



We create chemistry

Master Seal NP1 High  
Performance polyurethane  
Sealant

# Safety Data Sheet

## MasterSeal NP 1

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### 1. Identification

Product identifier used on the label

**MasterSeal NP 1**

**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: sealant

### 2. Hazards Identification

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

**Classification of the product**

Eye Dam./Irrit.	2A	Serious eye damage/eye irritation
Resp. Sens.	1	Respiratory sensitization
Skin Sens.	1	Skin sensitization
Carc.	2	Carcinogenicity
Repr.	2 (unborn child)	Reproductive toxicity
STOT RE	1	Specific target organ toxicity — repeated exposure
Aquatic Acute	3	Hazardous to the aquatic environment - acute
Aquatic Chronic	3	Hazardous to the aquatic environment - chronic

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### Label elements

Pictogram:



Signal Word:  
Danger

Hazard Statement:

H319	Causes serious eye irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317	May cause an allergic skin reaction.
H351	Suspected of causing cancer.
H361	Suspected of damaging the unborn child.
H372	Causes damage to organs (Central nervous system) through prolonged or repeated exposure.

Precautionary Statements (Prevention):

P280	Wear protective gloves/protective clothing/eye protection/face protection.
P260	Do not breathe dust/gas/mist/vapours.
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P284	In case of inadequate ventilation wear respiratory protection.
P270	Do not eat, drink or smoke when using this product.
P264	Wash with plenty of water and soap thoroughly after handling.
P272	Contaminated work clothing should not be allowed out of the workplace.

Precautionary Statements (Response):

P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P314	Get medical advice/attention if you feel unwell.
P308 + P311	IF exposed or concerned: Call a POISON CENTER or doctor/physician.
P303 + P352	IF ON SKIN (or hair): Wash with plenty of soap and water.
P333 + P311	If skin irritation or rash occurs: Call a POISON CENTER or doctor/physician.
P362 + P364	Take off contaminated clothing and wash it before reuse.
P337 + P311	If eye irritation persists: Call a POISON CENTER or doctor/physician.

Precautionary Statements (Storage):

P405	Store locked up.
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Precautionary Statements (Disposal):

P501	Dispose of contents/container to hazardous or special waste collection point.
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### 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

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### Labeling of special preparations (GHS):

CONTAINS ISOCYANATES. INHALATION OF ISOCYANATE MISTS OR VAPORS MAY CAUSE RESPIRATORY IRRITATION, BREATHLESSNESS, CHEST DISCOMFORT AND REDUCED PULMONARY FUNCTION. OVEREXPOSURE WELL ABOVE THE PEL MAY RESULT IN BRONCHITIS, BRONCHIAL SPASMS AND PULMONARY EDEMA. LONG-TERM EXPOSURE TO ISOCYANATES HAS BEEN REPORTED TO CAUSE LUNG DAMAGE, INCLUDING REDUCED LUNG FUNCTION WHICH MAY BE PERMANENT. ACUTE OR CHRONIC OVEREXPOSURE TO ISOCYANATES MAY CAUSE SENSITIZATION IN SOME INDIVIDUALS, RESULTING IN ALLERGIC RESPIRATORY REACTIONS INCLUDING WHEEZING, SHORTNESS OF BREATH AND DIFFICULTY BREATHING. ANIMAL TESTS INDICATE THAT SKIN CONTACT MAY PLAY A ROLE IN CAUSING RESPIRATORY SENSITIZATION.

### 3. Composition / Information on Ingredients

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

<u>CAS Number</u>	<u>Weight %</u>	<u>Chemical name</u>
1317-65-3	>= 0.0 - < 20.0%	Limestone
13463-67-7	>= 0.0 - < 7.0%	Titanium dioxide
14807-96-6	>= 3.0 - < 5.0%	talc
8052-41-3	>= 1.0 - <= 3.0%	Stoddard solvent
145899-78-1	>= 0.3 - < 1.0%	3-Oxazolidineethanol, 2-(1-methylethyl)-, 3,3'-carbonate
91-08-7	>= 0.3 - < 1.0%	toluene-2,6-diisocyanate
2530-83-8	>= 0.2 - < 0.3%	trimethoxy(3-(oxiranylmethoxy)propyl)silane
4083-64-1	>= 0.2 - < 0.3%	4-toluenesulphonyl isocyanate
149-57-5	>= 0.0 - < 0.2%	2-ethylhexanoic acid

### 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:

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. If irritation develops, seek medical attention.

