

# Safety Data Sheet

acc. to 29 CFR 1910.1200 App D



Date of compilation: 2024-08-19

Replaces version of: 2024-02-20

## SECTION 1: Identification

### 1.1 Product identifier

Product name	<b>T-RX Part B</b>
Product number	152B

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses

Part B of Two Part Floor Coating

Uses advised against

All uses other than those indicated on the product label and technical data sheet.

### 1.3 Details of the supplier of the safety data sheet

Essential Industries, Inc.  
28391 Essential Road  
P.O. Box 12  
Merton Wisconsin 53056  
United States

Telephone: 262-538-1122

Website: [www.essind.com](http://www.essind.com)

### 1.4 Emergency telephone number

Emergency information service	800-843-6174 (24 hours)
-------------------------------	-------------------------

## SECTION 2: Hazard(s) identification

### 2.1 Classification of the substance or mixture

Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

Acute Tox. 4.

Skin Irrit. 2.

Eye Dam. 1.

Resp. Sens. 1.

Skin Sens. 1.

STOT SE 3.

### 2.2 Label elements

Labelling acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

- Signal word                      Danger

- Pictograms



- Hazard statements

Causes skin irritation.

May cause an allergic skin reaction.

Causes serious eye damage.

Harmful if inhaled.

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

May cause respiratory irritation.

# Safety Data Sheet

acc. to 29 CFR 1910.1200 App D



Date of compilation: 2024-08-19

Replaces version of: 2024-02-20

## - Precautionary statements

Avoid breathing dust/fume/gas/mist/vapors/spray.

Use only outdoors or in a well-ventilated area.

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

Wear protective gloves.

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.

Immediately call a poison center/doctor.

Specific treatment (see on this label).

Take off contaminated clothing and wash before reuse.

Wash contaminated clothing before reuse.

Store in a well-ventilated place. Keep container tightly closed.

Store locked up.

Dispose of contents/container to industrial combustion plant.

Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.

## 2.3 Other hazards

of no significance

## SECTION 3: Composition/information on ingredients

### 3.1 Substance / Mixture

Mixture

### 3.2 Mixtures

Description of the mixture

Name of substance	CAS No	Wt%	Classification acc. to GHS
Hexamethylene diisocyanate oligomers, Isocyanurate	28182-81-2	≥ 90	Acute Tox. 3 / H331 Skin Sens. 1 / H317 STOT SE 3 / H335
Polyoxyethylene tridecyl ether phosphate	9046-01-9	1 – < 5	Skin Irrit. 2 / H315 Eye Dam. 1 / H318
Phosphoric Acid, Butyl Ester	12788-93-1	1 – < 5	Skin Corr. 1B / H314 Eye Dam. 1 / H318
Ethylidiisopropylamine	7087-68-5	1 – < 5	Acute Tox. 3 / H301 Acute Tox. 3 / H331 Eye Dam. 1 / H318 STOT SE 3 / H335 Flam. Liq. 2 / H225
Hexamethylene-di-isocyanate	822-06-0	< 1	Acute Tox. 4 / H302 Acute Tox. 1 / H330 Skin Irrit. 2 / H315 Eye Irrit. 2 / H319 Resp. Sens. 1 / H334 Skin Sens. 1 / H317 STOT SE 3 / H335

## Remarks

Any concentration shown as a range is to protect confidentiality or is due to batch variation. There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section. For full text of abbreviations: see SECTION 16.

## SECTION 4: First-aid measures

### 4.1 Description of first-aid measures

#### General notes

Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

#### Following inhalation

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. In case of respiratory tract irritation, consult a physician. Provide fresh air.

#### Following skin contact

Wash with plenty of soap and water.

#### Following eye contact

Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

#### Following ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.

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

Symptoms and effects are not known to date.

### 4.3 Indication of any immediate medical attention and special treatment needed

none

## SECTION 5: Fire-fighting measures

### 5.1 Extinguishing media

#### Suitable extinguishing media

Water spray, BC-powder, Carbon dioxide (CO<sub>2</sub>)

#### Unsuitable extinguishing media

Water jet

### 5.2 Special hazards arising from the substance or mixture

#### Hazardous combustion products

Nitrogen oxides (NO<sub>x</sub>), Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>)

### 5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Coordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

#### Special protective equipment for firefighters

Self-contained breathing apparatus (SCBA). Standard protective clothing for firefighters.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

#### For non-emergency personnel

Remove persons to safety.

#### For emergency responders

Wear breathing apparatus if exposed to vapors/dust/aerosols/gases.

