



# PRODUCT INFORMATION SHEET

**MATERION**

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

### 1.1. Product identifier

**Trade name or designation of the mixture** Metallized Alumina Ceramic  
**Synonyms** Aluminum Oxide, Alumina, Al<sub>2</sub>O<sub>3</sub>, Durox AL, Durox UHP  
**Document number** C22  
**Issue date** 22-August-2018  
**Version number** 01

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

**Identified uses** Not available.  
**Uses advised against** None known.

### 1.3. Details of the supplier of the product information sheet

#### Supplier

**Company name** Materion Brush Inc.  
**Address** 6070 Parkland Boulevard  
Mayfield Heights, OH 44124  
United States

#### Division

**Telephone** 1.216.383.4019  
**e-mail** ehs@materion.com  
**Contact person** Theodore Knudson

**1.4. Emergency telephone number** 1.216.383.4019

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

#### Classification according to Regulation (EC) No 1272/2008 as amended

##### Health hazards

|  |   |   |
|--|---|---|
| Serious eye damage/eye irritation                  | Category 2                              | H319 - Causes serious eye irritation.   |
| Respiratory sensitisation                          | Category 1                              | H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| Skin sensitisation                                 | Category 1                              | H317 - May cause an allergic skin reaction.                                       |
| Carcinogenicity                                    | Category 1A                             | H350 - May cause cancer.  |
| Reproductive toxicity                              | Category 2                              | H361 - Suspected of damaging fertility or the unborn child.                       |
| Specific target organ toxicity - single exposure   | Category 3 respiratory tract irritation | H335 - May cause respiratory irritation.  |
| Specific target organ toxicity - repeated exposure | Category 2 (Respiratory system)         | H373 - May cause damage to organs through prolonged or repeated exposure.         |

#### Hazard summary

May cause damage to organs through prolonged or repeated exposure. May cause cancer. May cause an allergic skin reaction. Possible reproductive hazard. Prolonged exposure may cause chronic effects. Occupational exposure to the substance or mixture may cause adverse health effects.

### 2.2. Label elements

#### Label according to Regulation (EC) No. 1272/2008 as amended

**Contains:** Aluminium oxide, Gold, Molybdenum, Nickel, Silica, Titanium, Tungsten

## Hazard pictograms



## Signal word

Danger

## Hazard statements

|      |  |
|------|--|
| H317 | May cause an allergic skin reaction.                                       |
| H319 | Causes serious eye irritation.   |
| H334 | May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| H335 | May cause respiratory irritation.  |
| H350 | May cause cancer.  |
| H361 | Suspected of damaging fertility or the unborn child.                       |
| H373 | May cause damage to organs through prolonged or repeated exposure.         |

## Precautionary statements

### Prevention

|      |  |
|------|--|
| P201 | Obtain special instructions before use.                                    |
| P202 | Do not handle until all safety precautions have been read and understood.  |
| P260 | Do not breathe dust/fume/gas/mist/vapors/spray.                            |
| P272 | Contaminated work clothing should not be allowed out of the workplace.     |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |
| P284 | Wear respiratory protection.   |

### Response

|             |  |
|-------------|--|
| P302 + P352 | IF ON SKIN: Wash with plenty of water.                                     |
| P304 + P340 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. |
| P308 + P313 | IF exposed or concerned: Get medical advice/attention.                     |
| P333 + P313 | If skin irritation or rash occurs: Get medical advice/attention.           |
| P342 + P311 | If experiencing respiratory symptoms: Call a poison centre/doctor.         |
| P362 + P364 | Take off contaminated clothing and wash it before reuse.                   |

### Storage

|      |                  |
|------|------------------|
| P405 | Store locked up. |
|------|------------------|

### Disposal

|      |   |
|------|---|
| P501 | Dispose of contents/container in accordance with local/regional/national/international regulations. |
|------|---|

## Supplemental label information

For further information, please contact the Product Stewardship Department at +1.216.383.4019.

