Corro Crete Filler Part B

1. Product and Company Identification

Product Name: Corro Crete Filler
Product Class: Polymer Blend Resin, Part B
Product Type: Component of a 3 Component Coating for Industrial Use

D.O.T. Category: Not Regulated
Manufacturer: Corroshield Industries Inc.
2575 United Lane
Elk Grove Village, IL 60007
Telephone: 847/298-7770
Emergency: 1-800/535-5053 INFOTRAC

2. Hazards Identification

Hazard·Risk Classification

Acute Toxicity	
Inhalation:	Category 2
Carcinogenicity:	Category 2
Eye Irritation:	Category 2
Respiratory Sensitizer:	Category 1
STOT, repeated exposure, category 2	
STOT, single exposure:	Category 3, RTI
Skin Irritation:	Category 2
Skin Sensitizer:	Category 1

Label elements including precautionary statements
Hazard Pictograms/Symbols:

Signal Word: Danger
Named Chemicals on Label: 4,4'-methylenediphenyl diisocyanate, Diphenylmethane-2,4'-diisocyanate, isocyanic acid, polymethylenepolyphenylene ester Skin Sensitizer, category 1 Eye Irritation, category 2

Hazard Statements

Skin Irritation, category 2	H315	Causes skin irritation.
Skin Sensitizer, category 1	H317	May cause an allergic skin reaction.
Eye Irritation, category 2	H319	Causes serious eye irritation.
Acute Toxicity, Inhalation, category 2	H330-2	Fatal if inhaled.
Respiratory Sensitizer, category 1	H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
STOT, single exposure, category 3, RTI	H335	May cause respiratory irritation.
Carcinogenicity, category 2	H351	Suspected of causing cancer.
STOT, repeated exposure, category 2	H373	May cause damage to organs through prolonged or repeated exposure.

Precaution Phrases

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/ face protection.
P284	Wear respiratory protection.
P285	In case of inadequate ventilation wear respiratory protection
P301+310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P302+352	IF ON SKIN: Wash with plenty of soap and water.
P304+340	IF INHALED: Remove victim to fresh air and keep at rest in position comfortable for breathing.
P305+351+338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.
P308+313	IF exposed or concerned: Get medical advice/attention.
P314	Get medical advice/attention if you feel unwell.
P333+313	If skin irritation or rash occurs: Get medical advice/attention.
P341	If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
P342+311	If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
P403+233	Store in a well-ventilated place. Keep container tightly closed.

Other hazards: No Information

Results of PBT and vPvB assessment: The product does not meet the criteria for PBT/VPvB in accordance with Annex XIII.

3. Composition/Information on Ingredients

Mixtures Hazardous Ingredients

CAS-No.	Chemical Name	%
101-68-8	4,4'-methylenediphenyl diisocyanate	25-50
9016-87-9	isocyanic acid, polymethylenepolyphenylene ester	25-50
5873-54-1	Diphenylmethane-2,4'-diisocyanate	10-25

CAS-No.	GHS Symbols	GHS Hazard Statements	M-Factors
101-68-8	GHS06-GHS08	H315-317-319-330-334-335-351-373	0
9016-87-9	GHS06-GHS08	H315-317-319-330-334-335-351-373	0
5873-54-1	GHS07-GHS08	H315-317-319-332-334-335-351-373	0

Additional Information: The text for GHS Hazard Statements shown above (if any) is given in Section 16.

4. First Aid Measures

Description of First Aid Measures

General Notes: When symptoms persist or in all cases of doubt seek medical advice.

After Inhalation: Move to fresh air. Consult a physician after significant exposure.

After Skin Contact: Use a mild soap if available. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.

After Eye Contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses.

After Ingestion: Do NOT induce vomiting. Never give anything by mouth to an unconscious person.

Self protection of the first aider: No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

Most important symptoms and effects, both acute and delayed: Harmful by inhalation, in contact with skin and if swallowed. Irritating to eyes and respiratory system.

Indication of any immediate medical attention and special treatment needed: No information available on clinical testing and medical monitoring. Specific toxicological information on substances, if available, can be found in section 11.

5. Fire-Fighting Measures

Extinguishing Media: Carbon Dioxide, Dry Chemical, Foam

FOR SAFETY REASONS NOT TO BE USED: Alcohol, Alcohol based solutions, any other media not listed above.

Special hazards arising from the substance or mixture: Heating or fire can release toxic gas.

Advice for firefighters: In the event of fire, wear self-contained breathing apparatus. ABC powder. Hazardous decomposition products formed under fire conditions. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Danger! - water reactive substance. Reacts with water to release toxic gas. May be harmful or fatal if inhaled.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures: Ensure adequate ventilation. Use personal protective equipment.

