



**Martoxid® KMS-99**

OSHA HCS 2024  
Canadian Workplace Hazardous Material Information System (WHMIS) 2015 rev 2022  
Mexico NOM-018-STPS-2000; NOM-018-STPS-2015  
GHS (Globally Harmonized System)

**Issue Date** 15/Feb/2023  
**Print Date** 29/Dec/2025

**Revision Number** 1.3.1  
**Page** 1 of 11

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

**1.1. Product identifier**

**Product Name:** Martoxid® KMS-99  
**Pure substance/mixture** Mixture

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

**Recommended Use** Industrial.  
**Uses advised against** None known.

**1.3. Details of the supplier of the safety data sheet**

**Company:** MARTINSWERK GmbH  
Kölner Strasse 110  
50127 Bergheim  
Germany  
Tel. : +49-2271-90.22.78  
Fax. : +49-2271-90.27.17

**Internet** [www.huberadvancedmaterials.com](http://www.huberadvancedmaterials.com)

**Contact E-Mail** [www.huberadvancedmaterials.com/contact](http://www.huberadvancedmaterials.com/contact)

**1.4. Emergency telephone number** CHEMTREC: +1 800 424 9300 or International 1+703-527-3887

**SECTION 2: Hazards identification**

**2.1. Classification of the substance or mixture**

**OSHA Regulatory Status** This material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

**Physical Hazards** Not classified.

**Health Hazards** Not classified.

**Environmental Hazard** Not classified.

# Safety Data Sheet

## Martoxid® KMS-99

Issue Date 15/Feb/2023  
Print Date 29/Dec/2025

Revision Number 1.3.1  
Page 2 of 11

### 2.2. Label elements

<b>Symbols/Pictograms</b>	None
<b>Signal Word</b>	None
<b>Hazard Statements</b>	None

### Precautionary Statements

<b>Prevention</b>	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
<b>Response</b>	IF ON SKIN: Wash with plenty of soap and water
<b>Storage</b>	Store away from incompatible materials
<b>Disposal</b>	Dispose of contents/containers in accordance with local regulations

**Additional Information:** None.

**Hazards not otherwise classified (HNOC)** Not classified.

**Hazards associated with known or reasonably anticipated uses** None known.

## SECTION 3: Composition/information on ingredients

**Pure substance/mixture** Mixture

Chemical Name	CAS Number	Weight-%
Aluminum oxide	1344-28-1	>96

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

<b>General Advice</b>	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.
<b>Eye Contact</b>	In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

# Safety Data Sheet

## Martoxid® KMS-99

Issue Date 15/Feb/2023

Print Date 29/Dec/2025

Revision Number 1.3.1

Page 3 of 11

<b>Skin Contact</b>	Wash with plenty of soap and water.
<b>Ingestion</b>	Rinse mouth thoroughly with water.
<b>Inhalation</b>	If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
<b>Aspiration hazard</b>	Not an expected route of exposure.
<b>4.2. Most important symptoms and effects, both acute and delayed</b>	Dust contact with the eyes can lead to mechanical irritation. Contact with dust can cause mechanical irritation or drying of the skin.
<b>4.3. Indication of any immediate medical attention and special treatment needed</b>	Treatment should be symptomatic and supportive.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

#### Suitable Extinguishing Media

Not combustible. Use extinguishing agent suitable for type of surrounding fire. Water spray (fog). Foam. Dry chemical. Carbon dioxide (CO<sub>2</sub>).

#### Unsuitable Extinguishing Media

None known.

### 5.2. Special hazards arising from the substance or mixture

None known.

### 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

### 6.1. Personal precautions, protective equipment and

Ensure adequate ventilation. Use personal protection recommended in Section 8. Avoid dust formation. Keep unauthorized personnel away.

# Safety Data Sheet

## Martoxid® KMS-99

Issue Date 15/Feb/2023

Print Date 29/Dec/2025

Revision Number 1.3.1

Page 4 of 11

### emergency procedures

**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** Methods for Containment : Prevent further leakage or spillage if safe to do so  
Methods for Clean-up : Sweep up and shovel into suitable containers for disposal

**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 handling** Minimize dust generation and accumulation. Provide local exhaust ventilation. Handle in accordance with good industrial hygiene and safety practice.

