

Revised : 08/10/2007

Supersedes : 22/09/2006

## MASTERSEAL® 345

HD-MASTERSEAL 345

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

Product Information

Product name MASTERSEAL® 345

Use of the Substance/Preparation

Recommended use Product for underground applications

Manufacturer, importer, supplier

Company UGC International, Division of BASF Construction Chemicals Europe 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. HAZARDS IDENTIFICATION

Not classified as hazardous according to directive 1999/45/EC

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

### 3. 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>
Calcium sulfoaluminate Xi,R36/38	37293-22-4	5 - 10 %	5
Calcium oxide Xi,R41	1305-78-8	< 2 %	2

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

### 4. FIRST AID MEASURES

- Eye contact Remove eye lenses immediately. Rinse thoroughly with plenty of water for at least 15 minutes and consult 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.

### 5. FIRE-FIGHTING MEASURES

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<u>Extinguishing media</u> - Suitable extinguishing media - Extinguishing media which must not be used for safety reasons Specific methods  Special protective equipment for firefighters Under fire conditions:	All extinguishing media can be used. High volume water jet  Collect contaminated fire extinguishing water separately. This must not be discharged into drains.  Use self-contained breathing apparatus for fire fighting.  May form acetic acid in a slightly oxygenated atmosphere	
<b>6. ACCIDENTAL RELEASE MEASURES</b>		
Personal precautions  Environmental precautions After spillage/leakage/gas leakage	Use personal protective equipment. See # 8. Ensure adequate ventilation. Danger of dust explosion. Remove all sources of ignition. Avoid formation of dust. Do not inhale dust.  Do not discharge into drains and sewers because of high alkalinity. Take up mechanically and collect in suitable container for disposal . Clean up promptly by sweeping or vacuum. Dispose as per 13. Flush down rest with water. Discharge of only after neutralisation.	
<b>7. HANDLING AND STORAGE</b>		
<u>Handling</u> Technical measures/Precautions  Safe handling advice  <u>Storage</u> Technical measures/Storage conditions  Incompatible products Storage class (VCI) Protection against fire and explosion	Provide adequate ventilation or air evacuation at workplace. Observe the usual precautions when handling chemicals. During processing, dust may form explosive mixture in air. Keep away from sources of ignition - No smoking. Mechanical energies, hot surfaces and naked flames may ignite the dry powder. In underground applications, as specified in the Technical Data Sheet, no ignition of dust was observed in presence of a burner. The wet powder is not combustible. Spray only wet material. Keep floors around the mixing equipment wet. Blocked pipes should be blown on wet surfaces.  Avoid formation of dust. Do not inhale dust. Avoid contact with skin and eyes.  Store in original container. Keep containers tightly closed and dry. Store away from wet and humid areas. Do not store in direct sunlight. Protect against frost.  Store away from acids 13: Non-combustible solids Danger of dust explosion. Dusting of dry powder should be avoided	
<b>8. EXPOSURE CONTROLS / PERSONAL PROTECTION</b>		
Exposure limit(s)	10 mg/m <sup>3</sup> for respirable dust (copolymer of vinylacetate & ethylene) 5 mg/m <sup>3</sup> for respirable dust (Calcium sulfoaluminate CAS Nr. 37293-22-4)	

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### 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.

### Personal protective equipment

- Respiratory protection

Wear respiratory equipment when entering the spray area masks / respirators (filter P1, EN 143)

- Hand protection

Gloves: polyvinyl chloride (PVC, EN 374)

- Eye protection

Safety goggles / face shield

- Skin and body protection

Overall for medium risks chemicals, Class II (EN 468)

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.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Form

powder

Colour

grey

Odour

none

Bulk density

585 ± 90 g/l (20° C)

pH

11 - 12.5

Water solubility

insoluble

Decomposition temperature

ca. 300 °C

Other data

22.5 ± 2.5 % Ash content

Dry dust at concentrations equal or greater than 249 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 > 300 mJ (MK3 method).

## 10. STABILITY AND REACTIVITY

Stability

Stable under normal storage and application temperatures.

Materials to avoid

Avoid contact with strong acids

Hazardous reactions

Exothermic reaction with strong acids

Hazardous decomposition products

May form acetic acid in a slightly oxygenated atmosphere under fire conditions.

Further information

Risk of dust explosion

## 11. TOXICOLOGICAL INFORMATION

No toxicological data is available for the finished product. The LD50/LC50 values mentioned refer to individual raw materials. (IUCLID)

Component:

Aluminium hydroxide CAS Nr. 21645-51-2

Copolymer of vinylacetate & ethylene

Acute toxicity

LD50/oral/rat =

> 5000 mg/kg Aluminium hydroxide

> 2000 mg/kg Copolymer of vinylacetate & ethylene

Sensitisation

Repeated prolonged contact may cause irritation.

Eye irritation

Product may cause irritation.

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Skin irritation	Product may cause irritation.	
<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 Nr. 1305-78-8 Copolymer of vinylacetate & ethylene	
Bioaccumulation	No negative effect expected	
Biological elimination	Elimination through activated sludge absorption	
Ecotoxicity effects	Do not discharge product into drains, surface and/or ground waters or onto surface soils. Must pass neutralization plant prior to discharge into drains and sewers.	
LC50/96h/fish =	1070 mg/l (C. carpio, Calcium oxide) > 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	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). May be under observance of local regulations, admitted into sewage treatment plant, or incinerated in suitable plant.	
Waste disposal number	After neutralization the unused product can be disposed off as 16 03 04 (unused inorganic wastes other than 16 03 03)	
<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: No hazard symbol required. This product is not a dangerous preparation.	
Symbol(s):	none	
R-phrase(s)	none	
S-phrase(s)	none	
<b>16. OTHER INFORMATION</b>		
Text of R phrases mentioned in Section 2	R36/38 - Irritating to eyes and skin. R41 - Risk of serious damage to eyes.	
Approved:	DEA	
Checked:	DEA	

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**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.