

## Safety Data Sheet acc. to OSHA HCS

Date of PDF Creation 08/10/2022

Reviewed on 08/10/2022

### 1 Identification

- **Product identifier**
- **Trade name: Trassig Aromatic Binder**
- **Application of the substance / the mixture** Binder
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Trassig Group  
65 Redding Rd. 874  
Georgetown CT 06829  
USA  
Telephone: (203) 659-0456  
Fax: (203) 549-0409
- **Information department:** Product Development Department
- **Emergency telephone number:**  
For Chemical Emergency  
Spill, Leak, Fire, Exposure, or Accident  
Call CHEMTREC Day or Night

Within USA and Canada: (800) 424-9300 Reference CCN 649199  
Outside USA and Canada: +1 (703) 527-3887 Reference CCN 649199

### 2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS08 Health hazard

Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.



GHS07

Acute Tox. 4 H332 Harmful if inhaled.  
Skin Irrit. 2 H315 Causes skin irritation.  
Eye Irrit. 2A H319 Causes serious eye irritation.  
Skin Sens. 1 H317 May cause an allergic skin reaction.  
STOT SE 3 H335 May cause respiratory irritation.

- **Storage:**

Store in a well-ventilated place. Keep container tightly closed. In closed containers, there may be a risk of pressure build up due to water contamination (Liberated CO2 Gas). Store locked up.

- **Label elements**

- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

(Contd. on page 2)



## SDS SAFETY DATA SHEET

# PREMIUM RUBBER GRANULES

This form may be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910.1200  
and WHMIS Canadian Legislation.

### SECTION 1: IDENTIFICATION OF THE SUBSTANCE

Rubber Granules

REVISION: 10/29/2014

Chemical Family Polymeric (fully processed) Cured.

Specific Materials: EPDM , SBR (high quality virgin industrial polymers)

### SECTION 2: HAZARDOUS IDENTIFICATION

Non-Hazardous as defined by OSHA Hazard Communication Standard CFR Title 29 Part 1910.1200 and  
the WHMIS Canadian Legislation.

### SECTION 3: COMPOSITION

Specific Gravity (H<sub>2</sub>O = 1): 1.15-1.20

Appearance& Odor: Granular, Black - Mild Characteristic Odor

%of Volatiles by volume: None

### SECTION 1: FIRST AID MEASURES

Inhalation:	Not relevant
Eye Contact:	Avoid Dust in Eyes, Do Not Rub eye.
Effects of Ingestion:	None expected. Treat Symptomatically
First Aid Procedures:	Not expected to require First Aid



### SECTION 5: FIREFIGHTING MEASURES

Extinguisher Media:	Standard fire extinguisher, water, CO2 Foam, Water fog, Water spray, Protein type air foam, Dry, Chemical.
Special Fire Fighting Procedures:	Regular procedures for rubber fires. Wear self contained breathing apparatus. Treat as a hydrocarbon fire.
Unusual Fire & Explosion Hazards:	NONE

### SECTION 6: ACCIDENTAL RELEASE MEASURES

Not Relevant

*No special procedures necessary.*

Waste disposal method: Sweep, vacuum into disposal containers

Dispose of according to Federal, State, and local regulations

### SECTION 7: HANDLING AND STORAGE

Ventilation:	Local exhaust
Eye Protection:	Safety glasses
Precautions in handling:	Personal hygiene: frequent washing with soap and water of exposed areas, remove and clean solid clothing.
Precautions in storage:	Normal material storage

### SECTION 8: EXPOSURE CONTROLS/ PERSONAL PROTECTION

Protective Equipment      Hand Protection



For prolonged or repeated skin contact use suitable protective gloves

Use eye protection when necessary depending on use



## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Granular
Color	black
Odor	Odorless.
Solubility	Insoluble in water

## SECTION 10 STABILITY AND REACTIVITY

Stable under normal temperature conditions and its designed use

Conditions to avoid: Do not heat above ambient temperature. Do not store near flame or ignition source.

Hazardous Polymerization: Will not occur

## SECTION 11 TOXICOLOGICAL INFORMATION

Skin contact	No specific health warnings noted.
Eye contact	No specific health warnings noted.
Health Warnings	No specific health warnings noted.