##### 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. Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions. Immediate medical attention required.

#### Most important symptoms and effects, both acute and delayed

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

**Hazards:** 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

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

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## 5. Fire-Fighting Measures

### Extinguishing media

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

Unsuitable extinguishing media for safety reasons:  
water jet

### 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:

Keep containers cool by spraying with water if exposed to fire. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

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## 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

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

### Methods and material for containment and cleaning up

For small amounts: Absorb isocyanate with suitable absorbent material (see § 40 CFR, sections 260, 264 and 265 for further information). Shovel into open container. Do not make container pressure tight. Move container to a well-ventilated area (outside). Spill area can be decontaminated with the following recommended decontamination solution: Mixture of 90 % water, 8 % concentrated ammonia, 2 % detergent. Add at a 10 to 1 ratio. Allow to stand for at least 48 hours to allow escape of evolved carbon dioxide.

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For large amounts: If temporary control of isocyanate vapor is required, a blanket of protein foam or other suitable foam (available from most fire departments) may be placed over the spill. Transfer as much liquid as possible via pump or vacuum device into closed but not sealed containers for disposal.

For residues: The following measures should be taken for final cleanup: Wash down spill area with decontamination solution. Allow solution to stand for at least 10 minutes.  
Dike spillage.

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## 7. Handling and Storage

### Precautions for safe handling

Provide suitable exhaust ventilation at the processing machines. Ensure thorough ventilation of stores and work areas. Avoid aerosol formation. When handling heated product, vapours of the product should be ventilated, and respiratory protection used. Wear respiratory protection when spraying. Danger of bursting when sealed gastight. Protect against moisture. If bulging of drum occurs, transfer to well ventilated area, puncture to relieve pressure, open vent and let stand for 48 hours before resealing.

Protection against fire and explosion:

Keep away from sources of ignition - No smoking. The relevant fire protection measures should be noted.

### Conditions for safe storage, including any incompatibilities

Observe VCI storage rules.

Further information on storage conditions: Keep only in the original container in a cool, well-ventilated place. Protect from direct sunlight. Store protected against freezing.

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## 8. Exposure Controls/Personal Protection

### Components with occupational exposure limits

toluene-2,6-diisocyanate	ACGIH TLV	STEL value 0.005 ppm Inhalable fraction and vapor ; Skin Designation Inhalable fraction and vapor ; The substance can be absorbed through the skin. TWA value 0.001 ppm Inhalable fraction and vapor ;
2-ethylhexanoic acid	ACGIH TLV	TWA value 5 mg/m3 Inhalable fraction and vapor ;
Limestone	OSHA PEL	PEL 5 mg/m3 Respirable fraction ; PEL 15 mg/m3 Total dust ; TWA value 5 mg/m3 Respirable fraction ; TWA value 15 mg/m3 Total dust ;
Titanium dioxide	OSHA PEL	PEL 15 mg/m3 Total dust ; TWA value 10 mg/m3 Total dust ;
	ACGIH TLV	TWA value 10 mg/m3 ;

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talc	OSHA PEL	TWA value 2 mg/m3 Respirable dust ; TWA value 20 millions of particles per cubic foot of air ; TWA value 2.4 millions of particles per cubic foot of air Respirable ; The exposure limit is calculated from the equation, $250/(\%SiO_2+5)$ , using a value of 100% SiO <sub>2</sub> . Lower percentages of SiO <sub>2</sub> will yield higher exposure limits. TWA value 0.1 mg/m3 Respirable ; The exposure limit is calculated from the equation, $10mg/m^3/(\%SiO_2+2)$ , using a value of 100% SiO <sub>2</sub> . Lower percentages of SiO <sub>2</sub> will yield higher exposure limits.
	ACGIH TLV	TWA value 2 mg/m3 Respirable fraction ; The value is for particulate matter containing no asbestos and <1% crystalline silica.
Stoddard solvent	OSHA PEL	PEL 500 ppm 2,900 mg/m3 ; TWA value 100 ppm 525 mg/m3 ;
	ACGIH TLV	TWA value 100 ppm ;

### Personal protective equipment

#### **Respiratory protection:**

When workers are facing concentrations above the occupational exposure limits they must use appropriate certified respirators. 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. For emergency or non-routine, high exposure situations, including confined space entry, use a NIOSH-certified full facepiece pressure demand self-contained breathing apparatus (SCBA) or a full facepiece pressure demand supplied-air respirator (SAR) with escape provisions.