Environmental precautions: Do not allow material to contaminate ground water system. Prevent product from entering drains. Keep the container open.

Methods and material for containment and cleaning up: Prevent further leakage or spillage if safe to do so. Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).

Reference to other sections: Please refer to disposal requirements or country specific disposal requirements for this material. See Section 13 for further information.

7. Handling and Storage

Precautions for safe handling: **INSTRUCTIONS FOR SAFE HANDLING:** Use only in area provided with appropriate exhaust ventilation. Wear personal protective equipment. Do not breathe vapours or spray mist. Persons with a history of skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this preparation is being used.
PROTECTION AND HYGIENE MEASURES: Wash hands before breaks and at the end of workday. When using, do not eat, drink or smoke.

Conditions for safe storage, including any incompatibilities: **CONDITIONS TO AVOID:** Keep from any possible contact with water.
STORAGE CONDITIONS: Store in original container. Keep container tightly closed in a dry and well-ventilated place. Keep locked up or in an area accessible only to qualified or authorised persons.

Specific end use(s): No specific advice for end use available.

8. Exposure Controls & Personal Protection

Ingredients with Occupational Exposure Limits

Name	CAS-No.	OSHAPEL	ACGIH TLV
4,4'-methylenediphenyl diisocyanate	101-68-8	0.02 PPM-CEILIN	0.005 PPM
Isocyanic acid, polymethylenepolyphenylene ester	9016-87-9		
Diphenylmethane-2,4'-diisocyanate	5873-54-1		

Further Information:	Refer to the regulatory exposure limits for the workforce enforced in each country.

Exposure Controls:
Personal Protection

Respiratory Protection:	When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Respirator with a vapor filter.
Eye Protection:	Ensure that eyewash stations and safety showers are close to the workstation location. Tightly fitting safety goggles.
Hand Protection:	Impervious gloves. Nitrile rubber. Long sleeved clothing. Remove and wash contaminated clothing before re-use.
Other Protective Equipment:	No Information
Engineering Controls:	Avoid contact with skin, eyes and clothing. Ensure adequate ventilation, especially in confined areas.

9. Exposure Controls & Personal Protection

Information on basic physical and chemical properties

Appearance:	Brown liquid
Physical State:	Liquid
Odor:	Earthy, Musty
Odor threshold:	Not determined
pH:	Not determined
Melting point / freezing point (°C):	Not determined
Boiling point/range (°C):	550 F - N.D.
Flash Point, (°F / °C):	>350 F
Evaporation rate:	Not determined
Flammability (solid, gas):	Not determined
Upper/lower flammability or explosive limits:	999 – 0
Vapor Pressure:	<0.0001 mbar @ 70oF
Vapor density:	8.5
Relative density:	1.24 @ 70 F
Solubility in / Miscibility with water:	Insoluble, reacts to produce carbon dioxide and polyurea solid
Partition coefficient: n-octanol/water:	Not determined
Auto-ignition temperature (°C):	>1110 F
Decomposition temperature (°C):	> 550 F
Viscosity:	45-95 mPas at 80oF
Explosive properties:	Not determined
Oxidizing properties:	Not determined
Other Information:	
VOC Content: g/l:	10
Density (lbs/gal):	10.21

10.Stability and Reactivity

Reactivity:	No reactivity hazards known under normal storage and use conditions.
Chemical stability:	Container can be pressurized by carbon dioxide due to reaction with humid air and/or water. Stable under normal conditions.
Possibility of hazardous reactions:	Hazardous polymerisation does not occur.
Conditions to avoid:	Keep from any possible contact with water.
Incompatible materials:	Reacts violently in contact with acids, amines, driers, polymerisation accelerators and easily oxidized materials. Contact with water or moist air liberates irritating gas.
Hazardous decomposition products:	Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), dense black smoke.

11. Toxicological Information

Acute Toxicity:	
Oral LD50:	>5000 mg/kg, oral (rat)
Inhalation LC50:	490 mg/m3 (aerosol), 4 hrs.
Irritation:	Over exposure, especially when spraying without the necessary precautions, entails the risk of concentration dependent irritating effects on eyes, nose, throat, and respiratory tract. Prolonged contact with the skin may cause tanning and irritant effects.
Corrosivity:	No information available.
Sensitization:	Repeated and/or prolonged exposure especially at levels above the OEL, may cause an allergic reaction/respiratory or skin sensitization.
Repeated dose toxicity:	No information available
Carcinogenicity:	The classification for diphenylmethane diisocyanate has changed to carcinogenic, category 3 when it is in the form of respirable aerosol, e.g. when sprayed.
Mutagenicity:	No information available.
Toxicity for reproduction:	No birth defects seen in animal (rat) studies. Fetotoxicity was observed at doses that were extremely toxic (including lethal) to the mother. Fetotoxicity was not observed at doses that were not maternally toxic.

