Safety Data Sheet Prepared in Accordance with HCS 29 C.F.R. 1910.1200



1. Identification of the Substance/Mixture and the Company/Undertaking

1.1 Product Identifier 261564-B **Revision Date**: 09/02/2022

Product Name: TEXACRETE-R - Component B Supersedes Date: 11/17/2020

1.2 Relevant identified uses of the

substance or mixture and uses

advised against

Hardener for 2 components coatings - Industrial use. For use by appropriately trained

applicators.

1.3 Details of the supplier of the safety data sheet

Supplier: FPT Infrastructure, Division of Fibrecrete Preservation

Technologies, Inc. 401 Old US 52 South Mount Airy, NC 27030

USA

Phone: (336) 789 7259 Fax: (336) 789 7425 www.fptinfrastructure.com info@fptinfrastructure.com

Datasheet Produced by: EHS@FPTInfrastructure.com

1.4 Emergency telephone number: CHEMTREC +001 703 5273887 (Outside US)

CHEMTREC 1-800-424-9300 (Inside US)

Giftinformasjonen: +47 22 59 13 00

2. Hazard Identification

2.1 Classification of the substance or mixture

Acute Toxicity, Inhalation, category 4
Carcinogenicity, category 2
Eye Irritation, category 2A
Respiratory Sensitizer, category 1
STOT, repeated exposure, category 2
STOT, single exposure, category 3, RTI
Skin Irritation, category 2
Skin Sensitizer, category 1

2.2 Label elements

Symbol(s) of Product



Signal Word

Danger

Named Chemicals on Label

4,4'-methylenediphenyl diisocyanate, Diphenylmethane-diisocyanate, isomers and homologues, Methylenediphenyl diisocyanate

HAZARD STATEMENTS

Skin Irritation, category 2	H315	Causes skin irritation.
Skin Sensitizer, category 1	H317	May cause an allergic skin reaction.
Eye Irritation, category 2A	H319	Causes serious eye irritation.
Acute Toxicity, Inhalation, category 4	H332	Harmful 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 P280	Do not breathe dust/fume/gas/mist/vapours/spray. Wear protective gloves/protective clothing/eye protection/face protection.
P284	Wear respiratory protection.
P285	In case of inadequate ventilation wear respiratory protection.
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 a 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.

2.3 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

3.2 Mixtures

Hazardous ingredients

Name According to EEC Diphenylmethane- diisocyanate, isomers and homologues	<u>EINEC No.</u> 618-498-9	<u>CAS-No.</u> 9016-87-9	<u>%</u> 25 - <50	<u>Classifications</u> H315-317-319-332-3 34-335-351-373	Acute Tox. 4 Inhalation, Carc. 2, Eye Irrit. 2, Resp. Sens. 1, Skin Irrit. 2, Skin Sens. 1A, STOT RE 2, STOT SE 3 RTI
Methylenediphenyl diisocyanate	247-714-0	26447-40-5	25 - <50	H315-317-319-332-3 34-335-351-373	
4,4'-methylenediphenyl diisocyanate	202-966-0	101-68-8	25 - <50	H315-317-319-332-3 34-335-351-373	

CAS-No.	M-Factors
9016-87-9	0
26447-40-5	0
101-68-8	0

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

4. First-aid Measures

4.1 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.

4.2 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.

4.3 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

5.1 Extinguishing Media:

Carbon Dioxide, Dry Chemical, Foam

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

5.2 Special hazards arising from the substance or mixture

Heating or fire can release toxic gas.

5.3 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. Water reactive.

Accidental Release Measures

Personal precautions, protective equipment and emergency procedures 6.1

Ensure adequate ventilation. Use personal protective equipment.

6.2 **Environmental precautions**

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

6.3 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).

6.4 Reference to other sections

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

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

PROTECTION AND HYGIENE MEASURES: Wash hands before breaks and at the end of workday. When using, do not eat, drink or smoke.

7.2 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.

ACGIH STEL

ACGIH Ceiling

7.3 Specific end use(s)

The mixing and application to be in accordance with the technical data sheets.

8. Exposure Controls/Personal Protection

8.1 Control parameters

4,4'-methylenediphenyl diisocyanate

Name

Ingredients with Occupational Exposure Limits (US)

Diphenylmethane-diisocyanate, isomers and homologues	9016-87-9	
Methylenediphenyl diisocyanate	26447-40-5	

CAS-No.