## 2.3. Other hazards

Not a PBT or vPvB substance or mixture.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

#### General information

| Chemical name          | %   | CAS-No. / EC No.        | REACH Registration No. | INDEX No.    | Notes |
|------------------------|---|-------------------------|------------------------|--------------|-------|
| Aluminium oxide        | 80 - 95   | 1344-28-1<br>215-691-6  | -                      | -            |       |
| <b>Classification:</b> | -   |                         |                        |              |       |
| Molybdenum             | 0 - 10  | 7439-98-7<br>231-107-2  | -                      | -            |       |
| <b>Classification:</b> | -   |                         |                        |              |       |
| Nickel                 | 0 - 10  | 7440-02-0<br>231-111-4  | 01-2119438727-29-0049  | 028-002-00-7 |       |
| <b>Classification:</b> | Skin Sens. 1;H317, STOT SE 3;H335, Carc. 2;H351, STOT RE 2;H373 |                         |                        |              | 7,S   |
| Silica                 | 0 - 4   | 14808-60-7<br>238-878-4 | -                      | -            |       |
| <b>Classification:</b> | Carc. 1A;H350   |                         |                        |              |       |
| Manganese              | 0 - 2   | 7439-96-5<br>231-105-1  | -                      | -            | #     |
| <b>Classification:</b> | -   |                         |                        |              |       |

| Chemical name          | %     | CAS-No. / EC No.       | REACH Registration No. | INDEX No. | Notes |
|------------------------|-------|------------------------|------------------------|-----------|-------|
| Titanium               | 0 - 2 | 7440-32-6<br>231-142-3 | -                      | -         |       |
| <b>Classification:</b> | -     |                        |                        |           |       |
| Tungsten               | 0 - 2 | 7440-33-7<br>231-143-9 | -                      | -         |       |
| <b>Classification:</b> | -     |                        |                        |           |       |
| Gold                   | 0 - 1 | 7440-57-5<br>231-165-9 | -                      | -         |       |
| <b>Classification:</b> | -     |                        |                        |           |       |

#### List of abbreviations and symbols that may be used above

#: This substance has been assigned Union workplace exposure limit(s).

### SECTION 4: First aid measures

**General information** If exposed or concerned: get medical attention/advice. IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

#### 4.1. Description of first aid measures

**Inhalation** Move to fresh air. Call a physician if symptoms develop or persist.  
**Skin contact** Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions.  
**Eye contact** Rinse with water. Get medical attention if irritation develops and persists.  
**Ingestion** Rinse mouth. Get medical attention if symptoms occur.

**4.2. Most important symptoms and effects, both acute and delayed** May cause an allergic skin reaction. Dermatitis. Rash. Prolonged exposure may cause chronic effects.

**4.3. Indication of any immediate medical attention and special treatment needed** Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

### SECTION 5: Firefighting measures

**General fire hazards** No unusual fire or explosion hazards noted.

#### 5.1. Extinguishing media

**Suitable extinguishing media** Water fog. Foam. Dry chemical powder. Dry sand. Carbon dioxide (CO<sub>2</sub>).  
**Unsuitable extinguishing media** Do not use water jet as an extinguisher, as this will spread the fire. Carbon dioxide (CO<sub>2</sub>).

**5.2. Special hazards arising from the substance or mixture** During fire, gases hazardous to health may be formed.

#### 5.3. Advice for firefighters

**Special protective equipment for firefighters** Self-contained breathing apparatus and full protective clothing must be worn in case of fire.  
**Special firefighting procedures** Move containers from fire area if you can do so without risk.

**Specific methods** Use standard firefighting procedures and consider the hazards of other involved materials.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel** Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

**For emergency responders** Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the SDS.

- 6.2. Environmental precautions** Avoid discharge into drains, water courses or onto the ground.
- 6.3. Methods and material for containment and cleaning up** Put material in suitable, covered, labeled containers.
- 6.4. Reference to other sections** Not available.

## SECTION 7: Handling and storage

- 7.1. Precautions for safe handling** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep formation of airborne dusts to a minimum. Do not breathe dust. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Pregnant or breastfeeding women must not handle this product. Should be handled in closed systems, if possible. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.
- 7.2. Conditions for safe storage, including any incompatibilities** Store locked up. Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).
- 7.3. Specific end use(s)** Not available.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Occupational exposure limits

##### Hungary. OELs. Joint Decree on Chemical Safety of Workplaces

| Components                      | Type    | Value                  | Form        |
|---------------------------------|---------|------------------------|-------------|
| Aluminium oxide (CAS 1344-28-1) | TWA     | 6 mg/m <sup>3</sup>    | Respirable. |
| Manganese (CAS 7439-96-5)       | STEL    | 20 mg/m <sup>3</sup>   |             |
| Molybdenum (CAS 7439-98-7)      | TWA     | 5 mg/m <sup>3</sup>    |             |
|                                 | STEL    | 60 mg/m <sup>3</sup>   |             |
| Nickel (CAS 7440-02-0)          | TWA     | 15 mg/m <sup>3</sup>   |             |
|                                 | Ceiling | 0,1 mg/m <sup>3</sup>  |             |
| Silica (CAS 14808-60-7)         | TWA     | 0,15 mg/m <sup>3</sup> | Respirable. |

