



SAFETY DATA SHEET

Martinal® OL-104C; Martinal® OL-107C

MOL No. 2009-68 Standards for Classification and Labeling of Chemical Substances and Material Safety Data Sheet (MSDS)

Issue Date: 03/Nov/2017
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Revision Number: 1.3
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Section 1: PRODUCT AND COMPANY IDENTIFICATION

A. Product name Martinal® OL-104C; Martinal® OL-107C
Chemical Name Aluminum Hydroxide (surface modified)
Pure substance/mixture Mixture

B. Recommended use and Limitations on use

Recommended Use Additive : Flame retardant
Uses advised against No information available

C. Supplier information

Company Name MARTINSWERK GmbH
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50127 Bergheim
Germany
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Contact person CHEMTREC
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Section 2: HAZARDS IDENTIFICATION

A. Hazard category/Classification

Physical Hazards Not classified
Health Hazards Not classified
Environmental Hazards Not classified

B. Warning label items including precautionary statement

Label Elements
Symbols/Pictograms None

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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

Legend

X / Y: Complies , - / N: Not Listed , Exempt

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

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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****B. Engineering Controls.
Engineering Measures**

Do not handle until all safety precautions have been read and understood
Ensure adequate ventilation, especially in confined areas
Provide a good standard of controlled ventilation (10 to 15 air changes per hour)
Use exhaust ventilation to keep airborne concentrations below exposure limits
In case of insufficient ventilation, wear suitable respiratory equipment

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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 Powder
Color	White
Odor	Odorless
Odor Threshold	No information available
pH:	+/- 9 (10% Water)
Melting point / Freezing point	~ 300 °C / 572 °F (1013 hPa)
Initial boiling point and boiling range	> 2900 °C / 5252 °F (1013 hPa)
Flash Point:	Not applicable Product/Substance is inorganic Solid
Evaporation Rate	Not applicable
Flammability (solid, gas)	No information available
Upper flammability limit:	No data available
Lower flammability limit:	No data available
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 Not applicable Product/Substance is inorganic No information available
Kinematic viscosity	No data available.
Dynamic viscosity	Not applicable. Solid.
Explosive Properties	None
Oxidizing Properties	None

9.2. Other information

No data available

Section 10: STABILITY AND REACTIVITY**A. Stability and hazardous reaction potential**

Stability Stable under normal conditions

Hazardous reaction potential None known

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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

Reproductive Effects 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.

Specific target organ toxicity - Single exposure No information available.

Specific target organ toxicity - Repeated exposure 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

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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

Section 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

Section 15: REGULATORY INFORMATION

National Regulations

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Other domestic and foreign regulations**Global Inventories****Legend**

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Section 16: OTHER INFORMATION**A. Source of Information**

Abbreviations and acronyms

- International Agency for Research on Cancer (IARC)
- International Air Transport Association (IATA)
- International Maritime Dangerous Goods (IMDG)
- International Uniform Chemical Information Database (IUCLID)
- Workplace Hazardous Materials Information System (WHMIS) status and classification
- EPA SARA Title III Section 312 (40 CFR 370) Hazard Classification
- DOT (Department of Transportation)
- OSHA (Occupational Safety and Health Administration of the US Department of Labor)
- TWA - Time-Weighted Average
- The Classification, Labeling and Packaging of Substances and Mixtures (CLP) 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)
- Reportable Quantity (RQ) (RQ/% in mixture)
- STEL - Short Term Exposure Limit
- TLV® - Threshold Limit Value
- Derived No Effect Level (DNEL)
- SVHC: Substances of Very High Concern for Authorization:
- Land transport (ADR/RID)
- Biochemical oxygen demand (BOD)
- Chemical oxygen demand (COD)
- ICAO (air)
- (IMDG) International Maritime Dangerous Goods
- Positive Pressure Self-Contained Breathing Apparatus (SCBA)
- Predicted No Effect Concentration (PNEC)
- Globally Harmonized System (GHS)

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**C. Number of revisions and Date 1.3
of most recent revision**

D. Other

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Disclaimer The information provided in this Safety Data Sheet is correct to the best of our knowledge,

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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