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

1.1. Product identifier

MasterSeal 681 also MASTERSEAL 481

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

Relevant identified uses: Product for construction chemicals

1.3. Details of the supplier of the safety data sheet

Company: BASF Construction Chemicals Egypt
Factory: Piece 118, Zone 4
Sadat City - Monoufaia, Egypt

Contact address: BASF SE
67056 Ludwigshafen
GERMANY

Telephone: +49 621 60-0
E-mail address: global.info@basf.com

1.4. Emergency telephone number

International emergency number:
Telephone: +49 180 2273-112

SECTION 2: Hazards Identification

2.1. Classification of the substance or mixture

According to Regulation (EC) No 1272/2008 [CLP]

No need for classification according to GHS criteria for this product.

According to Directive 67/548/EEC or 1999/45/EC
Possible Hazards:
No specific dangers known, if the regulations/notes for storage and handling are considered.

2.2. Label elements

According to Regulation (EC) No 1272/2008 [CLP]

The product does not require a hazard warning label in accordance with GHS criteria.

According to Directive 67/548/EEC or 1999/45/EC

EEC Directives

The product does not require a hazard warning label in accordance with EC Directives.

2.3. Other hazards

According to Regulation (EC) No 1272/2008 [CLP]

If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture.

SECTION 3: Composition/Information on Ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Chemical nature

Preparation based on: Asphalt, in water

Hazardous ingredients (GHS) according to Regulation (EC) No. 1272/2008

No particular hazards known.

Hazardous ingredients according to Directive 1999/45/EC

Does not contain any hazardous ingredients.
SECTION 4: First-Aid Measures

4.1. Description of first aid measures
First aid personnel should pay attention to their own safety. Immediately remove contaminated clothing.

If inhaled:
If difficulties occur after vapour/aerosol has been inhaled, remove to fresh air and seek medical attention.

On skin contact:
After contact with skin, wash immediately with plenty of water and soap. Under no circumstances should organic solvent be used. If irritation develops, seek medical attention.

On contact with eyes:
Wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

On ingestion:
Rinse mouth immediately and then drink plenty of water, seek medical attention. Do not induce vomiting unless told to by a poison control center or doctor.

4.2. Most important symptoms and effects, both acute and delayed
Symptoms: The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

4.3. Indication of any immediate medical attention and special treatment needed
Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

SECTION 5: Fire-Fighting Measures

5.1. Extinguishing media
Suitable extinguishing media:
foam, water spray, dry powder, carbon dioxide

Unsuitable extinguishing media for safety reasons:
water jet

5.2. Special hazards arising from the substance or mixture
Carbon dioxide, carbon monoxide, harmful vapours, nitrogen oxides, fumes/smoke, carbon black

5.3. Advice for fire-fighters
Special protective equipment:
Wear a self-contained breathing apparatus.

Further information:
The degree of risk is governed by the burning substance and the fire conditions. If exposed to fire, keep containers cool by spraying with water. Collect contaminated extinguishing water separately, do not allow to reach sewage or effluent systems. Contaminated extinguishing water must be disposed of in accordance with official regulations.

SECTION 6: Accidental Release Measures

6.1. Personal precautions, protective equipment and emergency procedures
Do not breathe vapour/aerosol/spray mists. Wear eye/face protection. If exposed to high vapour concentration, leave area immediately. Use personal protective clothing. Handle in accordance with good building materials hygiene and safety practice.

6.2. Environmental precautions
Contain contaminated water/firefighting water. Do not discharge into drains/surface waters/groundwater.

6.3. Methods and material for containment and cleaning up
For small amounts: Pick up with inert absorbent material (e.g. sand, earth etc.). Dispose of contaminated material as prescribed.
For large amounts: Pump off product.

6.4. Reference to other sections
Information regarding exposure controls/personal protection and disposal considerations can be found in section 8 and 13.

SECTION 7: Handling and Storage

7.1. Precautions for safe handling
Avoid aerosol formation. Avoid inhalation of mists/vapours. Avoid skin contact. No special measures necessary provided product is used correctly.

