Product: Filtersorb FMH



## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product name:

Emergency Response Information (8-17 CET)

Company WATCH GMBH Fahrlach Str.14

68165 Mannheim, Germany

Watch GmbH: 0049 621 879 510

Filtersorb® FMH

## 2. COMPOSITION / INFORMATION ON INGREDIENTS

### Composition

Material	CAS No.	Concentration (weight %)
Dolomite	16389-88-1	80-84 %
Manganese dioxide	1313-13-9	10-15 %

Amounts specified are typical and do not represent a specification. Remaining components are proprietary, non hazardous and/or present at amounts below reportable limits.

### 3. HAZARD IDENTIFICATIONS

Component	CAS No.	% wt	OSHA PEL TWA 8/40h [mg/m³]	OSHA PEL CEILING	ACGIH TLV [mg/m <sup>2</sup> ]	Listed Carcinogenic (Yes/No)		0
				[mg/m <sup>2</sup> ]		NTP	IARC	OSHA
Dolomite	16389-88-1	88-90	15 (total dust) 5 (respirable)	N.A.	10	NO	NO	NO
Manganese dioxide	1313-13-9	10-15	5 (as Mn)	5	0.2 (as Mn)	NO	NO	NO

#### Emergency overview:

Contact can cause irritation to eyes, skin, respiratory system, and gastrointestinal tract.

### Potential health effects:

Inhalation: May cause mild irritation to the respiratory tract. Long-term exposure may cause permanent damage. Dolomite is not listed by NTP, OSHA or IARC as a carcinogen.

**Ingestion**: Not expected to be a health hazard via ingestion. This product can cause mild irritation of gastrointestinal tract if swallowed in small amounts. Large amounts may cause gastrointestinal disturbances. Symptoms may include irritation, nausea, vomiting, abdominal pain, diarrhea.

Skin Contact: May cause mild irritation.

Eye Contact: May cause irritation of eyes. Abrasive action of dust particulate may damage eye.

Aggravation of Pre-existing Conditions: Contact may aggravate disorders of the eyes, skin, central nervous system disorders, gastrointestinal tract, and respiratory system (such as bronchitis, emphysema and asthma).

## 4. FIRST-AID MEASURES

### General Information:

Take off contaminated clothes immediately. Wash immediately with plenty of water. Continue rinsing for at least 10 minutes. If any symptom persists, seek medical attention.

- Eye contact: Rinse immediately with plenty of running water. Continue for at least 15 minutes. Seek medical advice.
- **Skin contact**: Wash immediately with plenty of water. Continue for at least 15 minutes. Obtain medical advice if there are persistent symptoms. Remove contaminated clothing.
- Inhalation: Remove patient to fresh air, allow to rest and keep warm. Obtain medical advice if there are persistent symptoms.
- Ingestion: First rinse mouth with water. Immediately give 1-2 glasses of water, if victim is fully conscious. Seek medical attention.

Product: Filtersorb FMH



## \* 5. FIRE-FIGHTING MEASURES

- Not considered to be a fire hazard. However, the material contains manganese dioxide which is a strong oxidizing agent and
  may increase the burning rate of combustibles
- Extinguishing media: Any means suitable for extinguishing surrounding fire.
- Unsuitable extinguishing media: None known

•

- Exposure hazards: None known
- Combustion products: at high temperatures the material is releasing carbon dioxide
- Protective equipment: Firefighters and other exposed, wear self-contained breathing apparatus and protective suit.

## 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions: Wear protective clothing.
- Environmental precautions: Keep out of drains and water courses.
- Methods for cleaning up: Vacuum or sweep up material and placed in a designated waste container.

### \* 7. HANDLING AND STORAGE

- Handling: Normal chemical handling. Wash hands after handling.
- Storage: Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Store in a cool, dry area. Keep container closed when not in use. Product or component is a powerful oxidizer, hence it should not stored near organic matter or other strong reductive substances or incompatible materials such as hydrogen peroxide and sodium peroxide. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Ventilation System**: A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, Industrial Ventilation, A Manual of Recommended Practices, most recent edition, for details.

**Personal Respirators** (NIOSH Approved): If the exposure limit is exceeded, a half-face dust/mist respirator may be worn for up to ten times the exposure limit or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. A full-face piece dust/mist respirator may be worn up to 50 times the exposure limit, or the maximum use concentration specified by the appropriate regulatory agency, or respirator supplier, whichever is lowest. For emergencies or instances where the exposure levels are not known, use a full-face piece positive-pressure, air-supplied respirator.

WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

Skin Protection: Wear protective gloves and clean body-covering clothing.