##### EU. Indicative Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU

| Components                | Type | Value                  | Form                 |
|---------------------------|------|------------------------|----------------------|
| Manganese (CAS 7439-96-5) | TWA  | 0,2 mg/m <sup>3</sup>  | Inhalable fraction.  |
|                           |      | 0,05 mg/m <sup>3</sup> | Respirable fraction. |

#### Biological limit values

##### Hungary. Chemical Safety at Workplace Ordinance Joint Decree No. 25/2000 (Annex 2): Permissible limit values of biological exposure (effect) indices

| Components             | Value           | Determinant | Specimen            | Sampling time |
|------------------------|-----------------|-------------|---------------------|---------------|
| Nickel (CAS 7440-02-0) | 0,02 mg/g       | Nickel      | Creatinine in urine | *             |
|                        | 0,038 µmol/mmol | Nickel      | Creatinine in urine | *             |

\* - For sampling details, please see the source document.

#### Recommended monitoring procedures

VENTILATION: Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Whenever possible, the use of local exhaust ventilation or other engineering controls is the preferred method of controlling exposure to airborne particulate. Where utilized, exhaust inlets to the ventilation system must be positioned as close as possible to the source of airborne generation. Avoid disruption of the airflow in the area of a local exhaust inlet by equipment such as a man-cooling fan. Check ventilation equipment regularly to ensure it is functioning properly. Provide training on the use and operation of ventilation to all users. Use qualified professionals to design and install ventilation systems. Follow standard monitoring procedures.

|  |   |
|--|---|
| <b>Derived no effect levels (DNELs)</b>                                      | Not available.  |
| <b>Predicted no effect concentrations (PNECs)</b>                            | Not available.  |
| <b>Exposure guidelines</b>   | Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled.   |
| <b>8.2. Exposure controls</b>  |   |
| <b>Appropriate engineering controls</b>                                      | Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.   |
| <b>Individual protection measures, such as personal protective equipment</b> |   |
| <b>General information</b>   | Use personal protective equipment as required. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.  |
| <b>Eye/face protection</b>   | If contact is likely, safety glasses with side shields are recommended. Wear approved safety glasses, goggles, face shield and/or welder's helmet when risk of eye injury is present, particularly during operations that generate dust, mist or fume.  |
| <b>Skin protection</b>   |   |
| <b>- Hand protection</b>   | Wear appropriate chemical resistant gloves. Wear gloves to prevent contact with particulate or solutions. Wear gloves to prevent metal cuts and skin abrasions during handling.   |
| <b>- Other</b>   | Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended. Protective overgarments or work clothing must be worn by persons who may become contaminated with particulate during activities.   |
| <b>Respiratory protection</b>  | Use a particulate filter respirator for particulate concentrations exceeding the Occupational Exposure Limit. When airborne exposures exceed or have the potential to exceed the occupational exposure limits, approved respirators must be used as specified by an Industrial Hygienist or other qualified professional. Respirator users must be medically evaluated to determine if they are physically capable of wearing a respirator. Quantitative and/or qualitative fit testing and respirator training must be satisfactorily completed by all personnel prior to respirator use. Users of tight fitting respirators must be clean shaven on those areas of the face where the respirator seal contacts the face. Use pressure-demand airline respirators when performing jobs with high potential exposures such as changing filters in a baghouse air cleaning device. |
| <b>Thermal hazards</b>   | Not applicable.   |
| <b>Hygiene measures</b>  | Observe any medical surveillance requirements. Contaminated work clothing should not be allowed out of the workplace.   |
| <b>Environmental exposure controls</b>                                       | Environmental manager must be informed of all major releases.   |

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

#### Appearance

|  |   |
|--|---|
| <b>Physical state</b>                          | Solid.  |
| <b>Form</b>                                    | Solid. Various shapes.                        |
| <b>Colour</b>                                  | White. Off-white. Grey. Gold.                 |
| <b>Odour</b>                                   | None.   |
| <b>Odour threshold</b>                         | Not applicable.                               |
| <b>pH</b>                                      | Not applicable.                               |
| <b>Melting point/freezing point</b>            | 2050 °C (3722 °F) estimated / Not applicable. |
| <b>Initial boiling point and boiling range</b> | Not applicable.                               |
| <b>Flash point</b>                             | Not applicable.                               |
| <b>Evaporation rate</b>                        | Not applicable.                               |
| <b>Flammability (solid, gas)</b>               | Not applicable.                               |

