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1. Identification

Product identifier used on the label

MasterSeal NP 1 Alumin Gray

Recommended use of the chemical and restriction on use

Recommended use*: for industrial and professional users

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

Acute Tox. 4 (Inhalation - vapour) Acute toxicity

Eye Dam./Irrit. 2A Serious eye damage/eye irritation

Resp. Sens.1Respiratory sensitizationSkin Sens.1Skin sensitizationCarc.2Carcinogenicity

STOT RE 1 Specific target organ toxicity — repeated

exposure

Label elements

^{*} 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.

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Pictogram:



Signal Word: Danger

Hazard Statement:

H332 Harmful if inhaled.

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.

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.

P271 Use only outdoors or in a well-ventilated area.

P260 Do not breathe dust/gas/mist/vapours.
P201 Obtain special instructions before use.

P261 Avoid breathing vapours.

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):

P308 + P311 IF exposed or concerned: Call a POISON CENTER or doctor/physician.

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.

P303 + P352 IF ON SKIN (or hair): Wash with plenty of soap and water. Take off contaminated clothing and wash before reuse.

P337 + P311 If eye irritation persists: Call a POISON CENTER or doctor/physician.

Precautionary Statements (Storage): P405 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.

Labeling of special preparations (GHS):

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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

CAS Number	Content (W/W)	Chemical name
1317-65-3	>= 10.0 - < 20.0 %	Limestone
13463-67-7	>= 3.0 - < 5.0 %	Titanium dioxide
14807-96-6	>= 3.0 - < 5.0 %	talc
1305-78-8	>= 1.0 - < 3.0 %	calcium oxide
8052-41-3	>= 1.0 - < 3.0 %	Stoddard solvent
91-08-7	>= 0.3 - < 1.0 %	toluene-2,6-diisocyanate
2530-83-8	>= 0.3 - < 1.0 %	trimethoxy(3-(oxiranylmethoxy)propyl)silane
584-84-9	>= 0.03 - < 0.04 %	toluene-2,4-diisocyanate

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. 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

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

Hazards: Symptoms can appear later.

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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:

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.

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.

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

No applicable information available.

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.

Storage stability:

Storage temperature: 5 - 32 °C

Protect from temperatures below: -17 °C Protect from temperatures above: 48 °C

8. Exposure Controls/Personal Protection

Components with occupational exposure limits

calcium oxide OSHA PEL PEL 5 mg/m3; TWA value 5 mg/m3;

ACGIH TLV 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

,

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 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/(%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.

TWA value 2 mg/m3 Respirable dust; 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.

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 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 20 millions of particles per cubic foot of air :

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;

ACGIH TLV TWA value 100 ppm;

Advice on system design:

Provide adequate exhaust ventilation to control work place concentrations.

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.

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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, 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. Contaminated equipment or clothing should be cleaned after each use or disposed of.

9. Physical and Chemical Properties

Form: paste Odour: mild

Odour threshold: No applicable information available.

Colour: grey

pH value:

Melting point:

Boiling point:

Sublimation point:

No applicable information available.

No applicable information available.

No applicable information available.

No applicable information available.

Flash point: Non-flammable.

Flammability: not flammable (UN Test N.1 (ready combustible solids))
Lower explosion limit: No applicable information available.

Autoignition:

No applicable information available.

Autoignition:

Vapour pressure:

No applicable information available.

No applicable information available.

Density: 10.1 lb/USg (25 °C)

Relative density:

Vapour density:

No applicable information available.

No applicable information available.

No applicable information available.

No applicable information available.

octanol/water (log Pow):

Self-ignition not self-igniting

temperature:

Thermal decomposition: No decomposition if stored and handled as

prescribed/indicated.

Viscosity, dynamic:

No applicable information available.

No applicable information available.

No applicable information available.

Solubility in water: ($15\ ^{\circ}\text{C}$) insoluble Miscibility with water: ($15\ ^{\circ}\text{C}$) 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

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

Oxidizing properties:

Not an oxidizer.

Chemical stability

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

Possibility of hazardous reactions

Reacts with water, with formation of carbon dioxide. Risk of bursting. Reacts with alcohols. Reacts with acids. Reacts with alkalies. Reacts with amines. Risk of exothermic reaction. Risk of polymerization. Contact with certain rubbers and plastics can cause brittleness of the substance/product with subsequent loss in strength.

Conditions to avoid

Avoid moisture.

Incompatible materials

acids, amines, alcohols, water, Alkalines, strong bases, Substances/products that react with isocyanates.

Hazardous decomposition products

Decomposition products:

Hazardous decomposition products: carbon monoxide, carbon dioxide, nitrogen oxide, hydrogen cyanide, nitrogen oxides, aromatic isocyanates, gases/vapours

Thermal decomposition:

No decomposition 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: Harmful by inhalation.

<u>Ora</u>

No applicable information available.