## SECTION 12 ECOLOGICAL INFORMATION

Eco toxicity	Not regarded as dangerous for the environment
	Not regarded to be toxic to fish
Degradability	The product is not biodegradable

## SECTION 13 DISPOSAL CONSIDERATIONS

Dispose of in accordance with Local, State, and Federal Regulations

Dispose of at authorized landfill

## SECTION 14 TRANSPORT INFORMATION

No transport warning sign required



## **SECTION 15: REGULATORY INFORMATION**

Not Relevant

## **SECTION 16: OTHER INFORMATION**

### **CALIFORNIA PROPOSITION 65- SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT TITLE 22 CALIFORNIA CODE OF REGULATIONS**

disclosure of the presence of a chemical(s) known to the State of California to cause cancer or reproductive toxicity. This product does contain carbon black that is bound in the rubber, therefore if used as designed it is not found to be listed as an airborne, unbound particle.

Issued Date                      10 29/2014

The information herein is to assist customers in determining whether our products are suitable for their applications. Our products are intended for sale to industrial and commercial customers. We request that customers inspect and test our products before use and satisfy themselves as to contents and suitability. Nothing herein shall constitute and other warranty express or implied, including any warranty of merchantability or fitness, nor is protection from any law or patent to be inferred. All patent rights are reserved. The exclusive remedy for all proven claims is replacement of our materials and in no event shall we be liable for special, incidental or consequential damages.

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Trade name: **Trassig Aromatic Binder**

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## Hazard pictograms



GHS07 GHS08

## Signal word Danger

### Hazard-determining components of labeling:

methylenediphenyl diisocyanate (MDI) Mixed Isomers

4,4'-methylenediphenyl diisocyanate

Polymeric Diphenylmethane Diisocyanate

### Hazard statements

H332 Harmful if inhaled.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H317 May cause an allergic skin reaction.

H335 May cause respiratory irritation.

H373 May cause damage to organs through prolonged or repeated exposure.

### Precautionary statements

Do not breathe dust/fume/gas/mist/vapors/spray.

Wash thoroughly after handling.

Use only outdoors or in a well-ventilated area.

Contaminated work clothing must not be allowed out of the workplace.

Wear protective gloves / eye protection / face protection.

[In case of inadequate ventilation] wear respiratory protection.

If on skin: Wash with plenty of water.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Call a poison center/doctor if you feel unwell.

Specific treatment (see on this label).

Get medical advice/attention if you feel unwell.

Take off contaminated clothing and wash it before reuse.

If skin irritation or rash occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

If experiencing respiratory symptoms: Call a poison center/doctor.

Wash contaminated clothing before reuse.

Store in a well-ventilated place. Keep container tightly closed. In closed containers, there may be a risk of pressure build up due to water contamination (Liberated CO<sub>2</sub> gas).

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

### Classification system:

#### NFPA ratings (scale 0 - 4)



Health = 2

Fire = 1

Reactivity = 1

#### HMIS-ratings (scale 0 - 4)



Health = \*2

Fire = 1

Reactivity = 1

### Other hazards

#### Results of PBT and vPvB assessment

**PBT:** Not applicable.

**vPvB:** Not applicable.

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Trade name: **Trassig Aromatic Binder**

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### 3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** Aromatic Isocyanate Prepolymer

- **Dangerous components:**

26447-40-5	methylenediphenyl diisocyanate (MDI) Mixed Isomers	20-30%
101-68-8	4,4'-methylenediphenyl diisocyanate	5-10%
9016-87-9	Polymeric Diphenylmethane Diisocyanate	5-10%

### 4 First-aid measures

- **Description of first aid measures**

- **General information:**

Symptoms of poisoning may even occur after several hours; therefore, medical observation is required for at least 48 hours after the accident.

MDI vapors or mist at concentrations above the TLV can irritate (burning sensation) the mucous membranes in the respiratory tract (nose, throat and lungs) causing runny nose, sore throat, coughing, chest discomfort, shortness of breath and reduced lung function. Persons with a preexisting, nonspecific bronchial hyper reactivity can respond to concentrations below the TLV with similar symptoms as well as asthmatic attack.

- **After inhalation:**

In case of unconsciousness, place patient stably in side position for transportation.

In case of respiratory failure or breathing irregularities, commence resuscitation or administer oxygen.