#### **Hand protection:**

Chemical resistant protective gloves should be worn to prevent all skin contact., Suitable materials may include, chloroprene rubber (Neoprene), nitrile rubber (Buna N), chlorinated polyethylene, polyvinylchloride (Pylox), butyl rubber, fluoroelastomer (Viton), depending upon conditions of use.

#### **Eye protection:**

Tightly fitting safety goggles (chemical goggles). Wear face shield if splashing hazard exists.

#### **Body protection:**

Cover as much of the exposed skin as possible to prevent all skin contact., Suitable materials may include, saran-coated material, depending upon conditions of use.

#### **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 or TLV value. Wash soiled clothing immediately. Remove contaminated clothing immediately and clean before re-use or dispose it if necessary.

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## 9. Physical and Chemical Properties

Form: paste  
Odour: slight odour

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Odour threshold:	No applicable information available.	
Colour:	pigmented	
pH value:	not applicable	
Melting point:	No applicable information available.	
Boiling point:	not applicable	
Sublimation point:	No applicable information available.	
Flash point:	Non-flammable.	
Flammability:	not flammable	(UN Test N.1 (ready combustible solids))
Lower explosion limit:	1 %(V)	
Upper explosion limit:	Information applies to the solvent. 6 %(V)	
Autoignition:	Information applies to the solvent. not applicable	
Vapour pressure:	No applicable information available.	
Density:	approx. 1.20 g/cm <sup>3</sup> ( 20 °C)	
Relative density:	No applicable information available.	
Vapour density:	No applicable information available.	
Partitioning coefficient n-octanol/water (log Pow):	No applicable information available.	
Thermal decomposition:	No decomposition if stored and handled as prescribed/indicated.	
Viscosity, dynamic:	No applicable information available.	
Viscosity, kinematic:	No applicable information available.	
Solubility in water:	( 15 °C) insoluble	
Miscibility with water:	( 20 °C) not (e.g. <10%)	
Solubility (quantitative):	No applicable information available.	
Solubility (qualitative):	No applicable information available.	
Evaporation rate:	No applicable information available.	
Other Information:	If necessary, information on other physical and chemical parameters is indicated in this section.	

## 10. Stability and Reactivity

### Reactivity

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

Oxidizing properties:  
not fire-propagating

### 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.

### Conditions to avoid

See MSDS section 7 - Handling and storage.

### Incompatible materials

strong acids, strong bases, strong oxidizing agents, strong reducing agents

### Hazardous decomposition products

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### Decomposition products:

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

### Thermal decomposition:

No decomposition if stored and handled as prescribed/indicated.

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## 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 by inhalation. Virtually nontoxic after a single skin contact. Virtually nontoxic after a single ingestion.

#### Oral

No applicable information available.

#### Inhalation

No applicable information available.

#### Dermal

No applicable information available.

#### Assessment other acute effects

No applicable information available.

#### Irritation / corrosion

Assessment of irritating effects: Eye contact causes irritation. The product has not been tested. The statement has been derived from the properties of the individual components. Based on available Data, the classification criteria are not met.

#### Sensitization

Assessment of sensitization: Sensitization after skin contact possible. The substance may cause sensitization of the respiratory tract. As a result of previous repeated overexposures or a single large dose, certain individuals will develop isocyanate sensitization (chemical asthma) which will cause them to react to a later exposure to isocyanate at levels well below the PEL/TLV. These symptoms, which include chest tightness, wheezing, cough, shortness of breath, or asthmatic attack, could be immediate or delayed up to several hours after exposure. Similar to many non-specific asthmatic responses, there are reports that once sensitized an individual can experience these symptoms upon exposure to dust, cold air, or other irritants. This increased lung sensitivity can persist for weeks and in severe cases for several years. Chronic overexposure to isocyanates has also been reported to cause lung damage, including a decrease in lung function, which may be permanent. Prolonged contact can cause reddening, swelling, rash, scaling, or blistering. In those who have developed a skin sensitization, these symptoms can develop as a result of contact with very small amounts of liquid material, or even as a result of vapour-only exposure. Animal tests indicate that skin contact may play a role in causing respiratory sensitization.