# Safety Data Sheet

acc. to 29 CFR 1910.1200 App D



Date of compilation: 2024-08-19

Replaces version of: 2024-02-20

## 6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it in accordance with all local, state and federal regulations.

## 6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains

Advice on how to clean up a spill

Wipe up with absorbent material (e.g. cloth, fleece). Collect spillage: sawdust, kieselgur (diatomite), sand, universal binder

Appropriate containment techniques

Use of adsorbent materials.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

## 6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Recommendations

- Measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation. Use only in well-ventilated areas.

Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

### 7.2 Conditions for safe storage, including any incompatibilities

- Ventilation requirements

Keep any substance that emits harmful vapors or gases in a place that allows these to be permanently extracted.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

Occupational exposure limit values (Workplace Exposure Limits)											
Country	Name of agent	CAS No	Identifier	TWA [ppm]	TWA [mg/m <sup>3</sup> ]	STEL [ppm]	STEL [mg/m <sup>3</sup> ]	Ceiling-C [ppm]	Ceiling-C [mg/m <sup>3</sup> ]	Notation	Source
US	hexamethylene-diisocyanate	822-06-0	REL	0.005 (10 h)	0.035 (10 h)			0.02 (10 min)	0.14 (10 min)		NIOSH REL
US	hexamethylene-diisocyanate	822-06-0	TLV®	0.005							ACGIH® 2023
US	hexamethylene-diisocyanate (HDI)	822-06-0	PEL (CA)	0.005	0.034						Cal/OSH A PEL

#### Notation

Ceiling-C ceiling value is a limit value above which exposure should not occur

STEL short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified)

TWA time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-

Notation

weighted average (unless otherwise specified)

## 8.2 Exposure controls

Appropriate engineering controls

General ventilation.

Individual protection measures (personal protective equipment)

Eye/face protection

Wear eye/face protection.

Skin protection

- Hand protection

Wear suitable gloves. Chemical protection gloves are suitable. Check leak-tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

- Other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

Respiratory protection

In case of inadequate ventilation wear appropriate respiratory protection.

Environmental exposure controls

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

#### Appearance

Physical state	liquid
Color	colorless to pale yellow
Odor	typical

#### Other safety parameters

pH (value)	not determined
Melting point/freezing point	not determined
Initial boiling point and boiling range	not determined
Flash point	106.1 °C (223 °F)
Lower explosion limit (LEL)	not determined
Upper explosion limit (UEL)	not determined
Evaporation rate	not determined
Flammability (solid, gas)	not relevant, (fluid)
Vapor pressure	9.95 hPa at 13.86 °C

# Safety Data Sheet

acc. to 29 CFR 1910.1200 App D



Date of compilation: 2024-08-19

Replaces version of: 2024-02-20

Density	1.147 g/cm <sup>3</sup>
Vapor density	not determined (Air=1)
Solubility(ies)	not determined
VOC	0%

Partition coefficient

- n-octanol/water (log KOW)	this information is not available
Auto-ignition temperature	not determined
Decomposition temperature	not determined
Viscosity	not determined

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

### 10.2 Chemical stability

See below "Conditions to avoid".

### 10.3 Possibility of hazardous reactions

No known hazardous reactions.

### 10.4 Conditions to avoid

There are no specific conditions known which have to be avoided.

### 10.5 Incompatible materials

Oxidizers

### 10.6 Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. Hazardous combustion products: see section 5.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

Test data are not available for the complete mixture.

Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

**Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)**

Acute toxicity

Harmful if inhaled.

GHS of the United Nations, annex 4: May be harmful if swallowed or in contact with skin.

- Acute toxicity estimate (ATE)

Inhalation: vapor 5.973 mg/l/4h

# Safety Data Sheet

acc. to 29 CFR 1910.1200 App D



Date of compilation: 2024-08-19

Replaces version of: 2024-02-20

## Acute toxicity estimate (ATE) of components

Name of substance	CAS No	Exposure route	ATE
Hexamethylene diisocyanate oligomers, Isocyanurate	28182-81-2	inhalation: vapor	7.7 mg/l/4h
Ethyl-diisopropylamine	7087-68-5	oral	>200 mg/kg
Ethyl-diisopropylamine	7087-68-5	inhalation: vapor	2.63 mg/l/4h
Hexamethylene-di-isocyanate	822-06-0	oral	959 mg/kg
Hexamethylene-di-isocyanate	822-06-0	inhalation: vapor	0.124 mg/l/4h