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

**7.3. Specific end use(s)** No information available.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Occupational exposure limits

#### Aluminum oxide

OSHA	TWA: 15 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable fraction (vacated) TWA: 10 mg/m <sup>3</sup> total dust (vacated) TWA: 5 mg/m <sup>3</sup> respirable fraction
OSHA - Final PELs -TWA	15 mg/m <sup>3</sup> TWA 5 mg/m <sup>3</sup> TWA
ACGIH	TWA: 10 mg/m <sup>3</sup>
NIOSH	--
Canada - Ontario - OEL - TWA EVs	1 mg/m <sup>3</sup>

**PNEC (Predicted No Effect Concentration)** No information available

**DNEL (Derived No Effect Level)** No information available

# Safety Data Sheet

## Martoxid® KMS-99

Issue Date 15/Feb/2023

Print Date 29/Dec/2025

Revision Number 1.3.1

Page 5 of 11

**Biological Limit Values** None

### 8.2. Exposure controls

#### Engineering Measures

Provide a good standard of controlled ventilation (5 to 10 air changes per hour). Use exhaust ventilation to keep airborne concentrations below exposure limits. In case of insufficient ventilation, wear suitable respiratory equipment.

#### Personal protective equipment

##### Eye/Face Protection

Wear safety glasses with side shields (or goggles).

##### Skin and Body Protection

Wear suitable protective clothing.

##### Hand Protection

For operations where prolonged or repeated skin contact may occur, impervious gloves should be worn.

##### Respiratory Protection

In case of inadequate ventilation wear respiratory protection.

#### Thermal hazards

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

#### Appearance:

##### Physical State

Solid Powder

##### Color

White (Al2O3)

#### Odor

Odorless

#### pH:

+/- 9 (10 % / H2O)

#### Melting point / Freezing point

2000 °C (3632 °F) (1013 hPa)

#### Initial boiling point and boiling range

2980 °C (5396 °F) (1013 hPa)

#### Freezing Point

Not applicable

#### Flash Point

Not applicable Product/Substance is inorganic Solid Melting Point : > 300°C

#### Flammability

No information available

##### Upper flammability limit:

--

##### Lower flammability limit:

--

#### Vapor Pressure

1 hPa (2158 °C)

#### Relative Vapor Density

Not applicable

Melting Point : > 300°C

#### Density

No data available

#### Relative Density

+/- 3.7 - 3.9

#### Water Solubility

Insoluble

#### Solubility in other solvents

No information available

#### Partition coefficient

No information available Not applicable : Product/Substance is inorganic

#### Autoignition Temperature

No data available No information available

#### Decomposition Temperature

No data available No information available

#### Viscosity

No information available.

# Safety Data Sheet

## Martoxid® KMS-99

Issue Date 15/Feb/2023

Print Date 29/Dec/2025

Revision Number 1.3.1

Page 6 of 11

<b>Kinematic viscosity</b>	Not applicable
<b>Dynamic viscosity</b>	Not applicable Solid
<b>Explosive Properties</b>	None
<b>Oxidizing Properties</b>	None
<b>Particle Characteristics</b>	No information available
<b>VOC Content (%)</b>	Not applicable

### 9.2. Other information

#### 9.2.1. Information with regard to physical hazard classes

Not applicable

#### 9.2.2. Other safety characteristics

Not applicable

## SECTION 10: Stability and reactivity

<b>10.1. Reactivity</b>	No data available
<b>10.2. Chemical stability</b>	Stable under normal conditions
<b>10.3. Possibility of hazardous reactions</b>	None under normal processing
<b>10.4. Conditions to avoid</b>	Incompatible materials Decomposition Temperature : Al <sub>2</sub> O <sub>3</sub> Water
<b>10.5. Incompatible materials</b>	Strong acids
<b>10.6. Hazardous decomposition products</b>	None known

## SECTION 11: Toxicological information

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

### 11.1. Information on toxicological effects

#### Aluminum oxide

<b>Serious eye damage/eye irritation</b>	Non-irritant : Rabbit
<b>Skin Corrosion/Irritation</b>	Non-irritant : Rabbit
<b>Mutagenicity</b>	Based on available data, the classification criteria are not met.
<b>Reproductive Effects</b>	No indication of effects on fertility. No indication of effects on developmental toxicity.

# Safety Data Sheet

## Martoxid® KMS-99

Issue Date 15/Feb/2023  
Print Date 29/Dec/2025

Revision Number 1.3.1  
Page 7 of 11

<b>Acute Toxicity</b>	Mixture Al <sub>2</sub> O <sub>3</sub> Repeated dose toxicity Inhalation 28-d Rat NOAEL (No observed adverse effect level) 70 mg(Al)/m <sup>3</sup> . Target Organs Lungs Respiratory system  Repeated dose toxicity 1- Year Oral Rat NOAEL (No observed adverse effect level) >=30 mg Al/kg bw
<b>Respiratory Sensitization</b>	Based on available data, the classification criteria are not met.
<b>Serious eye damage/eye irritation</b>	Non-irritant : Rabbit
<b>Skin Corrosion/Irritation</b>	Non-irritant : Rabbit
<b>Mutagenicity</b>	Based on available data, the classification criteria are not met.
<b>Reproductive Effects</b>	Based on available data, the classification criteria are not met.
<b>Reproductive Toxicity</b>	Based on available data, the classification criteria are not met.
<b>Carcinogenicity</b>	This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.
<b>Target Organ Effects</b>	Lungs.
<b>Specific target organ toxicity - Single exposure</b>	No information available.
<b>Specific target organ toxicity - Repeated exposure</b>	No information available.