If no information is available above under Acute Toxicity then the acute effects of this product have not been tested. Data on individual components are tabulated below:

CAS-No.	Chemical Name	Oral LD50	Dermal LD50	Vapor LC50
101-68-8	4,4'-methylenediphenyl diisocyanate	15000 mg/kg oral		43 ppm vapor 4 hrs
9016-87-9	isocyanic acid, polymethylenepolyphenylene ester	>10000 mg/kg	>9400 mg/kg	0..49 mg/l (4 h, Aerosol. rat)

Additional Information: **Persons allergic to isocyanates, and particularly those suffering from asthma or other respiratory conditions, should not work with isocyanates.**

12. Ecological Information

Toxicity:

EC50 48hr (Daphnia):	>1000 mg/l
IC50 72 hr (Algae):	Not available
LC50 (Fish):	Not available

Persistence and Degradability:	The polyurea produced on contact with water is insoluble, inert, and non-biodegradable. In air, the predominant degradation process is predicted to be a relatively rapid OH radical attack, by calculation and by analogy with related isocyanates.
Bioaccumulative Potential:	Not expected to be bioaccumulative.
Mobiliy in Soil:	Reacts with water to produce carbon dioxide and polyurea solid.
Results of PBT and vPvB Assessment:	The product does not meet the criteria for PBT/VPvB in accordance with Annex XIII.
Other Adverse Effects:	It is unlikely that significant environmental exposure in the air or water will arise from normal application of this product.

CAS-No.	Chemical Name	EC50 48hr	IC50 72hr	LC50 96hr
101-68-8	4,4'-methylenediphenyl diisocyanate	>1000 mg/l	No information	>1000 mg/l
9016-87-9	isocyanic acid, polymethylenepolyphenylene ester	No information	1640 mg/l	>1000 mg/l
5873-54-1	Diphenylmethane-2,4'-diisocyanate	No information	No information	

13. Disposal Considerations

Waste from residues/unused products: Disposal of container and unused contents in accordance with Federal, State and Local Regulations

Contaminated packaging: Disposal of container and unused contents in accordance with Federal, State and Local Regulations

14. Transport Information

UN Number: Not applicable
UN Proper Shipping Name: Not regulated for transport according to DOT, IMDG, and IATA regulations
Technical name: Not applicable
Transport hazard class(es): Not applicable
Subsidiary shipping hazard: Not applicable
Packing group: Not applicable
Environmental hazards: Not applicable
Special precautions for user: Not applicable
EmS-No.: Not applicable
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code: Not applicable

15. Regulatory Information

CERCLA – Sara Hazard Category: This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories: Carcinogenicity, Acute Toxicity (any route of exposure), Skin Corrosion or Irritation, Respiratory or Skin Sensitization, Serious eye damage or eye irritation, Specific target organ toxicity (single or repeated exposure)

Sara Section 313: This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the U.S. Superfund Amendment and Reauthorization Act (SARA) of 1986 and 40 CFR part 372:

Chemical Name	CAS-No.
4,4' methylenediphenyl diisocyanate	101-68-8

Toxic Substances Control Act: This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States: No TSCA 12(b) components exist in this product

US Clean Air Act:

EPA Coating Category:	Floor Coatings
EPA VOC Content Limit (g/l):	400
Product VOC Content (g/l)	<10
Thinning Recommendations:	None
Application Recommendations:	For professional use only.

As per the federal EPA definition for coating categories in 40 CFR 59.401.
Grams of VOC per liter of coating product as applied (mixture of Part A and Part B) per ASTM D2369 Method E.

New Jersey Right to Know:
The following materials are non-hazardous, but are among the top five components in this product.

Chemical Name	CAS-No.
No Chemical Name Found	

Pennsylvania Right to Know:

The following non-hazardous ingredients are present in the product at greater than 3%.

Chemical Name	**CAS-No.**
No Chemical Name Found	

California Proposition 65: No Proposition 65 Chemicals exist in this product.

Canadian DSL: All chemical ingredients included on inventory or exempt.

Chemical Safety Assessment: No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

16. Other Information

Text for GHS Hazard Statements shown in Section 3 describing each ingredient:

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation
H330	Fatal if inhaled.
H332	Harmful if inhaled.
H334	Causes serious eye damage.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.
H373	May cause damage to organs through prolonged or repeated exposure.

Revision Date: November 22. 2019

THE INFORMATION HEREIN RELATES TO THE PRODUCT NAMED AND IS BASED UPON INFORMATION CORROSHIELD INDUSTRIES INC. CONSIDERS TO BE ACCURATE. NO WARRANTY EXPRESSED OR IMPLIED IS INTENDED.