1. Identification

Product identifier used on the label

**MasterSeal NP 2 activator also NP2 SL2 ACTIVATOR**

Recommended use of the chemical and restriction on use

Recommended use*: for industrial use only

* 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


Classification of the product

<table>
<thead>
<tr>
<th>Type</th>
<th>Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute</td>
<td>2</td>
<td>(Inhalation - vapour) Acute toxicity</td>
</tr>
<tr>
<td>Resp.</td>
<td>1</td>
<td>Respiratory sensitization</td>
</tr>
<tr>
<td>Skin</td>
<td>1</td>
<td>Skin sensitization</td>
</tr>
<tr>
<td>Carc.</td>
<td>2</td>
<td>Carcinogenicity</td>
</tr>
</tbody>
</table>

Label elements
Pictogram:

Signal Word:
Danger

Hazard Statement:
H330 Fatal if inhaled.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317 May cause an allergic skin reaction.
H351 Suspected of causing cancer.

Precautionary Statements (Prevention):
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P260 Do not breathe mist or vapour.
P201 Obtain special instructions before use.
P284 [In case of inadequate ventilation] wear respiratory protection.
P202 Do not handle until all safety precautions have been read and understood.
P272 Contaminated work clothing should not be allowed out of the workplace.

Precautionary Statements (Response):
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 IF ON SKIN (or hair): Wash with plenty of soap and water.
P362 + P364 Take off contaminated clothing and wash before reuse.

Precautionary Statements (Storage):
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.

Precautionary Statements (Disposal):
P501 Dispose of contents/container to hazardous or special waste collection point.

Hazards not otherwise classified
No applicable information available.

Labeling of special preparations (GHS):
Product contains the following components and may cause allergy or asthma symptoms or breathing difficulties if inhaled: toluene-2,4-diisocyanate, toluene-2,6-diisocyanate

3. Composition / Information on Ingredients


<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Content (W/W)</th>
<th>Chemical name</th>
</tr>
</thead>
<tbody>
<tr>
<td>584-84-9</td>
<td>&gt;= 1.0 - &lt; 3.0 %</td>
<td>toluene-2,4-diisocyanate</td>
</tr>
<tr>
<td>91-08-7</td>
<td>&gt;= 0.3 - &lt; 1.0 %</td>
<td>toluene-2,6-diisocyanate</td>
</tr>
</tbody>
</table>
4. First-Aid Measures

Description of first aid measures

General advice:
Remove contaminated clothing.

If inhaled:
Remove the affected individual into fresh air and keep the person calm. Assist in breathing if necessary. Immediate medical attention required.

If on skin:
Wash affected areas thoroughly with soap and water. Consult a doctor if skin irritation persists.

If in eyes:
In case of contact with the eyes, rinse immediately for at least 15 minutes with plenty of water. Immediate medical attention required.

If swallowed:
Rinse mouth and then drink plenty of water. Do not induce vomiting. Immediate medical attention required.

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: In sensitized individuals, sensitization reactions may be elicited by structurally similar substances. Respiratory sensitization may result in allergic (asthma-like) signs in the lower respiratory tract including wheezing, shortness of breath and difficulty breathing, the onset of which may be delayed. Repeated inhalation of high concentrations may cause lung damage, including reduced lung function, which may be permanent. Substances eliciting lower respiratory tract irritation may worsen the asthma-like reactions that may be produced by product exposures.

Indication of any immediate medical attention and special treatment needed

Note to physician
Antidote: Specific antidotes or neutralizers to isocyanates do not exist.
Treatment: Treatment should be supportive and based on the judgement of the physician in response to the reaction of the patient.

5. Fire-Fighting Measures

Extinguishing media

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

Special hazards arising from the substance or mixture
Hazards during fire-fighting:
nitrous gases, fumes/smoke, isocyanate, vapour
Advice for fire-fighters
Protective equipment for fire-fighting:
Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

Further information:
Sealed containers should be protected against heat as this results in pressure build-up.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures
Clear area. Ensure adequate ventilation. Wear suitable personal protective clothing and equipment.