<u>Name</u>	CAS-No. OSHA PEL	OSHA STEL
Diphenylmethane-diisocyanate, isomers	9016-87-9	

101-68-8

and homologues Methylenediphenyl diisocyanate 26447-40-5

101-68-8 0.02 PPM-CEILIN 4,4'-methylenediphenyl diisocyanate

FURTHER INFORMATION: Refer to the regulatory exposure limits for the workforce enforced in each country.

ACGIH TWA

0.005 PPM

8.2 Exposure controls

Personal Protection

RESPIRATORY PROTECTION: When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. No personal respiratory protective equipment normally required.

EYE PROTECTION: Ensure that eyewash stations and safety showers are close to the workstation location. Safety goggles. Tightly fitting safety goggles.

HAND PROTECTION: Latex glovesImpervious gloves. 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

Not determined

9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance: Amber
Physical State Liquid

Odor Slight aromatic odor

Odor threshold

PH

Non-aqueous

Melting point / freezing point (°C)

Not determined

Vorageous

4 C (<40 F)</p>

Soiling point/range (°C)

>190 - N.D.

Flash Point, (°F / °C) 428

Evaporation rate Not determined Flammability (solid, gas) Not determined

Upper/lower flammability or explosive

limits - %(V)

Vapour Pressure<0.00001 mmHg</th>Vapour densityNot determinedRelative densityNot determined

Solubility in / Miscibility with water Reacts with water

Partition coefficient: n-octanol/water

Auto-ignition temperature (°C)

Not determined

Decomposition temperature (°C)

Not determined

Viscosity

Not determined

Explosive properties

Not applicable

Oxidising properties

Not applicable

9.2 Other information

VOC Content g/l:

Not determined

Specific Gravity (g/cm3) 0.146

10. Stability and Reactivity

10.1 Reactivity

No reactivity hazards known under normal storage and use conditions.

10.2 Chemical stability

Container can be pressurized by carbon dioxide due to reaction with humid air and/or water. Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous polymerisation does not occur.

10.4 Conditions to avoid

Keep from any possible contact with water.

10.5 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.

10.6 Hazardous decomposition products

Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), dense black smoke.

11. Toxicological Information

11.1 Information on toxicological effects

Acute Toxicity:

Oral LD50: No information available.

Inhalation LC50: No information available.

Irritation: No information available.

Corrosivity: No information available.

Sensitization: No information available.

Repeated dose toxicity: No information available.

Carcinogenicity: No information available.

Mutagenicity: No information available.

Toxicity for reproduction: No information available.

STOT-single exposure: No information available.

STOT-repeated exposure: No information available.

Aspiration hazard: No information available.

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	Gas LC50	Dust/Mist LC50
9016-87-9	Diphenylmethane-diisocyanate, isomers and homologues	>10000 mg/kg	>9400 mg/kg	049 mg/l (4 h, Aerosol. rat)		
26447-40-5	Methylenediphenyl diisocyanate	15000 mg/kg oral		43 ppm vapor 4hrs	0.000	0.000
101-68-8	4,4'-methylenediphenyl diisocyanate	15000 mg/kg oral	>9400 mg/kg	43 ppm vapor 4 hrs	0.000	0.000

Additional Information:

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

12. Ecological Information

12.1 Toxicity:

EC50 48hr (Daphnia):

IC50 72hr (Algae):

No information
No information
No information

12.2 Persistence and degradability: Not readily biodegradable.

12.3 Bioaccumulative potential: No information

12.4 Mobility in soil: No information

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

assessment:

12.6 Other adverse effects: No information

CAS-No.	Chemical Name	EC50 48hr	IC50 72hr	LC50 96hr
9016-87-9	Diphenylmethane-diisocyanate, isomers and homologues	No information	1640 mg/l	>1000 mg/l
26447-40-5	Methylenediphenyl diisocyanate	No information	No information	
101-68-8	4,4'-methylenediphenyl diisocyanate	>1000 mg/l	No information	>1000 mg/l

13. Disposal Considerations

13.1 WASTE TREATMENT METHODS: If recycling is not practicable, dispose of in compliance with local regulations. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport Information

14.1 UN number N/A

14.2 UN proper shipping nameNot regulated for transport according to U.S. DOT, ADR/RID, IMDG,

and IATA regulations.