If inhaled, remove victim from the immediate area to fresh air. Seek medical attention if respiratory irritation develops or if breathing becomes difficult.

- **After skin contact:**

Instantly wash with water and soap and rinse thoroughly. Remove any contaminated clothing. If skin irritation persists, seek medical advice.

- **After eye contact:** Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

- **After swallowing:** Do not induce vomiting; immediately call for medical help.

- **Information for doctor:**

- **Most important symptoms and effects, both acute and delayed**

Diisocyanate vapors or mist at concentrations above the TLV or PEL can irritate (burning sensation) the mucous membranes in the respiratory tract (nose, throat, lungs) causing runny nose, sore throat, coughing chest discomfort, shortness of breath and reduced lung function (breathing obstruction). Persons with a preexisting, nonspecific bronchial hyperreactivity can respond to concentrations below the TLV or PEL with similar symptoms as well as asthma attack or asthma-like symptoms. Exposure well above the TLV or PEL may lead to bronchitis, bronchial spasm and pulmonary edema (fluid in lungs). Chemical or hypersensitivity pneumonitis, with flu-like symptoms (e.g., fever, chills), has also been reported. These symptoms can be delayed up to several hours after exposure. These effects are usually reversible.

**Acute Skin Contact:** Causes irritation with symptoms of reddening, itching, and swelling. Persons previously sensitized can experience allergic skin reaction with symptoms of reddening, itching, swelling, and rash. Cured material is difficult to remove.

**Chronic Skin Contact:** Prolonged contact can cause reddening, swelling, rash, and, in some cases, skin sensitization. Animal tests and other research indicate that skin contact with diisocyanates can play a role in causing sensitization and respiratory reaction.

- **Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

### 5 Fire-fighting measures

- **Extinguishing media**

- **Suitable extinguishing agents:** CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray.

- **For safety reasons unsuitable extinguishing agents:** Water with full jet

- **Special hazards arising from the substance or mixture**

Can be released in case of fire:

Nitrogen Oxides (NO<sub>x</sub>)

Carbon Monoxide (CO)

Hydrogen Cyanide (HCN)

- **Advice for firefighters**

- **Protective equipment:**

Wear breathing apparatus

Wear full protective suit with self-contained breathing apparatus

See section 8

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### Additional information

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

Down-wind personnel must be evacuated. Do not reseal moisture contaminated containers as a chemical reaction generating carbon dioxide gas may occur resulting in an increase of pressure which may rupture the container. Dense smoke is emitted when the product is burned without sufficient oxygen. When using water spray, boil-over may occur when product temperature reaches the boiling point of water and the reaction forming carbon dioxide will be accelerated. Diisocyanate vapors and other gases may be generated by thermal decomposition.

## 6 Accidental release measures

### Personal precautions, protective equipment and emergency procedures

Mount respiratory protective device.

Wear protective equipment. Keep unprotected persons away.

Clean-up should only be performed by trained personnel. Personnel dealing with major spills should wear appropriate protective equipment including, but not limited to, the following items: Gloves, goggles and respiratory protection equipment.

**Environmental precautions:** Do not allow product to reach sewage system or bodies of water.

### Methods and material for containment and cleaning up:

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Transfer to a waste container. Keep the material damp and exposed to the air in a secure area (CO<sub>2</sub>-formation!) until completely solidified. The waste can then be disposed of on an approved landfill or a special refuse dump. Ensure adequate ventilation.

In the event of a large spill, treat spill area with decontamination solution. Preparation of decontamination solution: Prepare a mixture of 0.2 - 0.5% liquid detergent and 3 - 8% concentrated ammonium hydroxide in water (5 - 10% sodium carbonate may be substituted for the ammonium hydroxide).

### Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

### Protective Action Criteria for Chemicals

#### PAC-1:

26447-40-5	methylenediphenyl diisocyanate (MDI) Mixed Isomers	29 mg/m <sup>3</sup>
101-68-8	4,4'-methylenediphenyl diisocyanate	0.45 mg/m <sup>3</sup>
9016-87-9	Polymeric Diphenylmethane Diisocyanate	0.15 mg/m <sup>3</sup>

#### PAC-2:

26447-40-5	methylenediphenyl diisocyanate (MDI) Mixed Isomers	40 mg/m <sup>3</sup>
101-68-8	4,4'-methylenediphenyl diisocyanate	5 mg/m <sup>3</sup>
9016-87-9	Polymeric Diphenylmethane Diisocyanate	3.6 mg/m <sup>3</sup>

#### PAC-3:

26447-40-5	methylenediphenyl diisocyanate (MDI) Mixed Isomers	240 mg/m <sup>3</sup>
101-68-8	4,4'-methylenediphenyl diisocyanate	55 mg/m <sup>3</sup>
9016-87-9	Polymeric Diphenylmethane Diisocyanate	22 mg/m <sup>3</sup>

## 7 Handling and storage

### Handling:

#### Precautions for safe handling

Ensure good ventilation/exhaust at the workplace.

Keep containers tightly sealed.

Prevent formation of aerosols.

Exhaust ventilation required during spraying or when material is being used at temperatures above 100 degrees F.

Avoid contact with skin, eyes and clothing. Avoid breathing vapor or mist. Wash after handling.

#### Information about protection against explosions and fires:

Keep respiratory protective device available.

Pay attention to the general rules of internal fire prevention.

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- **Conditions for safe storage, including any incompatibilities**

- **Storage:**

- **Requirements to be met by storerooms and receptacles:**

Recommended ideal storage temperature range: 59 - 77 degrees F. Product should not be stored below 40 degrees or above 110 degrees F.

Material can increase in viscosity if stored at lower temperatures for an extended period of time.

- **Information about storage in one common storage facility:**

Store away from foodstuffs.

Keep containers tightly closed. Store in cool, dry conditions.

- **Further information about storage conditions:**

Protect from frost.

Store in dry conditions.

Protect from humidity and water.

Keep container tightly sealed.

- **Specific end use(s)** No further relevant information available.

## 8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.

- **Control parameters**

- **Components with limit values that require monitoring at the workplace:**

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the remaining constituent has no known exposure limits.

26447-40-5 methylenediphenyl diisocyanate (MDI) Mixed Isomers	
ACGIH TLV	Short-term value: 0.05 mg/m <sup>3</sup>
NIOSH REL/CEILING	Short-term value: 0.2 mg/m <sup>3</sup>
NIOSH REL/TWA	Short-term value: 0.05 mg/m <sup>3</sup>
OSHA PEL	Short-term value: 0.2 mg/m <sup>3</sup>
101-68-8 4,4'-methylenediphenyl diisocyanate	
PEL	Ceiling limit value: 0.2 mg/m <sup>3</sup> , 0.02 ppm
REL	Long-term value: 0.05 mg/m <sup>3</sup> , 0.005 ppm Ceiling limit value: 0.2* mg/m <sup>3</sup> , 0.02* ppm *10-min
TLV	Long-term value: 0.005 ppm

- **Additional information:** The lists that were valid during the creation were used as basis.

- **Exposure controls**

- **Personal protective equipment:**

- **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

Store protective clothing separately.

Avoid contact with the eyes and skin.

Gases fumes and aerosols should not be inhaled.

- **Breathing equipment:**

Airborne MDI concentrations greater than the ACGIH TLV-TWA (TLV) or OSHA PEL-C (PEL) can occur in inadequately ventilated environments when MDI is sprayed, aerosolized or heated. In such cases, respiratory protection must be worn. The type of respiratory protection selected must comply with the requirements set forth in OSHA's Respiratory Protection Standard (29 CFR 1910.134). The type of respiratory protection available includes (1) an atmosphere-supplying respirator such as a self-contained breathing apparatus (SCBA) or a supplied air respirator (SAR) in the positive pressure or continuous flow mode, or (2) an air-purifying respirator (APR). If an APR is selected then (a) the cartridge must be equipped with an end-of-service life indicator (ESLI) certified by NIOSH, or (b) a change out schedule, based on the objective information or data that will ensure that the cartridges are changed out before the end of their service life, must be developed and implemented. The basis for the change out schedule must be described in the written respirator program. Further, if an APR is selected, the airborne diisocyanate concentration must be no greater than 10 times the TLV or PEL. The recommended APR cartridge is an organic vapor/particulate filter combination cartridge (OV/P100).