7.2. Conditions for safe storage, including any incompatibilities
Suitable materials for containers: High density polyethylene (HDPE)
Further information on storage conditions: Keep only in the original container in a cool, dry, well-ventilated place away from ignition sources, heat or flame. Protect from direct sunlight.

7.3. Specific end use(s)
For the relevant identified use(s) listed in Section 1 the advice mentioned in this section 7 is to be observed.

SECTION 8: Exposure Controls/Personal Protection

8.1. Control parameters
Components with occupational exposure limits
8052-42-4: Asphalt

8.2. Exposure controls

Personal protective equipment

Respiratory protection:
Wear respiratory protection if ventilation is inadequate. Combination filter for gases/vapours of organic, inorganic, acid inorganic and alkaline compounds (e.g. EN 14387 Type ABEK).

Hand protection:
- impermeable gloves
- Synthetic rubber gloves
Manufacturer's directions for use should be observed because of great diversity of types.

Eye protection:
- Safety glasses with side-shields (frame goggles) (e.g. EN 166)

Body protection:
- light protective clothing

General safety and hygiene measures
Do not inhale gases/vapours/aerosols. Avoid contact with the skin, eyes and clothing. Avoid exposure - obtain special instructions before use. Handle in accordance with good building materials hygiene and safety practice. Wearing of closed work clothing is recommended. When using, do not eat, drink or smoke. Hands and/or face should be washed before breaks and at the end of the shift. At the end of the shift the skin should be cleaned and skin-care agents applied. Gloves must be inspected regularly and prior to each use. Replace if necessary (e.g. pinhole leaks).

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Form: liquid
Colour: dark brown
Odour: characteristic
Odour threshold: No applicable information available.

pH value: not applicable
Melting temperature: not applicable
boiling temperature: 100 °C
Flash point: Non-flammable.
Flammability: not determined
Vapour pressure: The product has not been tested.
Density: 1.02 g/cm³
(25 °C)
Solubility in water: emulsifiable
(25 °C)
Thermal decomposition: No decomposition if stored and handled as prescribed/indicated.
Explosion hazard: not explosive

9.2. Other information

Bulk density: not applicable
Other Information: If necessary, information on other physical and chemical parameters is indicated in this section.

SECTION 10: Stability and Reactivity

10.1. Reactivity
No hazardous reactions if stored and handled as prescribed/indicated.

Corrosion to metals: No corrosive effect on metal.

10.2. Chemical stability
The product is stable if stored and handled as prescribed/indicated.

10.3. Possibility of hazardous reactions
The product is stable if stored and handled as prescribed/indicated.

10.4. Conditions to avoid
See MSDS section 7 - Handling and storage.

10.5. Incompatible materials
Substances to avoid:
| strong acids, strong bases, strong oxidizing agents, strong reducing agents

10.6. Hazardous decomposition products
No hazardous decomposition products if stored and handled as prescribed/indicated.

SECTION 11: Toxicological Information

11.1. Information on toxicological effects

Acute toxicity

Assessment of acute toxicity:
Virtually nontoxic after a single ingestion. Virtually nontoxic by inhalation. Virtually nontoxic after a single skin contact. Based on available Data, the classification criteria are not met. The product has not been tested. The statement has been derived from the properties of the individual components.

Irritation

Assessment of irritating effects:
No irritation is expected under intended use and appropriate handling. Based on available Data, the classification criteria are not met.

Respiratory/Skin sensitization

Assessment of sensitization:
There is no evidence of a skin-sensitizing potential. Based on available Data, the classification criteria are not met. The product has not been tested. The statement has been derived from the properties of the individual components.

Germ cell mutagenicity

Assessment of mutagenicity:
The chemical structure does not suggest a specific alert for such an effect. Based on available Data, the classification criteria are not met.

Carcinogenicity

Assessment of carcinogenicity:
The chemical structure does not suggest a specific alert for such an effect. Based on available Data, the classification criteria are not met.

Reproductive toxicity

Assessment of reproduction toxicity:
The chemical structure does not suggest a specific alert for such an effect. Based on available Data, the classification criteria are not met.

