

Revised : 20/02/2007

Supersedes : / /

**MASTERSEAL® 855**

HD-MASTERSEAL 855



Xi - Irritant

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

### Product Information

Product name MASTERSEAL® 855

### Use of the Substance/Preparation

Recommended use Sprayable membrane for underground application

### Manufacturer, importer, supplier

Company

UGC International, Division of BASF Construction Chemicals  
(Switzerland) Ltd , Vulkanstrasse 110, 8048 Zurich, Switzerland,  
Tel.: +41 58 958 22 11, Fax: +41 58 958 34 10, www.ugc.basf.com

### Emergency telephone number

BASF AG Ludwigshafen Werkfeuerwehr  
Tel.: 0049 621 60 43333  
Fax: 0049 621 60 92664  
e-mail: fire.department@basf.com

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature of the preparation Formulation containing a vinyl acetate/ethylene copolymer

| <u>Hazardous components</u>                  | <u>CAS-Nr.</u> | <u>Weight %</u> | <u>OEL*, mg/m<sup>3</sup></u> |
|--|----------------|-----------------|-------------------------------|
| Dialuminium calcium tetraoxide<br>Xi,R38,R41 | 12042-68-1     | 15 - 25 %       | 5                             |
| Calcium oxide<br>Xi,R38,R41                  | 1305-78-8      | 25 - 35 %       | 5                             |

\* Occupational Exposure Limit, mg/m<sup>3</sup>

## 3. HAZARDS IDENTIFICATION

Specific hazards Xi - Irritant  
R38 - Irritating to skin.  
R41 - Risk of serious damage to eyes.

physico-chemical properties Mixing with water results in an alkaline suspension. Simultaneous hardening with emission of hydration heat occurs.

## 4. FIRST AID MEASURES

Cement- and mortar dust irritate eyes and, by prolonged contact, the skin. Mixing with water results in an alkaline suspension that has an irritant effect on eyes and skin.

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| - Eye contact   | Remove eye lenses immediately. Wash off immediately with plenty of water for at least 15 minutes. If symptoms persist, call a physician.   |                   |
| - Skin contact  | Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Put cream on the skin carefully. Get medical attention if irritation persists.   |                   |
| - Inhalation  | Remove affected person to fresh air. In case of breathing difficulty or distress, get medical attention.   |                   |
| - Ingestion   | Rinse mouth. Do not induce vomiting. If accidentally swallowed drink plenty of water and obtain medical attention. Point out the high alkalinity of cement.  |                   |
| <b>5. FIRE-FIGHTING MEASURES</b>                                |  |                   |
| <u>Extinguishing media</u>                                      |  |                   |
| - Suitable extinguishing media                                  | All extinguishing media can be used.   |                   |
| - Extinguishing media which must not be used for safety reasons | High volume water jet  |                   |
| Specific methods  | Use extinguishing media appropriate for surrounding fire . Cool containers exposed to fire with water spray.<br>Collect contaminated fire extinguishing water separately. This must not be discharged into drains.   |                   |
| Special protective equipment for firefighters                   | Use self-contained breathing apparatus for fire fighting.  |                   |
| Under fire conditions:  | Decomposes in : carbon mono-/dioxides  |                   |
| <b>6. ACCIDENTAL RELEASE MEASURES</b>                           |  |                   |
| Personal precautions  | Use personal protective equipment. See # 8.<br>Avoid contact with skin and eyes.<br>Avoid formation of dust.   |                   |
| Environmental precautions                                       | Do not discharge product into drains, surface and/or ground waters or onto surface soils.  |                   |
| After spillage/leakage/gas leakage                              | Take up mechanically and collect in suitable container for disposal .<br>Dispose as per 13. Keep away from sources of ignition. Small rests may be diluted with water and washed down into drain. Discharge of only after neutralisation.  |                   |
| Cleaning of equipment   | No special precautions required  |                   |
| <b>7. HANDLING AND STORAGE</b>                                  |  |                   |
| <u>Handling</u>   |  |                   |
| Technical measures/Precautions                                  | Keep away from sources of ignition - No smoking. Hot surfaces and naked flames may ignite the powder. Spray only wet material. The wet powder is not combustible. Keep floors around the equipment wet. Blocked pipes should be blown only against water or wet surfaces. In underground applications, as specified in the Technical Data Sheet, no ignition was observed in presence of a burner. |                   |
| <u>Storage</u>  |  |                   |