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· **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

The following glove types are recommended: neoprene, nitrile rubber, PVC or butyl rubber. Thin, disposable latex gloves should be avoided for repeated or long term handling of the material. Recommended thickness of the glove material: 5 - 6 mil

Selection of the glove material should be based on the consideration of penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**



Tightly sealed goggles

· **Body protection:** Protective work clothing

## 9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

<b>Form:</b>	Liquid
<b>Color:</b>	Light to dark amber
<b>Odor:</b>	Characteristic
<b>Odor threshold:</b>	Not determined.

· **pH-value:** Not determined.

· **Change in condition**

<b>Melting point/Melting range:</b>	Undetermined.
<b>Boiling point/Boiling range:</b>	Undetermined.

· **Flash point:** >200 °C (>392 °F)

· **Flammability (solid, gaseous):** Not applicable.

· **Decomposition temperature:** Not determined.

· **Auto igniting:** Product is not selfigniting.

· **Danger of explosion:** Product does not present an explosion hazard.

· **Explosion limits:**

<b>Lower:</b>	Not determined.
<b>Upper:</b>	Not determined.

· **Vapor pressure:** Not determined.

· **Density at 20 °C (68 °F):** 1.09 g/cm<sup>3</sup> (9.09605 lbs/gal)

· **Relative density** Not determined.

· **Vapor density** Not determined.

· **Evaporation rate** Not determined.

· **Solubility in / Miscibility with**

**Water:** Insoluble, reacts

· **Partition coefficient (n-octanol/water):** Not determined.

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· <b>Viscosity:</b> <b>Dynamic at 20 °C (68 °F):</b> <b>Kinematic:</b>	4,200 mPas Not determined.
· <b>Solvent content:</b> <b>VOC content:</b>	0.00 % 0.0 g/l / 0.00 lb/gal
· <b>Other information</b>	No further relevant information available.

## 10 Stability and reactivity

### · **Reactivity**

Contact with moisture, other materials that react with isocyanates, or temperatures above 350 F (177 C), may cause polymerization.

### · **Chemical stability**

· **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

### · **Possibility of hazardous reactions**

Exothermic reaction with amines and alcohols

Reacts with water to liberate CO<sub>2</sub> gas which may build pressure in closed containers

· **Conditions to avoid** No further relevant information available.

### · **Incompatible materials:**

Exothermic reaction with amines and alcohols. Reacts with water forming heat, carbon dioxide and insoluble urea. The combined effect of carbon dioxide and heat can produce enough pressure to rupture a closed container.

### · **Hazardous decomposition products:**

By Fire and High Heat: Carbon Monoxide, Carbon Dioxide, Oxides of Nitrogen and traces of HCN.

## 11 Toxicological information

### · **Information on toxicological effects**

#### · **Acute toxicity:**

#### · **LD/LC50 values that are relevant for classification:**

##### **26447-40-5 methylenediphenyl diisocyanate (MDI) Mixed Isomers**

Oral	LD50	>5,000 mg/kg (rat)
Dermal	LD50	>5,000 mg/kg (rabbit)
Inhalative	LC50/4 h	0.5 mg/l (rat)

##### **101-68-8 4,4'-methylenediphenyl diisocyanate**

Oral	LD50	2,200 mg/kg (mouse)
Dermal	LD50	>1,000 mg/kg (rabbit)
Inhalative	LC50/4 h	0.5 mg/l (rat)

### · **Primary irritant effect:**

· **on the skin:** Irritant to skin and mucous membranes.

· **on the eye:** Irritating effect.

### · **Sensitization:**

Sensitization possible through inhalation.

Sensitization possible through skin contact.

### · **Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:

Harmful

Irritant

### · **Carcinogenic categories**

#### · **IARC (International Agency for Research on Cancer)**

101-68-8	4,4'-methylenediphenyl diisocyanate	3
9016-87-9	Polymeric Diphenylmethane Diisocyanate	3

#### · **NTP (National Toxicology Program)**

None of the ingredients is listed.

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<b>· OSHA-Ca (Occupational Safety &amp; Health Administration)</b>
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None of the ingredients is listed.
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## 12 Ecological information

- **Toxicity**

- **Aquatic toxicity:** No further relevant information available.

- **Persistence and degradability** No further relevant information available.

- **Behavior in environmental systems:**

- **Bioaccumulative potential** No further relevant information available.