### Information on Likely Routes of Exposure

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

### 11.2. Information on other hazards

**11.2.1. Endocrine disrupting properties** This product does not contain any known or suspected endocrine disruptors

# Safety Data Sheet

**Martoxid® KMS-99**

Issue Date 15/Feb/2023

Print Date 29/Dec/2025

Revision Number 1.3.1

Page 8 of 11

11.2.2. Other information Not applicable

## SECTION 12: Ecological information

12.1. Toxicity Not considered to be harmful to aquatic life

**Aluminum oxide**

WGK Classification (AwSV) 1346. 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.

Bioconcentration factor (BCF) No data available.

12.4. Mobility in soil None.

12.5. Results of PBT and vPvB assessment This substance does not meet the criteria for classification as PBT or vPvB.

12.6. Endocrine disrupting properties This product does not contain any known or suspected endocrine disruptors

12.7. Other Adverse Effects None known

## SECTION 13: Disposal considerations

**13.1. Waste treatment methods****Disposal Methods** Disposal should be in accordance with applicable regional, national and local laws and regulations.**Contaminated Packaging** Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not reuse container.**Waste codes** Waste codes should be assigned by the user based on the application for which the product was used**Aluminum oxide**

WGK Classification (AwSV) 1346. WGK: nwg

# Safety Data Sheet

Martoxid® KMS-99

Issue Date 15/Feb/2023

Print Date 29/Dec/2025

Revision Number 1.3.1

Page 9 of 11

## SECTION 14: Transport information

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

<b>TDG -Canada</b>	Not regulated
<b>DOT</b>	Not regulated
<b>ADR</b>	Not regulated
<b>IATA</b>	Not regulated
<b>IMDG/IMO</b>	Not regulated
<b>ICAO</b>	Not regulated

- 14.1. UN number or ID 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. Maritime transport in bulk according to IMO instruments  
Not applicable

## SECTION 15: Regulatory information

### Global Inventories

Pure substance/mixture Mixture

Chemical Name	CAS Number	EC No	Australia (AIC)	Canada (DSL)	China (IECSC)	Japan	S. Korea (KECL)	Mexico	Thailand (TECI)	New Zealand	Taiwan	Philippines (PICCS)	TSCA: United States
Aluminum oxide	1344-28-1	215-691-6	Y	Y	Y	(1)-23 (ENCS)(IS HL)	KE-01012	Y	55-1-01518	Y	Y	Y	A

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

### US Federal Regulations

#### EPA

#### SARA 313

This material, as supplied, does not contain any substances regulated as hazardous substances under the

# Safety Data Sheet

## Martoxid® KMS-99

Issue Date 15/Feb/2023

Print Date 29/Dec/2025

Revision Number 1.3.1

Page 10 of 11

Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

### Aluminum oxide

SARA 313

1.0

### SARA 311/312 Hazardous Categorization

Yes :

Acute health hazard

No :

Chronic health hazard

Fire hazard

Sudden release of pressure hazard

Reactive hazard

### CWA (Clean Water Act)

Not listed

### CAA (Clean Air Act)

Not listed

### U.S. State Right-to-Know Regulations

Chemical Name	CAS NUMBER:	California Proposition 65	Massachusetts	Minnesota	New Jersey	Pennsylvania
Aluminum oxide	1344-28-1	-	Y	Y	Y	Y

Y: Listed ; N: Not Listed

### California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65)

This product does not contain any Proposition 65 chemicals

### CANADA

#### WHMIS

This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR) and the SDS contains all the information required by the HPR

## SECTION 16: Other information

### Prepared by

Huber Engineered Materials (HEM) Global Regulatory Affairs  
HEM.HAMregulatory@huber.com

### Issue Date

15/Feb/2023

### Print Date

29/Dec/2025

### Revision Number

1.3.1

### Reason for Version

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

### Training Advice

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

# Safety Data Sheet

## Martoxid® KMS-99

Issue Date 15/Feb/2023  
Print Date 29/Dec/2025

Revision Number 1.3.1  
Page 11 of 11

### 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  
GHS (Globally Harmonized System)  
SARA (Superfund Amendments and Reauthorization Act of 1986)  
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**