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1. Identification

Product identifier used on the label

MasterEmaco S 477CI also EMACO S77CI

Recommended use of the chemical and restriction on use Recommended use*: for industrial and professional users

* The "Recommended use" identified for this product is provided solely to comply with a Federal requirement and is not part of the seller's published specification. The terms of this Safety Data Sheet (SDS) do not create or infer any warranty, express or implied, including by incorporation into or reference in the seller's sales agreement.

Details of the supplier of the safety data sheet

Company: BASF CORPORATION 100 Park Avenue Florham Park, NJ 07932, USA

Telephone: +1 973 245-6000

Emergency telephone number

CHEMTREC: 1-800-424-9300 BASF HOTLINE: 1-800-832-HELP (4357)

Other means of identification

Chemical family: No applicable information available.

2. Hazards Identification

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

Classification of the product

| Skin Corr./Irrit. | 2 | Skin corrosion/irritation |
|-------------------|---|--|
| Eye Dam./Irrit. | 1 | Serious eye damage/eye irritation |
| STOT SE | 3 (irritating to respiratory system) | Specific target organ toxicity — single exposure |
| STOT RE | 1 (by inhalation) | Specific target organ toxicity — repeated exposure |

Label elements

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| 51011. 2.0 | (30005310/3D3_GEN_03/EN) | |
|---|--|--|
| Pictogram: | | |
| | | |
| | | |
| • • | × | |
| Signal Word: | | |
| Danger | | |
| Hazard Statement: | | |
| H318 | Causes serious eye damage. | |
| H315 | Causes skin irritation. | |
| H335 | May cause respiratory irritation. | |
| H372 | Causes damage to organs (Lung) through prolonged or repeated exposure. | |
| | | |
| Precautionary Stateme | | |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. | |
| P271 | Use only outdoors or in a well-ventilated area. | |
| P260 | Do not breathe dust/gas/mist/vapours. | |
| P202 | Do not handle until all safety precautions have been read and | |
| D070 | understood. | |
| P273 P270 | Avoid release to the environment. Do not eat, drink or smoke when using this product. | |
| P264 | Wash with plenty of water and soap thoroughly after handling. | |
| | | |
| Precautionary Stateme P305 + P351 + P338 | | |
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. | |
| P310 | Immediately call a POISON CENTER or doctor/physician. | |
| P304 + P340 | IF INHALED: Remove person to fresh air and keep comfortable for | |
| | breathing. | |
| P303 + P352 P332 + P313 | IF ON SKIN (or hair): Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. | |
| P362 + P364 | Take off contaminated clothing and wash before reuse. | |
| | , | |
| Precautionary Stateme | | |
| P403 + P233 P405 | Store in a well-ventilated place. Keep container tightly closed. Store locked up. | |
| F 40J | Store locked up. | |
| Precautionary Statements (Disposal): | | |
| P501 | Dispose of contents/container to hazardous or special waste collection | |
| | point. | |
| | | |

Hazards not otherwise classified

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.

3. Composition / Information on Ingredients

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

| CAS Number | Content (W/W) | Chemical name |
|------------|--------------------|-----------------------------|
| 14808-60-7 | >= 25.0 - < 75.0 % | crystalline silica |
| 65997-15-1 | >= 25.0 - < 50.0 % | Cement, portland, chemicals |

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| | | (00) |
|---|--|---|
| 1305-78-8 7632-00-0 13397-24-5 1317-65-3 | >= 1.0 - < 5.0 % >= 0.1 - < 1.0 % >= 0.3 - < 3.0 % >= 0.0 - < 3.0 % | calcium oxide sodium nitrite Gypsum (Ca(SO4).2H2O) Limestone |
| | | |

4. First-Aid Measures

Description of first aid measures

General advice:

First aid personnel should pay attention to their own safety. Remove contaminated clothing.

If inhaled:

After inhalation of dust. Keep patient calm, remove to fresh air. If difficulties occur: Obtain medical attention.

If on skin:

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.

If in eyes:

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

If swallowed:

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.

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. Hazards: No applicable information available.

Indication of any immediate medical attention and special treatment needed

Note to physician Treatment:

Treat according to symptoms (decontamination, vital functions), no known specific antidote.

5. Fire-Fighting Measures

Extinguishing media

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

Unsuitable extinguishing media for safety reasons: water jet

Additional information:

Product itself is non-combustible. Only the packaging materials can catch fire. The extinguishing agents normally used are sufficient.

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Special hazards arising from the substance or mixture

Hazards during fire-fighting:

carbon monoxide, carbon dioxide, harmful vapours

Evolution of fumes/fog. The substances/groups of substances mentioned can be released in case of fire. Product is not combustible or explosive.

Advice for fire-fighters

Protective equipment for fire-fighting: Wear self-contained breathing apparatus and chemical-protective clothing.