- **Mobility in soil** No further relevant information available.

- **Additional ecological information:**

- **General notes:**

*This product is not miscible with water. Reacts with water at the interface producing CO<sub>2</sub> gas and forming a solid and insoluble product with high melting point (polyurea). This reaction is accelerated by surfactants (eg. detergents) or by water-soluble solvents. Previous experience demonstrates that polyurea is inert and non-degradable.*

*Water hazard class 1 (self-assessment): slightly hazardous for water.*

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

- **Other adverse effects** No further relevant information available.

## 13 Disposal considerations

- **Waste treatment methods**

- **Recommendation:**

*Can be disposed of with household garbage after solidification following consultation with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.*

- **Uncleaned packagings:**

- **Recommendation:** Disposal must be made according to official regulations.

## 14 Transport information

· <b>UN-Number</b>	Void
· <b>DOT, ADR, ADN, IMDG, IATA</b>	Void
· <b>UN proper shipping name</b>	Void
· <b>DOT, ADR, ADN, IMDG, IATA</b>	Void
· <b>Transport hazard class(es)</b>	Void
· <b>DOT, ADR, ADN, IMDG, IATA</b>	Void
· <b>Class</b>	Void
· <b>Packing group</b>	Void
· <b>DOT, ADR, IMDG, IATA</b>	Void
· <b>Environmental hazards:</b>	
· <b>Marine pollutant:</b>	No
· <b>Special precautions for user</b>	Not applicable.
· <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	Not applicable.
· <b>Transport/Additional information:</b>	
· <b>DOT</b>	Single containers less than 5,000 lbs are not regulated. Single containers with 5,000 lbs or more of 4,4' methylenediphenyl diisocyanate are regulated as Class 9, NA 3082, PG III.
· <b>UN "Model Regulation":</b>	Void

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## 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**  
No further relevant information available.

- **Sara**

- **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

- **Section 313 (Specific toxic chemical listings):**

101-68-8 4,4'-methylenediphenyl diisocyanate

9016-87-9 Polymeric Diphenylmethane Diisocyanate

- **TSCA (Toxic Substances Control Act):**

26447-40-5 methylenediphenyl diisocyanate (MDI) Mixed Isomers

ACTIVE

101-68-8 4,4'-methylenediphenyl diisocyanate

ACTIVE

9016-87-9 Polymeric Diphenylmethane Diisocyanate

ACTIVE

- **Hazardous Air Pollutants**

101-68-8 4,4'-methylenediphenyl diisocyanate

- **Proposition 65**

- **Chemicals known to cause cancer:**

None of the ingredients is listed.

- **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

- **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

- **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

- **Carcinogeny categories**

- **EPA (Environmental Protection Agency)**

101-68-8 4,4'-methylenediphenyl diisocyanate

D, CBD

9016-87-9 Polymeric Diphenylmethane Diisocyanate

CBD

- **TLV (Threshold Limit Value)**

None of the ingredients is listed.

- **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms**



GHS07

GHS08

- **Signal word** Danger

- **Hazard-determining components of labeling:**

methylenediphenyl diisocyanate (MDI) Mixed Isomers

4,4'-methylenediphenyl diisocyanate

Polymeric Diphenylmethane Diisocyanate

- **Hazard statements**

H332 Harmful if inhaled.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H317 May cause an allergic skin reaction.

H335 May cause respiratory irritation.

(Contd. on page 10)

# Safety Data Sheet

## acc. to OSHA HCS

Date of PDF Creation 08/10/2022

Reviewed on 08/10/2022

Trade name: **Trassig Aromatic Binder**

(Contd. of page 9)

H373 May cause damage to organs through prolonged or repeated exposure.

### Precautionary statements

Do not breathe dust/fume/gas/mist/vapors/spray.

Wash thoroughly after handling.

Use only outdoors or in a well-ventilated area.

Contaminated work clothing must not be allowed out of the workplace.

Wear protective gloves / eye protection / face protection.

[In case of inadequate ventilation] wear respiratory protection.

If on skin: Wash with plenty of water.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Call a poison center/doctor if you feel unwell.

Specific treatment (see on this label).

Get medical advice/attention if you feel unwell.

Take off contaminated clothing and wash it before reuse.

