

Safety Data Sheet

MasterSeal NP 2 activator also NP2 SL2 ACTIVATOR

Revision date : 2012/03/22

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Version: 1.2

(30605608/SDS_GEN_US/EN)

1. Product and Company Identification

Company

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

24 Hour Emergency Response Information

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

2. Hazards Identification

Emergency overview**WARNING:**

HARMFUL IF INHALED.

SENSITIZATION CAN OCCUR IN SOME INDIVIDUALS, LEADING TO ASTHMA-LIKE SPASMS OF THE BRONCHIAL TUBES AND DIFFICULTY BREATHING. INDIVIDUALS WITH A HISTORY OF RESPIRATORY ILLNESS, ASTHMATIC CONDITIONS, EYE DAMAGE OR TDI SENSITIZATION SHOULD NOT BE EXPOSED TO THIS PRODUCT. TDI IS INCLUDED IN THE NTP ANNUAL REPORT ON CARCINOGENS. RESULTS FROM A TDI HEALTH STUDY INDICATE THAT OVEREXPOSURE TO A RESPIRATORY IRRITANT, RESULTING IN LOWER RESPIRATORY TRACT SYMPTOMS COULD INCREASE THE RISKS OF DEVELOPING ASTHMA-LIKE REACTIONS FROM SUBSEQUENT TDI EXPOSURE.

CONTAINS MATERIAL WHICH CAN CAUSE CANCER.

Irritating to eyes, respiratory system and skin.
Avoid contact with the skin, eyes and clothing.
Avoid sources of ignition.

State of matter: liquid

Colour: amber

Odour: mild

Potential health effects**Primary routes of exposure:**

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

Acute toxicity:

May be harmful if inhaled.

Irritation / corrosion:

Irritating to eyes, respiratory system and skin.

Sensitization:

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

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Signs and symptoms of overexposure:

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.

Potential environmental effects

Aquatic toxicity:

The product has not been tested.

3. Composition / Information on Ingredients

<u>CAS Number</u>	<u>Content (W/W)</u>	<u>Chemical name</u>
584-84-9	>= 1.0 - <= 5.0 %	toluene-2,4-diisocyanate
91-08-7	>= 0.1 - <= 1.0 %	toluene-2,6-diisocyanate

4. 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.

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

Flash point: 260 °F
126 °C

Lower explosion limit: No data available.

Upper explosion limit: No data available.

Suitable extinguishing media:

carbon dioxide, dry powder, foam, water spray

Hazards during fire-fighting:

nitrous gases, fumes/smoke, isocyanate, vapour

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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:

Clear area. Ensure adequate ventilation. Wear suitable personal protective clothing and equipment.

Environmental precautions:

Do not discharge into drains/surface waters/groundwater.

Cleanup:

Ensure adequate ventilation. Avoid sources of ignition.

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.

7. Handling and Storage

Handling

General advice:

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.

Storage

General advice:

Keep container tightly closed and in a well-ventilated place.

Storage stability:

Storage temperature: 65 - 104 °F

Protect against moisture.

8. Exposure Controls and Personal Protection

Components with workplace control parameters

toluene-2,6-diisocyanate

	ACGIH	TWA value	0.005 ppm	; STEL value	0.02 ppm	;
toluene-2,4-diisocyanate	OSHA	CLV	0.02 ppm	0.14 mg/m ³		;
	ACGIH	TWA value	0.005 ppm	; STEL value	0.02 ppm	;

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.

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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	
Colour:	amber	
pH value:		neutral to slightly alkaline
Melting point:		No data available.
Boiling range:	237 - 251 °C	
Vapour pressure:		No data available.
Density:	approx. 1.0 g/cm ³	(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.
Viscosity, dynamic:		No data available.
Solubility in water:		The product has not been tested.

10. Stability and Reactivity

Conditions to avoid:

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

Substances to avoid:

strong oxidizing agents, strong bases, strong acids

Hazardous reactions:

The product is chemically stable.

Decomposition products:

irritant gases/vapours, carbon oxides

Oxidizing properties:

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

11. Toxicological information

Acute toxicity

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.

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Oral:

No data available.

Inhalation:

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.

Dermal:

No data available.

Irritation / corrosion

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

Skin:

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

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

Eye:

Information on: toluene-2,6-diisocyanate
Species: rabbit
Result: Irritant.
The product has not been tested. The statement has been derived from 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

Information on: toluene-2,4-diisocyanate

Assessment of sensitization:

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

Repeated dose toxicity

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.

Genetic toxicity

Information on: toluene-2,4-diisocyanate

The substance was mutagenic in various test systems with bacterias and cell cultures; however, these results could not be confirmed in tests with mammals. Literature data.

Carcinogenicity

Information on: toluene-2,4-diisocyanate

IARC (International Agency for Research on Cancer) has classified this substance as group 2B (The agent is possibly carcinogenic to humans). NTP listed carcinogen

12. Ecological Information

Aquatic toxicity

Information on: toluene-2,4-diisocyanate

Assessment of aquatic toxicity:

Acutely harmful 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.

Other adverse effects:

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

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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

OSHA hazard category:

IARC 1, 2A or 2B carcinogen; NTP listed carcinogen; Chronic target organ effects reported; ACGIH TLV established

EPCRA 311/312 (Hazard categories):

Acute; Chronic

EPCRA 313:

CAS Number

584-84-9
91-08-7

Chemical name

toluene-2,4-diisocyanate
toluene-2,6-diisocyanate

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

State RTK

MA, NJ, PA
MA, NJ, PA

CAS Number

584-84-9
91-08-7

Chemical name

toluene-2,4-diisocyanate
toluene-2,6-diisocyanate

CA Prop. 65:

THIS PRODUCT CONTAINS A CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER.

16. Other Information

HMIS III rating

Health: 2⁺ Flammability: 1 Physical hazard: 1

NFPA and HMIS use a numbering scale ranging from 0 to 4 to indicate the degree of hazard. A value of zero means that the substance possesses essentially no hazard; a rating of four indicates extreme danger. Although similar, the two rating systems are intended for different purposes, and use different criteria. The NFPA system was developed to provide an on-the-spot alert to the hazards of a material, and their severity, to emergency responders. The HMIS system was designed to communicate workplace hazard information to employees who handle hazardous chemicals.

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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.

MSDS Prepared by:

BASF NA Product Regulations

msds@basf.com

MSDS Prepared on: 2012/03/22

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