Further information:

Product itself is non-combustible; fire extinguishing method of surrounding areas must be considered. The degree of risk is governed by the burning substance and the fire conditions. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Avoid contact with skin and eyes. Use personal protective clothing. Handle in accordance with good building materials hygiene and safety practice.

Environmental precautions

Do not discharge into drains/surface waters/groundwater.

Methods and material for containment and cleaning up

For small amounts: Pick up with suitable appliance and dispose of. For large amounts: Pick up with suitable appliance and dispose of. Pack in tightly closed containers for disposal.

For residues: Rinse with plenty of water. Avoid raising dust.

7. Handling and Storage

Precautions for safe handling

Avoid dust formation. The Cement contained in this product reacts alkaline when in contact with water or humidity. This may cause severe irritation of skin or mucous membranes. The humidity of the skin or mucous membranes is enough for this reaction. Prolonged direct contact to the dry product should be avoided therefore. Avoid inhalation of dusts. Avoid skin contact. Pour downwind and allow as little free fall as possible while emptying bags into equipment. Breathing must be protected when large quantities are decanted without local exhaust ventilation.

Protection against fire and explosion: No special precautions necessary.

Conditions for safe storage, including any incompatibilities

Segregate from metals. Segregate from acids. Segregate from lyes. Segregate from oxidants. Segregate from foods and animal feeds.

Suitable materials for containers: Paper/Fibreboard

Further information on storage conditions: Containers should be stored tightly sealed in a dry place.

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8. Exposure Controls/Personal Protection

| Components with occupational exposure limits | | | |
|--|-----------------------|---|--|
| calcium oxide | OSHA PEL ACGIH TLV | PEL 5 mg/m3;TWA value 5 mg/m3; TWA value 2 mg/m3; | |
| Limestone | OSHA PEL | PEL 5 mg/m3 Respirable fraction ; PEL 15 mg/m3 Total dust ; TWA value 15 mg/m3 Total dust ; TWA value 5 mg/m3 Respirable fraction ; | |
| Gypsum (Ca(SO4).2H2O) | OSHA PEL | PEL 5 mg/m3 Respirable fraction ; PEL 15 mg/m3 Total dust ; TWA value 15 mg/m3 Total dust ; TWA value 5 mg/m3 Respirable fraction | |
| | ACGIH TLV | , TWA value 10 mg/m3 Inhalable fraction; | |
| crystalline silica | OSHA PEL | TWA value 2.4 millions of particles per cubic foot of air Respirable ; The exposure limit is calculated from the equation, 250/(%SiO2+5), using a value of 100% SiO2. Lower percentages of SiO2 will yield higher exposure limits. TWA value 0.1 mg/m3 Respirable ; The exposure limit is calculated from the equation, 10/(%SiO2+2), using a value of 100% SiO2. Lower percentages of SiO2 will yield higher exposure limits. TWA value 0.3 mg/m3 Total dust ; The exposure limit is calculated from the equation, 30/(%SiO2+2), using a value of 100% SiO2. Lower percentages of SiO2 will yield higher exposure limits. | |
| | ACGIH TLV | TWA value 0.025 mg/m3 Respirable fraction; | |
| Cement, portland, chemicals | OSHA PEL | PEL 15 mg/m3 Total dust;PEL 5 mg/m3 Respirable fraction; | |
| | ACGIH TLV | TWA value 1 mg/m3 Respirable fraction ; The value is for particulate matter containing no asbestos and <1% crystalline silica. | |

Advice on system design:

Provide local exhaust ventilation to maintain recommended P.E.L.

Personal protective equipment

Respiratory protection:

Breathing protection if dusts are formed.

Hand protection:

Chemical resistant protective gloves, Manufacturer's directions for use should be observed because of great diversity of types.

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Eye protection:

Tightly fitting safety goggles (chemical goggles).

Body protection:

Body protection must be chosen based on level of activity and exposure.

General safety and hygiene measures:

Avoid contact with the skin, eyes and clothing. Avoid inhalation of dusts. In order to prevent contamination while handling, closed working clothes and working gloves should be used. Handle in accordance with good building materials hygiene and safety practice. 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). Contaminated equipment or clothing should be cleaned after each use or disposed of.

9. Physical and Chemical Properties

| Form: Odour: Odour threshold: | powder mild | Not determined due to potential health hazard by inhalation. |
|---|----------------------|---|
| Colour: pH value: Melting point: Boiling point: Sublimation point: Flash point: | grey 13 | (20 °C) (as aqueous solution) not applicable No applicable information available. No applicable information available. The substance/product is non- combustible. |
| Flammability: Lower explosion limit: | not determined | As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use. |
| Upper explosion limit: | | As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use. |
| Autoignition: Vapour pressure: Relative density: Bulk density: | 1,500 kg/m3 | No applicable information available. No applicable information available. No data available. |
| Vapour density: Partitioning coefficient n- octanol/water (log Pow): Self-ignition | ., | No applicable information available. No applicable information available. not self-igniting |
| temperature: Viscosity, dynamic: Viscosity, kinematic: Solubility in water: Miscibility with water: Solubility (quantitative): Solubility (qualitative): Evaporation rate: | No applicable inform | No applicable information available. No applicable information available. (15 °C) not soluble (15 °C) immiscible No applicable information available. ation available. No applicable information available. |

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10. Stability and Reactivity

Reactivity

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

Oxidizing properties: Based on its structural properties the product is not classified as oxidizing.