Environmental precautions
Do not discharge into drains/surface waters/groundwater.

Methods and material for containment and cleaning up
For small amounts: Sweep/shovel up. Dispose of absorbed material in accordance with regulations.
For large amounts: Contain spillage. Pick up with suitable absorbent material. Sweep/shovel up.
Dispose of absorbed material in accordance with regulations.
Ensure adequate ventilation. Avoid sources of ignition.

7. Handling and Storage

Precautions for safe handling
Avoid contact with the skin, eyes and clothing. Avoid excessive temperatures. Avoid humidity.

Protection against fire and explosion:
Avoid all sources of ignition: heat, sparks, open flame. If exposed to fire, keep containers cool by spraying with water.

Conditions for safe storage, including any incompatibilities
No applicable information available.

Suitable materials for containers: tinned carbon steel (Tinplate)

Further information on storage conditions: Keep container tightly closed and in a well-ventilated place.

Storage stability:
Storage temperature: 65 - 104 °F
Protect against moisture.

8. Exposure Controls/Personal Protection

Components with occupational exposure limits

<table>
<thead>
<tr>
<th>Compound</th>
<th>ACGIH TLV</th>
<th>TWA value</th>
<th>STEL value</th>
</tr>
</thead>
<tbody>
<tr>
<td>toluene-2,6-diisocyanate</td>
<td></td>
<td>0.005 ppm</td>
<td>0.02 ppm</td>
</tr>
<tr>
<td>toluene-2,4-diisocyanate</td>
<td>OSHA PEL</td>
<td>CLV 0.02 ppm 0.14 mg/m3</td>
<td>TWA value 0.005 ppm 0.04 mg/m3</td>
</tr>
</tbody>
</table>
Advice on system design:
Provide local exhaust ventilation to control vapours/mists.

Personal protective equipment

Respiratory protection:
When atmospheric levels may exceed the occupational exposure limit (PEL or TLV) NIOSH-certified air-purifying respirators equipped with an organic vapor sorbent and particulate filter can be used as long as appropriate precautions and change out schedules are in place.

Hand protection:
Chemical resistant protective gloves, Protective glove selection must be based on the user's assessment of the workplace hazards.

Eye protection:
Safety glasses with side-shields. Wear face shield if splashing hazard exists.

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

General safety and hygiene measures:
Wear protective clothing as necessary to prevent contact. Eye wash fountains and safety showers must be easily accessible. Observe the appropriate PEL value. Wash soiled clothing immediately. Contaminated equipment or clothing should be cleaned after each use or disposed of.

9. Physical and Chemical Properties

Form: liquid
Odour: mild
Odour threshold: No applicable information available.
Colour: amber
pH value: neutral to slightly alkaline
Melting point: No data available.
Boiling range: 237 - 251 °C
Sublimation point: No applicable information available.
Flash point: 260 °F 126 °C
Flammability: not determined
Lower explosion limit: No data available.
Upper explosion limit: No data available.
Vapour pressure: No data available.
Density: approx. 1.0 g/cm3 (20 °C)
Relative density: 8.7 - 9.1 (23 °C)
Bulk density: not applicable
Vapour density: Heavier than air.
Partitioning coefficient n-octanol/water (log Pow): No data available.
Thermal decomposition: No applicable information available.
Viscosity, dynamic: No data available.
Viscosity, kinematic: No applicable information available.
Solubility in water: The product has not been tested.
Solubility (quantitative): No applicable information available.
10. Stability and Reactivity

Reactivity
No applicable information available.

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

Chemical stability
No applicable information available.

Possibility of hazardous reactions
The product is chemically stable.

Conditions to avoid
Avoid moisture. Avoid prolonged exposure to extreme heat. Avoid sources of ignition.

Incompatible materials
strong oxidizing agents, strong bases, strong acids

Hazardous decomposition products

Decomposition products:
irritant gases/vapours, carbon oxides

Thermal decomposition:
No applicable information available.

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: May be harmful if inhaled.