#### Upper/lower flammability or explosive limits

|   |                 |
|---|-----------------|
| <b>Flammability limit - lower (%)</b>             | Not applicable. |
| <b>Flammability limit - lower (%) temperature</b> | Not applicable. |

|   |                                  |
|---|----------------------------------|
| <b>Flammability limit - upper (%)</b>             | Not applicable.                  |
| <b>Flammability limit - upper (%) temperature</b> | Not applicable.                  |
| <b>Vapour pressure</b>                            | Not applicable.                  |
| <b>Vapour density</b>                             | Not applicable.                  |
| <b>Relative density</b>                           | Not applicable.                  |
| <b>Solubility(ies)</b>                            |                                  |
| <b>Solubility (water)</b>                         | Insoluble.                       |
| <b>Partition coefficient (n-octanol/water)</b>    | Not applicable.                  |
| <b>Auto-ignition temperature</b>                  | Not applicable.                  |
| <b>Decomposition temperature</b>                  | Not applicable.                  |
| <b>Viscosity</b>                                  | Not applicable.                  |
| <b>Explosive properties</b>                       | Not explosive.                   |
| <b>Oxidising properties</b>                       | Not oxidising.                   |
| <b>9.2. Other information</b>                     |                                  |
| <b>Density</b>                                    | 3,95 g/cm <sup>3</sup> estimated |
| <b>Flammability</b>                               | Not applicable.                  |

## SECTION 10: Stability and reactivity

|   |   |
|---|---|
| <b>10.1. Reactivity</b>                         | The product is stable and non-reactive under normal conditions of use, storage and transport. |
| <b>10.2. Chemical stability</b>                 | Material is stable under normal conditions.   |
| <b>10.3. Possibility of hazardous reactions</b> | No dangerous reaction known under conditions of normal use.                                   |
| <b>10.4. Conditions to avoid</b>                | Contact with incompatible materials.  |
| <b>10.5. Incompatible materials</b>             | Strong acids. Strong oxidising agents.  |
| <b>10.6. Hazardous decomposition products</b>   | No hazardous decomposition products are known.  |

## SECTION 11: Toxicological information

|   |   |
|---|---|
| <b>General information</b>                        | Occupational exposure to the substance or mixture may cause adverse effects.  |
| <b>Information on likely routes of exposure</b>   |   |
| <b>Inhalation</b>                                 | Prolonged inhalation may be harmful.  |
| <b>Skin contact</b>                               | May cause an allergic skin reaction.  |
| <b>Eye contact</b>                                | Direct contact with eyes may cause temporary irritation.  |
| <b>Ingestion</b>                                  | May cause discomfort if swallowed. However, ingestion is not likely to be a primary route of occupational exposure. |
| <b>Symptoms</b>                                   | May cause an allergic skin reaction. Dermatitis. Rash.  |
| <b>11.1. Information on toxicological effects</b> |   |
| <b>Acute toxicity</b>                             | Not known.  |
| <b>Skin corrosion/irritation</b>                  | Due to partial or complete lack of data the classification is not possible.   |
| <b>Serious eye damage/eye irritation</b>          | Direct contact with eyes may cause temporary irritation.  |
| <b>Respiratory sensitisation</b>                  | May cause allergy or asthma symptoms or breathing difficulties if inhaled.  |
| <b>Skin sensitisation</b>                         | May cause an allergic skin reaction.  |
| <b>Germ cell mutagenicity</b>                     | Due to partial or complete lack of data the classification is not possible.   |

## Carcinogenicity

In 1997, IARC (the International Agency for Research on Cancer) concluded that crystalline silica inhaled from occupational sources can cause lung cancer in humans. However in making the overall evaluation, IARC noted that "carcinogenicity was not detected in all industrial circumstances studied. Carcinogenicity may be dependent on inherent characteristics of the crystalline silica or on external factors affecting its biological activity or distribution of its polymorphs." (IARC Monographs on the evaluation of the carcinogenic risks of chemicals to humans, Silica, silicates dust and organic fibres, 1997, Vol. 68, IARC, Lyon, France.) In June 2003, SCOEL (the EU Scientific Committee on Occupational Exposure Limits) concluded that the main effect in humans of the inhalation of respirable crystalline silica dust is silicosis. "There is sufficient information to conclude that the relative risk of lung cancer is increased in persons with silicosis (and, apparently, not in employees without silicosis exposed to silica dust in quarries and in the ceramic industry). Therefore, preventing the onset of silicosis will also reduce the cancer risk..." (SCOEL SUM Doc 94-final, June 2003) According to the current state of the art, worker protection against silicosis can be consistently assured by respecting the existing regulatory occupational exposure limits. May cause cancer. Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled.

