Safety data sheet

1. Substance/preparation and company identification

MASTERSEAL SP120 PF REACTOR

Company:
BASF South East Asia Pte Ltd.
7 Temasek Boulevard,
#35-01 Suntec Tower One, 038987, SINGAPORE
Contact address:
BASF SE
67056 Ludwigshafen
GERMANY
Telephone: +49 621 60-0
E-mail address: global.info@basf.com

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

2. Hazard identification

Possible Hazards

Harmful if swallowed.
Causes burns.
Risk of serious damage to eyes.
Possible risk of impaired fertility.
Possible risk of harm to the unborn child.
Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

3. Composition/information on ingredients

Chemical nature

Compound based on: amines, aliphatic, modified

Hazardous ingredients
according to Directive 1999/45/EC

nonylphenol

Content (W/W): >= 30 % - <= 60 %
CAS Number: 25154-52-3
EC-Number: 246-672-0
INDEX-Number: 601-053-00-8
Hazard symbol(s): C, N
R-phrase(s): 22, 34, 62, 63, 50/53

The wording of the hazard symbols and R-phrases is specified in chapter 16 if dangerous ingredients are mentioned.

4. First-Aid Measures

General advice:
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.

5. Fire-Fighting Measures

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

Unsuitable extinguishing media for safety reasons:
water jet

Specific hazards:
carbon dioxide, carbon monoxide, nitrogen oxides, fumes/smoke, carbon black, corrosive gases/vapours

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. Contaminated extinguishing water must be disposed of in accordance with official regulations.

6. Accidental Release Measures

Personal precautions:
Use personal protective clothing. Do not breathe vapour/aerosol/spray mists. Handle in accordance with good building materials hygiene and safety practice.

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

Methods for cleaning up or taking 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.

7. Handling and Storage

Handling

Avoid aerosol formation. Avoid inhalation of mists/vapours. Avoid skin contact. Ensure adequate ventilation. No special measures necessary provided product is used correctly.

Protection against fire and explosion:
The product does not contribute to the spreading of flames, nor is it self combustible, not explosive.

Storage

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. Store protected against freezing.

8. Exposure controls and personal protection

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:
Suitable chemical resistant safety gloves (EN 374) also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN 374): E.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), butyl rubber (0.7 mm) and other Manufacturer's directions for use should be observed because of great diversity of types.

Eye protection:
Tightly fitting safety goggles (splash goggles) (e.g. EN 166)

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

General safety and hygiene measures:
Do not inhale gases/vapours/aerosols. Avoid contact with the skin, eyes and clothing. 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).

9. Physical and Chemical Properties

Form:	liquid	
Colour:	amber	
Odour:	fish-like	
pH value:	alkaline	
boiling temperature:	approx. 226 °C	
Flash point:	approx. 106.67 °C	
Flammability:	not highly flammable	
Ignition temperature:	not applicable	
Explosion hazard:	not explosive	
Vapour pressure:	approx. 4.81 mmHg (21 °C)	
Density:	approx. 0.95 g/cm3 (21 °C)	(Directive 84/449/EEC, A.3)
Solubility in water:	< 0.1 g/l (15 °C)	

10. Stability and Reactivity

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

Thermal decomposition:	No decomposition if stored and handled as prescribed/indicated.

Substances to avoid:
zinc, aluminium, oxidizing agents, strong alkalies, acids

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

11. Toxicological Information

Acute toxicity

Assessment of acute toxicity:
Of moderate toxicity after single ingestion. Virtually nontoxic after a single skin contact.

Experimental/calculated data:
LD50 rat (oral): > 1,620 mg/kg

LD50 rabbit (dermal): > 2,140 mg/kg

Irritation

Assessment of irritating effects:
Corrosive! Damages skin and eyes.

Reproductive toxicity

Assessment of reproduction toxicity:
The results of animal studies suggest a fertility impairing effect. EU-classification The product has not been tested. The statement has been derived from the properties of the individual components.

Developmental toxicity

Assessment of teratogenicity:
Indications of possible developmental toxicity/teratogenicity were seen in animal studies.
EU-classification The product has not been tested. The statement has been derived from the properties of the individual components.

12. Ecological Information

Ecotoxicity

Assessment of aquatic toxicity:
Very toxic (acute effect) to aquatic organisms.
The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: alpha-(2-Aminomethylethyl)-omega-(2-aminomethylethoxy)-poly(oxy(methyl-1,2-ethanediyl))
Assessment of aquatic toxicity:
Acutely harmful for aquatic organisms. Depending on local conditions and existing concentrations, disturbances in the biodegradation process of activated sludge are possible.

Information on: nonylphenol
Assessment of aquatic toxicity:
Very toxic (acute effect) to aquatic organisms. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.

Information on: alpha-(2-Aminomethylethyl)-omega-(2-aminomethylethoxy)-poly(oxy(methyl-1,2-ethanediyl))
Toxicity to fish:
LC50 (96 h) > 464 - < 1,000 mg/l, Leuciscus idus (OECD 203; ISO 7346; 84/449/EEC, C.1, semistatic)
The details of the toxic effect relate to the nominal concentration. The product will cause changes in the pH value of the test system. The result refers to an unneutralized sample. After neutralization a reduction in harmful effect can be observed. The product has not been tested. The statement has been derived from products of a similar structure and composition.