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

#### Aspiration Hazard

No aspiration hazard expected.



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### Chronic Toxicity/Effects

#### Repeated dose toxicity

Assessment of repeated dose toxicity: May cause central nervous system effects. Based on available Data, the classification criteria are not met.

#### 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: Contains a compound classified as IARC Group 2B (possibly carcinogenic to humans).

#### *Information on: Titanium dioxide*

*Assessment of carcinogenicity: IARC (International Agency for Research on Cancer) has classified this substance as group 2B (The agent is possibly carcinogenic to humans). In long-term studies in rats in which the substance was given by inhalation, a carcinogenic effect was observed. Tumors were only observed in rats after chronic inhalative exposure to high concentrations which caused sustained lung inflammation. In long-term studies in rats and mice in which the substance was given by feed, a carcinogenic effect was not observed. Dermal exposure is not expected to be carcinogenic.*

#### *Information on: toluene-2,6-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).*

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#### 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: May cause harm to the unborn child. The product has not been tested. The statement has been derived from the properties of the individual components.

#### 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

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

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## 12. Ecological Information

### Toxicity

#### Aquatic toxicity

Assessment of aquatic toxicity:

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There is a high probability that the product is not acutely harmful to aquatic organisms. The product has not been tested. The statement has been derived from the properties of the individual components.

### **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.

The polymer component of the product is poorly biodegradable.

### **Bioaccumulative potential**

#### Assessment bioaccumulation potential

Discharge into the environment must be avoided.

### **Mobility in soil**

#### Assessment transport between environmental compartments

No data available.

### **Additional information**

Other ecotoxicological advice:

Do not discharge product into the environment without control. The product has not been tested. The statement has been derived from the properties of the individual components.

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## **13. Disposal considerations**

### **Waste disposal of substance:**

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

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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

### **Further information**

DOT: This product is regulated if the amount in a single receptacle exceeds the Reportable Quantity (RQ). Please refer to Section 15 of this MSDS for the RQ for this product.

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### 15. Regulatory Information

#### Federal Regulations

##### Registration status:

Chemical TSCA, US released / listed

TSCA § 5(a) proposed Significant New Use Restriction (SNUR)  
This product contains a substance subject to a pending SNUR.  
40 CFR 721.10789

**EPCRA 311/312 (Hazard categories):** Refer to SDS section 2 for GHS hazard classes applicable for this product.

##### EPCRA 313:

###### CAS Number

91-08-7  
584-84-9

###### Chemical name

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

###### CERCLA RQ

100 LBS

###### CAS Number

91-08-7

###### Chemical name

toluene-2,6-diisocyanate

#### State regulations

##### State RTK

PA

##### CAS Number

1317-65-3  
13463-67-7  
14807-96-6  
53306-54-0  
8052-41-3  
584-84-9  
1317-65-3  
13463-67-7  
14807-96-6  
8052-41-3  
91-08-7  
584-84-9

##### Chemical name

Limestone  
Titanium dioxide  
talc  
bis(2-propylheptyl) phthalate  
Stoddard solvent  
toluene-2,4-diisocyanate  
Limestone  
Titanium dioxide  
talc  
Stoddard solvent  
toluene-2,6-diisocyanate  
toluene-2,4-diisocyanate

NJ

#### **Safe Drinking Water & Toxic Enforcement Act, CA Prop. 65:**

**WARNING:** This product can expose you to chemicals including TITANIUM DIOXIDE (AIRBORNE, UNBOUND PARTICLES OF RESPIRABLE SIZE), which is known to the State of California to cause cancer, and TOLUENE, which is known to the State of California to cause birth defects or other reproductive harm. For more information, go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

#### **NFPA Hazard codes:**

Health: 2      Fire: 0      Reactivity: 0      Special:

### 16. Other Information

#### **SDS Prepared by:**

BASF NA Product Regulations  
SDS Prepared on: 2018/07/28

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