If skin irritation or rash occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

If experiencing respiratory symptoms: Call a poison center/doctor.

Wash contaminated clothing before reuse.

Store in a well-ventilated place. Keep container tightly closed. In closed containers, there may be a risk of pressure build up due to water contamination (Liberated CO2 gas).

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

## 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Department issuing SDS:** Product Development Department

· **Contact:** Product Development Department

· **Date of preparation / last revision** 08/10/2022 / -

### Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organisation

ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Acute Tox. 4: Acute toxicity – Category 4

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A

Resp. Sens. 1: Respiratory sensitisation – Category 1

Skin Sens. 1: Skin sensitisation – Category 1

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2



## MATERIAL DATA SHEET

# EPDM Colored Rubber Granule

### 1. PRODUCT IDENTIFICATION

Customer Information Center: 800-234-5414

REVISION01/12/2013

Use of the material: Designed for athletic/play/safety surface/synthetic flooring  
Infill granules for artificial grass

Specific Materials: EPDM with Fillers & Pigments

### 2. COMPOSITION/ DETAILS OF COMPONENTS

Chemical characterization: Vulcanized (crosslinked) rubber mixture based on EPDM (Ethylene Propylene Diene Monomer) and additives – mineral fillers, paraffinic mineral oil, processing aids, dyestuffs and crosslinking agents –

Additional information: Not applicable

### 3. POSSIBLE HAZARDS

Classification: Not applicable

Additional hazard information for man and the environment: Not applicable

### 4. FIRST-AID MEASURES

No particular measures are required

### 5. MEASURES FOR FIRE FIGHTING

Suitable extinguishing agents: Water, foam

Unsuitable extinguishing agents from a safety standpoint: Not applicable

Particular hazards arising from the product itself, its combustion products or from the resulting gases: Observe the development of toxic gases in the case of a fire.

Special protective equipment for fire fighters: Circulating air-independent wear breathing apparatus



Additional information: Not applicable  
Fire class: Not applicable  
Temperature class: Not applicable

## 6. ACCIDENTAL RELEASE MEASURES

No particular measures necessary

## 7. HANDLING AND storage

Handling: No particular measures necessary  
Storage: No particular measures necessary

## 8. EXPOSURE RESTRICTION AND PERSONAL PROTECTIVE EQUIPMENT

No special measures are required in respect of inhalation protection, eye protection, hand protection and body protection. It is nevertheless recommended that protective eyewear, gloves and work clothing is worn when working with the material.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form: Granules with definite particle sizes and particle size distribution

Colors: red, green, beige, blue, brown, yellow, grey, luminous blue, luminous yellow, luminous green, luminous orange, luminous red, purple, turquoise, and white

Smell: Characteristic

Safety -related information:

Ignition temperature ( °C): >300

Density at 23°C (g/cm<sup>3</sup>): 1.55 +/- 0.05

## 10. STABILITY AND REACTIVITY

Conditions to be avoided: Thermal decomposition as from approx. 300

Materials to be avoided: None known

Dangerous decomposition products: In the case of fire, the development of carbon monoxide, carbon dioxide, sulphur dioxide, nitrogen oxides and other fumes is possible.

## 11. TOXICOLOGY INFORMATION

Acute oral toxicity	LD 50 (mg/kg)	Not known
Acute dermal toxicity	LD acute 50 (mg/kg)	Not known
Inhalation toxicity	LD 50 (mg/l)	Not known





## **12. ECOLOGY - RELATED INFORMATION**

Water endangerment class (WGK): 0 (Self classification) not water-solubly

## **13. DISPOSAL INFORMATION**

Disposal/Waste material (Product):

Preferably forward the material for appropriate recycling. The material may be used as landfill or incinerated in a suitable facility, in compliance with local authority regulations.

## **14. TRANSPORTATION INFORMATION**

Not hazardous goods

## **15. REGULATIONS**

EC Regulations

Identification/marketing/labeling:

No identification/marketing/labeling required

## **16. OTHER INFORMATION**

The above information is based on the current state of knowledge and experiences. The safety data sheets of the individual materials served as a source in compiling this sheet. The safety data sheet describes products in respect of their safety requirements. The provided information is not being regarded as an assurance of properties. Please refer to the respective test reports for product specifications. The information provided is subject to change.