Information on: nonylphenol
Toxicity to fish:
LC50 (96 h) 0.128 mg/l, Pimephales promelas (other, Flow through.)

Information on: alpha-(2-Aminomethylethyl)-omega-(2-aminomethylethoxy)-poly(oxy(methyl-1,2-ethanediyl))
Aquatic invertebrates:
EC50 (48 h) 15 mg/l, Daphnia magna (OECD Guideline 202, part 1)
Literature data. The product has not been tested. The statement has been derived from products of a similar structure and composition.

Information on: nonylphenol
Aquatic invertebrates:
EC50 (48 h) 0.085 mg/l, Daphnia magna (other, static)

Information on: alpha-(2-Aminomethylethyl)-omega-(2-aminomethylethoxy)-poly(oxy(methyl-1,2-ethanediyl))
Aquatic plants:
No data available concerning toxicity for algae.

Information on: nonylphenol
Aquatic plants:
EC50 (72 h) 0.323 mg/l (growth rate), Scenedesmus subspicatus (DIN 38412 Part 9, static)

Persistence and degradability

Assessment biodegradation and elimination (H2O):
Not readily biodegradable (by OECD criteria). Poorly eliminated from water.
The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: alpha-(2-Aminomethylethyl)-omega-(2-aminomethylethoxy)-poly(oxy(methyl-1,2-ethanediyl))
Assessment biodegradation and elimination (H2O):
Not readily biodegradable (by OECD criteria). Poorly eliminated from water. The product has not been tested. The statement has been derived from products of a similar structure and composition.

Information on: nonylphenol
Assessment biodegradation and elimination (H2O):
According to OECD criteria the product is not readily biodegradable but inherently biodegradable.

Bioaccumulation potential

Bioaccumulation potential:
Accumulation in organisms is expected. The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: alpha-(2-Aminomethylethyl)-omega-(2-aminomethylethoxy)-poly(oxy(methyl-1,2-ethanediyl))
Bioaccumulation potential:
Because of the n-octanol/water distribution coefficient (log Pow) accumulation in organisms is not to be expected.

Information on: nonylphenol
Bioaccumulation potential:
Bioconcentration factor: 1,280 (calculated)
Accumulation in organisms is expected.
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13. Disposal Considerations

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.

14. Transport Information

Land transport

ADR

Hazard class:	8
Packing group:	III
ID number:	UN 2735
Hazard label:	8, EHSM
Proper shipping name:	AMINES, LIQUID, CORROSIVE, N.O.S. (contains NONYLPHENOLE, POLYETHERDIAMINE)

RID

Hazard class:	8
Packing group:	III
ID number:	UN 2735
Hazard label:	8, EHSM
Proper shipping name:	AMINES, LIQUID, CORROSIVE, N.O.S. (contains NONYLPHENOLE, POLYETHERDIAMINE)

Inland waterway transport

ADNR

Hazard class:	8
Packing group:	III
ID number:	UN 2735
Hazard label:	8, EHSM
Proper shipping name:	AMINES, LIQUID, CORROSIVE, N.O.S. (contains NONYLPHENOLE, POLYETHERDIAMINE)

Sea transport

IMDG

Hazard class:	8
Packing group:	III
ID number:	UN 2735
Hazard label:	8, EHSM
Marine pollutant:	YES
Proper shipping name:	AMINES, LIQUID, CORROSIVE, N.O.S. (contains NONYLPHENOLE, POLYETHERDIAMINE)

Air transport

IATA/ICAO

Hazard class:	8
Packing group:	III
ID number:	UN 2735
Hazard label:	8
Proper shipping name:	AMINES, LIQUID, CORROSIVE, N.O.S. (contains NONYLPHENOLE, POLYETHERDIAMINE)

15. Regulatory Information

Regulations of the European union (Labelling) / National legislation/Regulations

Directive 1999/45/EC ('Preparation Directive'):

Hazard symbol(s)

C	Corrosive.
N	Dangerous for the environment.

R-phrase(s)

R22	Harmful if swallowed.
R34	Causes burns.
R41	Risk of serious damage to eyes.
R62	Possible risk of impaired fertility.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R63	Possible risk of harm to the unborn child.

S-phrase(s)

S1/2	Keep locked-up and out of reach of children.
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.
S45	In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S53	Avoid exposure - obtain special instructions before use.
S61	Avoid release to the environment. Refer to special instructions/safety data sheets.

Hazard determining component(s) for labelling: NONYLPHENOLE

Other regulations

16. Other Information

Due to the merger of Degussa Construction chemicals and BASF Group all Material Safety Data Sheets have been reassessed on the basis of consolidated information. This may have resulted in changes of the Material Safety Data Sheets. In case you have questions concerning such changes please contact us under the address mentioned in Section I.

Full text of hazard symbols and R-phrases if mentioned as hazardous components in chapter 3:

C	Corrosive.
N	Dangerous for the environment.
22	Harmful if swallowed.
34	Causes burns.
62	Possible risk of impaired fertility.
63	Possible risk of harm to the unborn child.

50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Vertical lines in the left hand margin indicate an amendment from the previous version.

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.