification	REACH registration number	Weight-%
Aluminum Hydroxide	21645-51-2	(1)-17 (ENCS); ISHL	Not classified	01-2119529246-39	>99

4. FIRST AID MEASURES

If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing**IF ON SKIN:** Wash with plenty of soap and water
Take off contaminated clothing and wash before reuse**IF IN EYES:** In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes
Call a physician if irritation develops and persists**If swallowed:** Rinse mouth thoroughly with water**Self-Protection of the First Aider** Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves**Notes to Physician** Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media Water spray (fog)
Foam
Dry chemical
Carbon dioxide (CO₂)**Unsuitable Extinguishing Media** Do not use water jetstream**Special hazards arising from the substance or mixture** Avoid dust formation

Issue Date: 24/Aug/2021
Print Date: 24/Aug/2021

Revision Number: 1.1.1
Page 3 of 8

Fire-fighting measures	In case of fire and/or explosion do not breathe fumes Water mist may be used to cool closed containers Keep unauthorized personnel away
Special Protective Equipment for Firefighters	Wear self-contained breathing apparatus and protective suit

6. ACCIDENTAL RELEASE MEASURES

Protective Equipment and Precautions for Firefighters	Avoid dust formation Ensure adequate ventilation Use personal protection recommended in Section 8 Avoid contact with eyes and skin. Wear suitable personal protection equipment. Keep unauthorized personnel away
Environmental Precautions	Keep out of drains, sewers, ditches and waterways Disposal considerations See section 13 for more information
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 Minimize use of water during clean-up Recommended filter type: High efficiency particulate air filter (HEPA filter)
Other Information	Not applicable

7. HANDLING AND STORAGE

Handling	
Technical measures	Provide adequate ventilation as well as local exhaust at critical locations Ensure adequate ventilation Use personal protection equipment See section 8 for more information
Advice on safe handling	Minimize dust generation and accumulation
Conditions for safe storage, including any incompatibilities	Keep containers tightly closed in a cool, well-ventilated place
Hygiene Measures	Wash hands thoroughly after handling
Storage	
Packaging compatibilities	Keep/store only in original container

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits	Provide adequate ventilation as well as local exhaust at critical locations
Aluminum Hydroxide Japan	TWA: 2 mg/m ³
Engineering Measures	Ensure adequate ventilation, especially in confined areas

Issue Date: 24/Aug/2021

Print Date: 24/Aug/2021

Revision Number: 1.1.1

Page 4 of 8

Personal Protective Equipment

Respiratory Protection	In case of inadequate ventilation wear respiratory protection
Hand protection	For operations where prolonged or repeated skin contact may occur, impervious gloves should be worn
Eye Protection	Wear safety glasses with side shields (or goggles)
Skin and Body Protection	Wear suitable protective clothing. Chemical resistant apron.
Hygiene Measures	Handle in accordance with good industrial hygiene and safety practice Wash thoroughly after handling Avoid contact with eyes and skin Do not breathe dust

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	
Physical State	Solid Powder
Color	White
Odor	Odorless
Odor Threshold	No information available
pH:	8.0
Melting point / Freezing point	~ 300 °C / 572 °F (101.3 hPa)
Initial boiling point and boiling range	> 2900 °C / 5252 °F (101.3 hPa)
Flash Point:	Not applicable. Product/Substance is inorganic. Solid.
Evaporation Rate	Not applicable
Flammability (solid, gas)	Not flammable
Upper flammability limit:	
Lower flammability limit:	
Vapor Pressure	Not applicable
Vapor Density	Not applicable
Relative Density	+/- 2.42 g/cm ³ (20 °C)
Water Solubility	Insoluble
Solubility in other solvents	No information available
Partition coefficient	Not applicable Product/Substance is inorganic
Decomposition Temperature	200 °C (392 °F)
Dynamic viscosity	Not applicable Solid
Explosive Properties	None
Oxidizing Properties	None
 Other information:	 No data available

10. STABILITY AND REACTIVITY

Reactivity	Stable under normal conditions
Chemical stability	Stable under normal conditions

Issue Date: 24/Aug/2021
 Print Date: 24/Aug/2021

Revision Number: 1.1.1
 Page 5 of 8

Possibility of hazardous reactions	None known
Conditions to avoid	Decomposition Temperature < / =0.3% : Al ₂ O ₃ Water
Incompatible materials	Strong oxidizing agents
Hazardous decomposition products	None known

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
Skin	Avoid prolonged or repeated contact with skin Contact with dust can cause mechanical irritation or drying of the skin
Eyes	Avoid contact with eyes Dust contact with the eyes can lead to mechanical irritation
Ingestion	Ingestion is not a likely route of exposure
Aspiration hazard	Not an expected route of exposure.

Symptoms Low hazard for usual industrial or commercial handling

11.1. Information on toxicological effects

Aluminum Hydroxide

Oral LD50	> 2000 mg/kg Rat
Inhalation LC50	Rat > 2.3 mg/l (Al ₂ O ₃) Aerosol Maximum attainable concentration
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.
Skin Corrosion/Irritation	Based on available data, the classification criteria are not met
Skin Sensitization	Based on available data, the classification criteria are not met
Reproductive Toxicity	Based on available data, the classification criteria are not met.
Carcinogenicity	Based on available data, the classification criteria are not met.
Target Organ Effects	Based on available data, the classification criteria are not met.
Specific target organ toxicity - Single exposure	Based on available data, the classification criteria are not met.

Issue Date: 24/Aug/2021

Print Date: 24/Aug/2021

Revision Number: 1.1.1

Page 6 of 8

Specific target organ toxicity - Repeated exposure - Based on available data, the classification criteria are not met.

12. ECOLOGICAL INFORMATION

Ecotoxicity Based on available data, the classification criteria are not met

Persistence and degradability No data available

Bioaccumulation No data available.

Mobility in soil No data available

Hazardous to the ozone layer No data available

13. DISPOSAL CONSIDERATIONS

Disposal Dispose of in accordance with federal, state and local regulations

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal

14. TRANSPORT INFORMATION

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

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

15. REGULATORY INFORMATION

Global Inventories

HUBER

Safety Data Sheet

Martinal® TM 3620

Issue Date: 24/Aug/2021
Print Date: 24/Aug/2021

Revision Number: 1.1.1
Page 7 of 8

Pure substance/mixture Substance

Chemical Name	CAS Number	EC No	REACH registration number	Australia (AIC)	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

Legend

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

KECL - Korean Existing and Evaluated Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances
TSCA (Toxic Substances Control Act)
DSL (Domestic Substance List)
NDSL (Non-Domestic Substances List)
Japan - ISHL Notifiable Substances
ENCS - Japan Existing and New Chemical Substances

16. OTHER INFORMATION

Prepared by

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

Reason for Revision

This SDS complies with the requirements of JIS Z 7250:2010 and JIS Z 7252:2009 (Japan)

Bibliography

NITE GHS Classified list
Japan Society for occupational health (2015) recommendation of allowable concentrations, etc.
ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value

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)

HUBER

Safety Data Sheet
Martinal® TM 3620

Issue Date: 24/Aug/2021

Print Date: 24/Aug/2021

Revision Number: 1.1.1

Page 8 of 8

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