### Hungary. 26/2000 EüM Ordinance on protection against and preventing risk relating to exposure to carcinogens at work (as amended)

Not listed.

#### IARC Monographs. Overall Evaluation of Carcinogenicity

Nickel (CAS 7440-02-0)

2B Possibly carcinogenic to humans.

Silica (CAS 14808-60-7)

1 Carcinogenic to humans.

#### Reproductive toxicity

Suspected of damaging fertility or the unborn child.

#### Specific target organ toxicity - single exposure

Not classified.

#### Specific target organ toxicity - repeated exposure

May cause damage to organs through prolonged or repeated exposure.

#### Aspiration hazard

Not an aspiration hazard.

#### Mixture versus substance information

No information available.

#### Other information

Not available.

## SECTION 12: Ecological information

### 12.1. Toxicity

Based on available data, the classification criteria are not met for hazardous to the aquatic environment.

### 12.2. Persistence and degradability

No data is available on the degradability of this product.

### 12.3. Bioaccumulative potential

No data available.

### Partition coefficient n-octanol/water (log K<sub>ow</sub>)

Not available.

### Bioconcentration factor (BCF)

Not available.

### 12.4. Mobility in soil

No data available.

### 12.5. Results of PBT and vPvB assessment

Not a PBT or vPvB substance or mixture.

### 12.6. Other adverse effects

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

#### Residual waste

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

#### Contaminated packaging

Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

#### EU waste code

The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.

#### Disposal methods/information

Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.

#### Special precautions

Dispose in accordance with all applicable regulations.

## SECTION 14: Transport information

### ADR

14.1. - 14.6.: Not regulated as dangerous goods.

### RID

14.1. - 14.6.: Not regulated as dangerous goods.

### ADN

14.1. - 14.6.: Not regulated as dangerous goods.

### IATA

14.1. - 14.6.: Not regulated as dangerous goods.

### IMDG

14.1. - 14.6.: Not regulated as dangerous goods.

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### EU regulations

**Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended**

Not listed.

**Regulation (EC) No. 850/2004 On persistent organic pollutants, Annex I as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended**

Not listed.

**Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended**

Not listed.

**Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA**

Not listed.

#### Authorisations

**Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended**

Not listed.

#### Restrictions on use

**Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended**

Nickel (CAS 7440-02-0)

**Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended.**

Not listed.

#### Other EU regulations

**Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended**

Not listed.

#### Other regulations

Pregnant women should not work with the product, if there is the least risk of exposure. The product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLP Regulation) as amended. Regulation (EU) No 453/2010 amending Regulation (EC) No 1907/2006 on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH). Regulation (EC) No 1272/2008 on classification, labeling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006. Additional information is given in the Safety Data Sheet.



**National regulations**

Follow national regulation for work with chemical agents. Young people under 18 years old are not allowed to work with this product according to EU Directive 94/33/EC on the protection of young people at work, as amended.

Chemical Safety at Workplace Ordinance Joint Decree No. 25/2000 (Annex 2): Permissible limit values of biological exposure (effect) indices Decree No. 25/2000. (IX. 30.) EüM-SzCsM of the Minister of Health and the Minister of Social and Family Affairs on chemical safety at work Act No. 93 of 1993 on Labour Safety (1993.évi XCIII.), as amended  
Government Decree No. 220 of 2004 (VII. 21.) providing rules on the protection of surface waters quality  
Government Decree No. 98/2001 (VI. 15.), on the conditions of the activities related to hazardous waste, and Ministry of Environmental Affairs Decree No. 16/2001 (VII. 18.), on the register of wastes  
Public Act No. XXV of 2000 on Chemical Safety, and Application Decree No. 44/2000. (XII.27.) EüM [of the Ministry of Health]

This safety data sheet conforms to the following laws, regulations and standards:

No Chemical Safety Assessment has been carried out.

**15.2. Chemical safety assessment****SECTION 16: Other information****List of abbreviations**

Not available.

**Information on evaluation method leading to the classification of mixture**

The classification for health and environmental hazards is derived by a combination of calculator methods and test data, if available.

**Further information**

Transportation Emergency  
Call Chemtrec at:  
Domestic: 800.424.9300  
International: 703.527.3887

**Disclaimer**

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