Developmental toxicity

Assessment of teratogenicity:
The chemical structure does not suggest a specific alert for such an effect. Based on available Data, the classification criteria are not met.

Repeated dose toxicity and Specific target organ toxicity (repeated exposure)

Assessment of repeated dose toxicity:
The product has not been tested. The statement has been derived from the properties of the individual components.

Other relevant toxicity information
Based on our experience and the information available, no adverse health effects are expected if handled as recommended with suitable precautions for designated uses. The product has not been tested. The statements on toxicology have been derived from the properties of the individual components.

SECTION 12: Ecological Information

12.1. Toxicity

Assessment of aquatic toxicity:
Based on available Data, the classification criteria are not met. There is a high probability that the product is not acutely harmful to aquatic organisms.

12.2. Persistence and degradability

Assessment biodegradation and elimination (H2O):
Inherently biodegradable. The insoluble fraction can be removed by mechanical means in suitable waste water treatment plants.

12.3. Bioaccumulative potential

Assessment bioaccumulation potential:
No data available.
Discharge into the environment must be avoided.

12.4. Mobility in soil

Assessment transport between environmental compartments:
Volatility: No data available.

12.5. Results of PBT and vPvB assessment

The product does not fulfill the criteria for PBT (Persistent/bioaccumulative/toxic) and vPvB (very persistent/very bioaccumulative).

12.6. Other adverse effects

The product does not contain substances that are listed in Annex I of Regulation (EC) 2037/2000 on substances that deplete the ozone layer.

12.7. Additional information

Other ecotoxicological advice:
Do not discharge product into the environment without control. The product has not been tested. The statements on ecotoxicology have been derived from the properties of the individual components.

SECTION 13: Disposal Considerations
13.1. Waste treatment methods

Observe national and local legal requirements.
Residues should be disposed of in the same manner as the substance/product.

Contaminated packaging:
Contaminated packaging should be emptied as far as possible; then it can be passed on for recycling after being thoroughly cleaned.

SECTION 14: Transport Information

Land transport

ADR

| UN number: | Not classified as a dangerous good under transport regulations |
| UN proper shipping name: | Not applicable |
| Transport hazard class(es): | Not applicable |
| Packing group: | Not applicable |
| Environmental hazards: | Not applicable |
| Special precautions for user: | None known |

RID

| UN number: | Not applicable |
| UN proper shipping name: | Not applicable |
| Transport hazard class(es): | Not applicable |
| Packing group: | Not applicable |
| Environmental hazards: | Not applicable |
| Special precautions for user: | None known |

Inland waterway transport

ADN

| UN number: | Not classified as a dangerous good under transport regulations |
| UN proper shipping name: | Not applicable |
| Transport hazard class(es): | Not applicable |
| Packing group: | Not applicable |
| Environmental hazards: | Not applicable |
| Special precautions for user: | None known |
| Transport in inland waterway vessel: | Not evaluated |
Sea transport

IMDG

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Air transport

IATA/ICAO

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<td>Special precautions for user</td>
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14.1. UN number
See corresponding entries for “UN number” for the respective regulations in the tables above.

14.2. UN proper shipping name
See corresponding entries for “UN proper shipping name” for the respective regulations in the tables above.

14.3. Transport hazard class(es)
See corresponding entries for “Transport hazard class(es)” for the respective regulations in the tables above.

14.4. Packing group
See corresponding entries for “Packing group” for the respective regulations in the tables above.

14.5. Environmental hazards
See corresponding entries for “Environmental hazards” for the respective regulations in the tables above.

14.6. Special precautions for user
14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

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SECTION 15: Regulatory Information

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

If other regulatory information applies that is not already provided elsewhere in this safety data sheet, then it is described in this subsection.

15.2. Chemical Safety Assessment

Chemical Safety Assessment not required

SECTION 16: Other Information

In addition to the information given in the safety data sheet we refer to the product specific 'Technical Information'.

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. The data do not describe the product's properties (product specification). Neither should any agreed property nor the suitability of the product for any specific purpose be deduced from the data contained in the safety data sheet. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.