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| Technical measures/Storage conditions             | Keep containers tightly closed and dry. Store away from wet and humid areas.   |                   |
| Incompatible products                             | Store away from acids  |                   |
| Storage class (VCI)                               | 11: Combustible solids   |                   |
| Protection against fire and explosion             | Dusting of dry powder should be avoided  |                   |
| <b>8. EXPOSURE CONTROLS / PERSONAL PROTECTION</b> |  |                   |
| Exposure limit(s)                                 | 10 mg/m <sup>3</sup> as respirable particles (vinyl acetate & ethylene copolymer)<br>5 mg/m <sup>3</sup> as respirable particles (Calcium aluminate cement, CAS 12042-68-1)  |                   |
| Engineering measures                              | Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL, suitable respiratory protection must be worn. Inhalation of cement dust may cause irritation of the respiratory tracts. |                   |
| <u>Personal protective equipment</u>              |  |                   |
| - Respiratory protection                          | masks / respirators (filter P2, EN 143)  |                   |
| - Hand protection                                 | Nitrile impregnated cotton glove (EN 374)  |                   |
| - Eye protection                                  | Safety goggles / face shield   |                   |
| - Skin and body protection                        | Overall for medium risks chemicals, Class II (EN 468)  |                   |
| - Other   | Wash hands before breaks and immediately after handling the product.   |                   |
| Hygiene measures                                  | Observe the usual precautions when handling chemicals. Wash hands before breaks and after finishing work. Change contaminated clothes immediately. Do not eat, drink or smoke at workplace.  |                   |
| <b>9. PHYSICAL AND CHEMICAL PROPERTIES</b>        |  |                   |
| Form  | powder   |                   |
| Colour  | white  |                   |
| Odour   | none   |                   |
| Density   | 710 ± 100 kg/m <sup>3</sup> (20° C)  |                   |
| pH  | 11.5 - 13.5  |                   |
| Boiling point/range                               | not applicable   |                   |
| Flash point                                       | not applicable   |                   |
| Other data  | Dry dust at concentrations equal or greater than 600 g/m <sup>3</sup> might lead to a dust fire (see also #7). Minimum ignition temperature of a dust cloud 470 grad. C (BAM method). Minimum ignition energy without induction for the dry powder > 1 J (MK3 method).   |                   |
| <b>10. STABILITY AND REACTIVITY</b>               |  |                   |
| Stability   | Stable under normal storage and application temperatures.  |                   |
| Materials to avoid                                | strong acids   |                   |
| Hazardous reactions                               | Mixing with water results in an alkaline suspension. Simultaneous hardening with emission of hydration heat occurs. Exothermic reaction with strong acids  |                   |

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| Hazardous decomposition products  | Decomposes in carbon mono-/dioxides  |                   |
| <b>11. TOXICOLOGICAL INFORMATION</b>  |  |                   |
| No toxicological data is available for the finished product. The LD50/LC50 values mentioned refer to individual raw materials. (IUCLID)     |  |                   |
| Component:  | vinyl acetate & ethylene copolymer<br>Calcium oxide CAS Nr. 1305-78-8  |                   |
| <u>Acute toxicity</u>   |  |                   |
| LD50/oral/rat =   | > 2000 mg/kg bw copolymer<br>> 2000 mg/kg bw Calcium oxide   |                   |
| Eye irritation  | irritant   |                   |
| Skin irritation   | irritant   |                   |
| Further information   | Inhalation of cement dust may cause irritation of the respiratory tracts.  |                   |
| <b>12. ECOLOGICAL INFORMATION</b>   |  |                   |
| No eco-toxicological data is available for the finished product. The EC50/LC50 values mentioned refer to individual raw materials. (IUCLID) |  |                   |
| Component:  | Calcium oxide CAS 1305-78-8<br>vinyl acetate & ethylene copolymer  |                   |
| Ecotoxicity effects   | Do not discharge into drains and sewers because of high alkalinity.<br>Discharge of only after neutralisation.   |                   |
| LC50/96h/fish =   | 1070 mg/l (C. carpio) Calcium oxide<br>> 1000 mg/l (C. carpio) copolymer   |                   |
| Water pollution class   | German WPC (water pollution class) = 1 (low hazard to water)   |                   |
| <b>13. DISPOSAL CONSIDERATIONS</b>  |  |                   |
| Waste from residues   | Dispose according to local regulations for construction materials.<br>Eliminate the product and its package in agreement with the local legislation. The end user of the product is responsible for the waste (product and package). |                   |
| Waste disposal number   | When unused products have been hardened with water, 17 01 07 (construction wastes other than 17 01 06)   |                   |
| <b>14. TRANSPORT INFORMATION</b>  |  |                   |
| <u>Road/rail transport</u>  |  |                   |
| ADR/RID   |  |                   |
| <u>Sea transport IMDG</u>   |  |                   |
| <u>Air transport ICAO-TI and IATA-DGR</u>   |  |                   |
| IATA-DGR  |  |                   |
| Other information   | Calcium oxide is classified as dangerous goods only in air cargo.  |                   |
| <b>15. REGULATORY INFORMATION</b>   |  |                   |
| Labelling   | Labelling according to EU directives concerning preparations.  |                   |
| Symbol(s):  | Xi - Irritant  |                   |
| R-phrases(s)  | R38 - Irritating to skin.  |                   |

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S-phrases(s)

R41 - Risk of serious damage to eyes.  
S 2 - Keep out of the reach of children.  
S22 - Do not breathe dust.  
S24/25 - Avoid contact with skin and eyes.  
S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection.

## 16. OTHER INFORMATION

Text of R phrases mentioned in Section 2

R38 - Irritating to skin.  
R41 - Risk of serious damage to eyes.

Revised:

DEA

Approved:

DEA

REMARKS:

This data sheet conforms to standards defined by directives 91/155 & 93/112/EEC  
Data sheet required pursuant to Art.10 of directive 88/379/EEC.  
The information in this Data Sheet applies only to the products designated herein and produced or supplied by us. It is based on our experience and on the data available to us at the time of its issue and is accurate to the best of our knowledge.