Inhalation

Type of value: ATE Value: 14.8 mg/l Determined for vapor

Dermal

No applicable information available.

Assessment other acute effects

No applicable information available.

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Irritation / corrosion

Assessment of irritating effects: Eye contact causes irritation. Skin contact causes irritation. The product has not been tested. The statement has been derived from the properties of the individual components.

Sensitization

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

Chronic Toxicity/Effects

Repeated dose toxicity

Assessment of repeated dose toxicity: Prolonged exposure may cause chronic effects.

Genetic toxicity

Assessment of mutagenicity: The substance was mutagenic in various bacterial test systems; however, a mutagenic effect could not be confirmed in mammalian cell culture.

Carcinogenicity

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

Information on: toluene-2.6-diisocvanate

Assessment of carcinogenicity: IARC (International Agency for Research on Cancer) has classified this substance as group 2B (The agent is 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.

Reproductive toxicity

Assessment of reproduction toxicity: The results of animal studies gave no indication of a fertility impairing effect.

Teratogenicity

Assessment of teratogenicity: No indications of a developmental toxic / teratogenic effect were seen in animal studies.

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.

Medical conditions aggravated by overexposure

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The isocyanate component is a respiratory sensitizer. It may cause allergic reaction leading to asthma-like spasms of the bronchial tubes and difficulty in breathing. Medical supervision of all employees who handle or come into contact with isocyanates is recommended. Contact may aggravate pulmonary disorders. Persons with history of respiratory disease or hypersensitivity should not be exposed to this product. Preemployment and periodic medical examinations with respiratory function tests (FEV, FVC as a minimum) are suggested. Persons with asthmatic conditions, chronic bronchitis, other chronic respiratory diseases, recurrent eczema or pulmonary sensitization should be excluded from working with isocyanates. Once a person is diagnosed as having pulmonary sensitization (allergic asthma) to isocyanates, further exposure is not recommended.

12. Ecological Information

Toxicity

Aquatic toxicity

Assessment of aquatic toxicity:

Based on available Data, the classification criteria are not met.

Persistence and degradability

Assessment biodegradation and elimination (H2O)

Poorly biodegradable.

The product is unstable in water. The elimination data also refer to products of hydrolysis.

Assessment biodegradation and elimination (H2O)

Information on: TDI

Poorly biodegradable. The product is unstable in water. The elimination data also refer to products of hydrolysis.

Mobility in soil

Assessment transport between environmental compartments

Adsorption to solid soil phase 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.

14. Transport Information

Land transport USDOT

Not classified as a dangerous good under transport regulations

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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

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

CERCLA RQCAS NumberChemical name5000 LBS7440-47-3chromium1000 LBS108-88-3Toluene400 LBS7440-93-0: 108Nickely abbreaker

100 LBS 7440-02-0; 108- Nickel; chlorobenzene; toluene-2,4-diisocyanate;

90-7; 584-84-9; toluene-2,6-diisocyanate

91-08-7

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: 2 Fire: 0 Reactivity: 0 Special:

HMIS III rating

Health: 2^m Flammability: 0 Physical hazard:0

16. Other Information

SDS Prepared by:

BASF NA Product Regulations SDS Prepared on: 2015/05/11

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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IMPORTANT: WHILE THE DESCRIPTIONS, DESIGNS, DATA AND INFORMATION CONTAINED HEREIN ARE PRESENTED IN GOOD FAITH AND BELIEVED TO BE ACCURATE, IT IS PROVIDED FOR YOUR GUIDANCE ONLY. BECAUSE MANY FACTORS MAY AFFECT PROCESSING OR APPLICATION/USE, WE RECOMMEND THAT YOU MAKE TESTS TO DETERMINE THE SUITABILITY OF A PRODUCT FOR YOUR PARTICULAR PURPOSE PRIOR TO USE. NO WARRANTIES OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE MADE REGARDING PRODUCTS DESCRIBED OR DESIGNS, DATA OR INFORMATION SET FORTH, OR THAT THE PRODUCTS, DESIGNS, DATA OR INFORMATION MAY BE USED WITHOUT INFRINGING THE INTELLECTUAL PROPERTY RIGHTS OF OTHERS. IN NO CASE SHALL THE DESCRIPTIONS, INFORMATION, DATA OR DESIGNS PROVIDED BE CONSIDERED A PART OF OUR TERMS AND CONDITIONS OF SALE. FURTHER, YOU EXPRESSLY UNDERSTAND AND AGREE THAT THE DESCRIPTIONS, DESIGNS, DATA, AND INFORMATION FURNISHED BY OUR COMPANY HEREUNDER ARE GIVEN GRATIS AND WE ASSUME NO OBLIGATION OR LIABILITY FOR THE DESCRIPTION, DESIGNS, DATA AND INFORMATION GIVEN OR RESULTS OBTAINED, ALL SUCH BEING GIVEN AND ACCEPTED AT YOUR RISK. **END OF DATA SHEET**