Not applicable **Technical name** 14.3 Transport hazard class(es) Not applicable Subsidiary shipping hazard Not applicable 14.4 Packing group Not applicable Not applicable 14.5 Environmental hazards 14.6 Special precautions for user Not applicable EmS-No.: Not applicable Transport in bulk according to Annex II of Not applicable MARPOL 73/78 and the IBC code

15. Regulatory Information

15.1 Safety, health and environmental regulations/legislation for the substance or mixture:

U.S. Federal Regulations: As follows -

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:

<u>Chemical Name</u> <u>CAS-No.</u> <u>%</u>

4,4'-methylenediphenyl diisocyanate 101-68-8 25

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.

U.S. Clean Air Act:

EPA Coating Category: Not applicable
EPA VOC Content Limit (g/l): Not applicable
Product VOC Content (g/l) Not determined

Thinning Recommendations: N/A
Application Recommendations: N/A

U.S. State Regulations: As follows -

New Jersey Right-to-Know:

The following materials are non-hazardous, but are among the top five components in this product.

Chemical NameCAS-No.Non-hazardous, supplier trade secretunknown

Pennsylvania Right-To-Know

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

Chemical NameCAS-No.Non-hazardous, supplier trade secretunknown

California Proposition 65:

No Proposition 65 Chemicals exist in this product.

^{*} 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.

International Regulations: As follows -

* Canadian DSL:

All chemical ingredients included on inventory or exempt.

15.2 Chemical Safety Assessment:

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

Other Information

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

Causes skin irritation.
May cause an allergic skin reaction.
Causes serious eye irritation.
Harmful if inhaled.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause respiratory irritation.
Suspected of causing cancer.
May cause damage to organs through prolonged or repeated exposure.

Reasons for revision

Substance and/or Product Properties Changed in Section(s):

- 01 Identification
- 02 Hazard Identification
- 03 Composition/Information On Ingredients
- 05 Fire-fighting Measures
- 08 Exposure Controls/Personal Protection
- 09 Physical and Chemical Properties
- 14 Transportation Information
- 15 Regulatory Information

Revision Statement(s) Changed

List of References:

This Safety Data Sheet was compiled with data and information from the following sources:

The Ariel Regulatory Database provided by the 3E Corporation in Copenhagen, Denmark; European Union Commission Regulation No. 1907/2006 on REACH as amended within Commission Regulation (EU) 2015/830;

European Union (EC) Regulation No. 1272/2008 on the classification, labelling and packaging of substances and mixtures (CLP Regulation) and subsequent technical progress adaptations (ATP); EU Council Decision 2000/532/EC and its Annex entitled "List of Wastes".

Acronym & Abbreviation Key:

CLP Classification, Labeling & Packaging Regulation

EC European Commission
EU European Union
US United States

CAS Chemical Abstract Service

EINECS European Inventory of Existing Chemical Substances

REACH Registration, Evaluation, Authorization of Chemicals Regulation

GHS Globally Harmonized System of Classification and Labeling of Chemicals

LTEL Long term exposure limit
STEL Short term exposure limit
OEL Occupational exposure limit

ppm Parts per million

mg/m3 Milligrams per cubic meter TLV Threshold Limit Value

ACGIH American Conference of Governmental Industrial Hygienists

OSHA Occupational Safety & Health Administration

PEL Permissible Exposure Limits
VOC Volatile organic compounds

g/l Grams per liter

mg/kg Milligrams per kilogram

N/A Not applicable LD50 Lethal dose at 50%

LC50 Lethal concentration at 50%

EC50 Half maximal effective concentration
IC50 Half maximal inhibitory concentration
PBT Persistent bioaccumulative toxic chemical
vPvB Very persistent and very bioaccumulative

EEC European Economic Community

ADR International Transport of Dangerous Goods by Road RID International Transport of Dangerous Goods by Rail

UN United Nations

IMDG International Maritime Dangerous Goods Code
IATA International Air Transport Association

MARPOL International Convention for the Prevention of Pollution From Ships, 1973 as

modified by the Protocol of 1978

IBC International Bulk Container RTI Respiratory Tract Irritation

NE Narcotic Effects

For further information, please contact: Technical Services Department

The information on this sheet corresponds to our present knowledge. It is not a specification and it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage, and use of the product. It is not applicable to unusual or non-standard uses of the product or where instructions and recommendations are not followed.