Information on: toluene-2,4-diisocyanate
Assessment of acute toxicity: Of very high toxicity after short-term inhalation. Virtually nontoxic after a single ingestion. Virtually nontoxic after a single skin contact.

Oral
No data available.

Inhalation
Type of value: ATE
Value: 1.340 mg/l
Determined for vapor
Information on: toluene-2,6-diisocyanate
Type of value: LC50
Species: mouse
Value: 0.07 mg/l
Exposure time: 4 h
The vapour was tested.

Information on: toluene-2,4-diisocyanate
Type of value: LC50
Species: rat
Value: 0.1 mg/l
Exposure time: 4 h
Literature data.

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Dermal
No data available.

Assessment other acute effects
No applicable information available.

Irritation / corrosion
Assessment of irritating effects: Irritating to eyes, respiratory system and skin.

Information on: toluene-2,4-diisocyanate
Assessment of irritating effects: Irritating to eyes and skin.

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Skin

Information on: toluene-2,6-diisocyanate
Species: rabbit
Result: Irritant.
The product has not been tested. The statement has been derived from substances/products of a similar structure or composition. Literature data.

Information on: toluene-2,4-diisocyanate
Species: rabbit
Result: Irritant.
Literature data.

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Eye

Information on: toluene-2,6-diisocyanate
Species: rabbit
Result: Irritant.
The product has not been tested. The statement has been derived from substances/products of a similar structure or composition. Literature data.

Information on: toluene-2,4-diisocyanate
Species: rabbit
Result: Irritant.
Literature data.

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Sensitization
Assessment of sensitization: Sensitization after skin contact possible. The substance may cause sensitization of the respiratory tract.

*Information on: toluene-2,4-diisocyanate*
Assessment of sensitization:
The substance may cause sensitization of the respiratory tract. Sensitization after skin contact possible.

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**Chronic Toxicity/Effects**

**Repeated dose toxicity**
Assessment of repeated dose toxicity: No applicable information available.

*Information on: toluene-2,4-diisocyanate*
Assessment of repeated dose toxicity: The substance may cause damage to the lung even after repeated inhalation of low doses, as shown in animal studies.

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**Genetic toxicity**

*Information on: toluene-2,4-diisocyanate*
Assessment of mutagenicity: The substance was mutagenic in various test systems with bacteria and cell cultures; however, these results could not be confirmed in tests with mammals. Literature data.

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**Carcinogenicity**

*Information on: toluene-2,4-diisocyanate*
Assessment of carcinogenicity: IARC (International Agency for Research on Cancer) has classified this substance as group 2B (The agent is possibly carcinogenic to humans). NTP listed carcinogen

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**Symptoms of Exposure**

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: The product has not been tested.

Aquatic toxicity

*Information on: toluene-2,4-diisocyanate*
Assessment of aquatic toxicity:
Safety Data Sheet
MasterSeal NP 2 activator also NP2 SL2 ACTIVATOR

Acute harm for aquatic organisms. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations. The product may hydrolyse. The test result maybe partially due to degradation products.

Additional information

Other ecotoxicological advice:
Do not release untreated into natural waters. Do not allow to enter soil, waterways or waste water channels. The product has not been tested. The statement has been derived from the properties of the individual components.

13. Disposal considerations

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

Container disposal:
Contaminated packaging should be emptied as far as possible; then it can be passed on for recycling after being thoroughly cleaned.
Do not reuse empty containers.

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 / listed

EPCRA 311/312 (Hazard categories):
Acute; Chronic

CERCLA RQ
100 LBS

CAS Number
108-90-7; 584-84-9; 91-08-7

Chemical name
chlorobenzene; toluene-2,4-diisocyanate; toluene-2,6-diisocyanate
State regulations

CA Prop. 65:
WARNING: THIS PRODUCT CONTAINS A CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

NFPA Hazard codes:
Health: 3 Fire: 1 Reactivity: 0 Special:

16. Other Information

SDS Prepared by:
BASF NA Product Regulations
SDS Prepared on: 2015/04/29

We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.

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