Chemical stability

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

Possibility of hazardous reactions

The product is stable if stored and handled as prescribed/indicated. Strong bases are formed on the addition of water.

Conditions to avoid

Avoid dust formation. Avoid humidity.

Incompatible materials

strong bases, strong acids

Hazardous decomposition products

Decomposition products: No hazardous decomposition products if stored and handled as prescribed/indicated.

11. Toxicological information

Primary routes of exposure

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

Acute Toxicity/Effects

Acute toxicity

Assessment of acute toxicity: Virtually nontoxic after a single ingestion. Virtually nontoxic after a single skin contact. Virtually nontoxic by inhalation. The product has not been tested. The statement has been derived from the properties of the individual components.

Oral

No applicable information available.

Inhalation No applicable information available.

<u>Dermal</u> No applicable information available.

Assessment other acute effects Assessment of STOT single: Causes temporary irritation of the respiratory tract.

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The product has not been tested. The statement has been derived from the properties of the individual components.

Irritation / corrosion

Assessment of irritating effects: Skin contact causes irritation. May cause severe damage to the eyes. The product has not been tested. The statement has been derived from the properties of the individual components.

Sensitization

Assessment of sensitization: There is no evidence of a skin-sensitizing potential. The product has not been tested. The statement has been derived from the properties of the individual components. Chromate in this product has been reduced. Sensitization due to chromate within stated shelf-live is unlikely.

Chronic Toxicity/Effects

Repeated dose toxicity

Assessment of repeated dose toxicity: No reliable data was available concerning repeated dose toxicity. 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.

Genetic toxicity

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.

Information on: crystalline silica

Assessment of carcinogenicity: In long-term studies in rats and mice in which the substance was given by feed, a carcinogenic effect was not observed. In long-term animal studies in which the substance was given by inhalation in high doses, a carcinogenic effect was observed. The substance and its compounds in the form of respirable dusts/aerosolsis classified by the German MAK commision as a category 1 carcinogen (substances that cause cancer to humans). A carcinogenic effect cannot safely be ruled out. The inhalation uptake of the alveolar fraction of the fine dust may cause damage to the lungs. The International Agency for Research on Cancer (IARC) has classified this substance as a Group 1 (known) human carcinogen.

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.

Teratogenicity

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.

Other 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.

Symptoms of Exposure

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The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

12. Ecological Information

Toxicity

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

Persistence and degradability

Assessment biodegradation and elimination (H2O)

Inorganic product which cannot be eliminated from water by biological purification processes. The product is slightly soluble in water. It can be largely eliminated from the water by abiotic processes, e.g. mechanical separation.

Experience shows this product to be inert and non-degradable.

Elimination information

not applicable

Bioaccumulative potential

<u>Assessment bioaccumulation potential</u> The product will not be readily bioavailable due to its consistency and insolubility in water.

Mobility in soil

Assessment transport between environmental compartments

The substance will not evaporate into the atmosphere from the water surface. Following exposure to soil, adsorption to solid soil particles is probable, therefore contamination of groundwater is not expected.

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.

13. Disposal considerations

Waste disposal of substance:

Dispose of in accordance with local authority regulations. Do not discharge into drains/surface waters/groundwater.

Container disposal:

Completely emptied packagings can be given for recycling.

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14. Transport Information

Land transport USDOT

Not classified as a dangerous good under transport regulations

Sea transport IMDG

Not classified as a dangerous good under transport regulations

Air transport IATA/ICAO

Not classified as a dangerous good under transport regulations

15. Regulatory Information

Federal Regulations

Registration status:

Chemical TSCA, US released; restriction on use / listed

This product contains an alkali metal nitrite which is subject to the SNUR at 40 CFR 721.4740 which prohibits the use of this product in metalworking fluids containing amines. 40 CFR 721.4740

EPCRA 311/312 (Hazard categories):

<u>CERCLA RQ</u> 1000 LBS 100 LBS <u>CAS Number</u> 1310-73-2 7632-00-0 <u>Chemical name</u> Sodium Hydroxide sodium nitrite

Acute; Chronic

State regulations

CA Prop. 65: WARNING: THIS PRODUCT CONTAINS A CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER.

NFPA Hazard codes: Health : 2 Fire: 0 Reactivity: 0 Special:

HMIS III ratingHealth: 2¤Flammability: 0Physical hazard:0

16. Other Information

SDS Prepared by: BASF NA Product Regulations SDS Prepared on: 2015/04/08

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