**Eye Protection**: Use chemical safety goggles and/or full face shield where dusting or splashing of solutions is possible. Maintain eye wash fountain and quick-drench facilities in work area.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

<ul><li>General Information:</li></ul>	
Physical State:	solid
Appearance	black granules
Odor:	odorless
Change in condition:	
Melting point/Melting range:	n.a.
• Flash point:	n.a.
Solubility in water 20 <sup>O</sup> C:	not soluble
• pH-value (10 g/l):	7 to 8
Bulk weight (kg/m3):	1570

Product: Filtersorb FMH



### 10. STABILITY AND REACTIVITY

- . Stability: Stable under ordinary conditions of use and storage
- Materials to avoid: Manganese Dioxide is a powerful oxidizing agent, therefore it should not be heated or rubbed with organic matter or other easily oxidable substances such as sulfur, magnesium, powder of zinc or aluminum, etc. Act as a catalyst in hydrogen peroxide fast decomposition. Keep away from heat and flammable materials.
  - Dolomite reacts vigorously with acids to form CO<sub>2</sub>. Potential vigorous reaction and release of heat with fluorine, ammonium salts, aluminum, hydrogen, magnesium, acids
- Conditions to Avoid: Dusting and incompatibles
- Hazardous decomposition products: If stored and handled properly none known. Dolomite decompose at 730 °C to produce calcium and magnesium oxides and carbon dioxide.

### 11. TOXICOLOGICAL INFORMATIONS

Dolomite

Acute toxicity (LD/LC50 values relevant for classification):

Oral LD50, rat: 6450 mg/kg

Manganese Dioxide

Acute toxicity (LD/LC50 values relevant for classification):
Oral LD50, rat: 3478 mg/kg
Dermal (subcutaneous) LD50, rat: 422 mg/kg

Chronic toxicity (LD/LC50 values relevant for classification):

**Inhalation** LD50, rat: 1.82 mg/m<sup>3</sup>, 34 hours/35 days

#### 12. ECOLOGICAL INFORMATION

**Ecotoxicity**: Because dolomite has the potential to neutralize acids and to produce a slight increase in water pH, it would be expected to produce some ecotoxicity upon exposure to aquatic organisms and aquatic systems in high concentrations. Presents no hazard to the environment

• Environmental fate: No data available

## 13. DISPOSAL CONSIDERATIONS

**RCRA:** This product as manufactured, is not a RCRA, listed hazardous waste and does not exhibit any characteristics of a hazardous waste, including toxicity

**Disposal method:** This product is generally suitable for landfill disposal. Follow all applicable Federal, State, and local laws, rules, and regulations regarding the proper disposal of this material. If this product has been altered or contaminated with other hazardous materials, appropriate waste analysis may be necessary to determine proper method for disposal. A qualified environmental professional should determine waste characterization, disposal, and treatment methods for this material in accordance with applicable Federal, State and local regulations and requirements. Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

### \* 14. TRANSPORT INFORMATIONS

• Land transport ADR/RID and GGVS/GGVE:

Not regulated for transport.

Sea transport IMDG:

Product: Filtersorb FMH



Not regulated for transport.

### • Air transport IATA/ICAO:

Not regulated for transport.

Filtersorb® FMH is not classified as a hazardous material by US DOT and is not regulated by the Transportation of Dangerous Goods (TDG) when shipped by any mode of transport.

## 15. REGULATORY INFORMATIONS

Components listed in federal regulations:

Component	CAS No.	TSCA	RCRA	CERCLA	SARA 311/312	SARA 313	SARA 302
Dolomite	16389-88-1	YES	No	No	No	No	No
Manganese dioxide	1313-13-9	Yes	No	Yes	Yes (as compound)	No	No

### Components listed in international regulations

Component	CAS No.	AICS	DSL	ECL	EINECS	ENCS	Philippines
Dolomite	16389-88-1	Yes	No	Yes	Yes	Yes	Yes
Manganese dioxide	1313-13-9	Yes	Yes	Yes	Yes	Yes	Yes

Not listed or not regulated by the following inventories: CDTA, Chemical Weapon Convention

### NFPA Ratings

Component	CAS No.	Health	Flammability	Reactivity	Others
Dolomite	16389-88-1	2	0	1	Oxidizer
Manganese dioxide	1313-13-9	2	0	0	Alkaline

## 16. OTHER INFORMATIONS

- This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product feature and shall not establish a legally valid contractual relationship.
- \* Data compared to the previous version altered.
- Reason for revision: General update.

### Disclaimer:

Watch GmbH provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose. This MSDS provides selected regulatory information on this product, including its components. This is not intended to include all regulations. It is the responsibly of the user to know and comply with all applicable regulations and laws relating to the product being used.

WATCH GMBH MAKES NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE INFORMATION SET FORTH HEREIN OR THE PRODUCT TO WHICH THE INFORMATION REFERS. ACCORDINGLY, WATCH GMBH WILL NOT BE RESPONSIBLE FOR DAMAGES RESULTING FROM USE OF OR RELIANCE UPON THIS INFORMATION.