## Acute toxicity of components

Name of substance	CAS No	Exposure route	Endpoint	Value	Species
Hexamethylene diisocyanate oligomers, Isocyanurate	28182-81-2	oral	LD50	>2,500 mg/kg	rat
Hexamethylene diisocyanate oligomers, Isocyanurate	28182-81-2	inhalation: vapor	LC50	7.7 mg/l/4h	unknown
Hexamethylene diisocyanate oligomers, Isocyanurate	28182-81-2	dermal	LD50	>2,000 mg/kg	rat
Polyoxyethylene tridecyl ether phosphate	9046-01-9	oral	LD50	>5,000 mg/kg	rat
Phosphoric Acid, Butyl Ester	12788-93-1	oral	LD50	5,300 mg/kg	rat
Ethyl-diisopropylamine	7087-68-5	oral	LD50	>200 – <500 mg/kg	rat
Ethyl-diisopropylamine	7087-68-5	inhalation: vapor	LC50	2.63 mg/l/4h	rat
Hexamethylene-di-isocyanate	822-06-0	oral	LD50	959 mg/kg	rat
Hexamethylene-di-isocyanate	822-06-0	inhalation: vapor	LC50	124 mg/m <sup>3</sup> /4h	rat
Hexamethylene-di-isocyanate	822-06-0	dermal	LD50	>7,000 mg/kg	rat

### Skin corrosion/irritation

Causes skin irritation.

### Serious eye damage/eye irritation

Causes serious eye damage.

### Respiratory or skin sensitization

May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.

### Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

### Carcinogenicity

Shall not be classified as carcinogenic.

### Reproductive toxicity

Shall not be classified as a reproductive toxicant.

### Specific target organ toxicity - single exposure

May cause respiratory irritation.

### Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

# Safety Data Sheet

acc. to 29 CFR 1910.1200 App D



Date of compilation: 2024-08-19

Replaces version of: 2024-02-20

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

## SECTION 12: Ecological information

### 12.1 Toxicity

Shall not be classified as hazardous to the aquatic environment.

Aquatic toxicity (acute) of components					
Name of substance	CAS No	Endpoint	Value	Species	Exposure time
Hexamethylene diisocyanate oligomers, Isocyanurate	28182-81-2	EC50	>1,000 mg/l	algae	72 h
Phosphoric Acid, Butyl Ester	12788-93-1	EC50	>100 mg/l	fish	96 h
Phosphoric Acid, Butyl Ester	12788-93-1	LC50	>100 mg/l	fish	96 h
Phosphoric Acid, Butyl Ester	12788-93-1	ErC50	>100 mg/l	algae	72 h
Ethyl-diisopropylamine	7087-68-5	LC50	69.7 mg/l	fish	96 h
Ethyl-diisopropylamine	7087-68-5	EC50	28.1 mg/l	aquatic invertebrates	48 h
Ethyl-diisopropylamine	7087-68-5	ErC50	196 mg/l	algae	72 h

Aquatic toxicity (chronic) of components					
Name of substance	CAS No	Endpoint	Value	Species	Exposure time
Phosphoric Acid, Butyl Ester	12788-93-1	EC50	>1,000 mg/l	microorganisms	3 h
Ethyl-diisopropylamine	7087-68-5	EC50	912 mg/l	microorganisms	3 h
Hexamethylene-di-isocyanate	822-06-0	EC50	842 mg/l	microorganisms	3 h

### 12.2 Persistence and degradability

Data are not available.

### 12.3 Bioaccumulative potential

Data are not available.

### 12.4 Mobility in soil

Data are not available.

### 12.5 Results of PBT and vPvB assessment

According to the results of its assessment, this substance is not a PBT or a vPvB. Does not contain a PBT-/vPvB-substance at a concentration of  $\geq 0.1\%$ .

### 12.6 Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) in a concentration of  $\geq 0.1\%$ .

### 12.7 Other adverse effects

Data are not available.



# Safety Data Sheet

acc. to 29 CFR 1910.1200 App D



Date of compilation: 2024-08-19

Replaces version of: 2024-02-20

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment.

Waste treatment of containers/packages

Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

#### Remarks

Dispose of contents/container in accordance with local/regional/national/international regulations. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities. Dispose of contents/container to an authorized waste treatment facility. Waste should not be disposed of by release to sewers. Avoid release to the environment. Empty container and inner liner may contain product residues. Ideally, waste should be prevented and what cannot be prevented should be re-used, recycled and recovered as much as feasible.

## SECTION 14: Transport information

### Information for each of the UN Model Regulations

#### Transport of dangerous goods by road or rail (49 CFR US DOT) - Additional information

Not subject to transport regulations.

#### International Maritime Dangerous Goods Code (IMDG) - Additional information

Not subject to IMDG.

#### International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information

Not subject to ICAO-IATA.

## SECTION 15: Regulatory information

### 15.1 Safety, health and environmental regulations specific for the product in question

#### National regulations

##### Toxic Substance Control Act (TSCA)

all ingredients are listed (ACTIVE) or exempt from listing

##### DSL/NDSL (Canada)

all ingredients are listed on or exempt from the DSL

##### Superfund Amendment and Reauthorization Act (SARA TITLE III )

- Specific Toxic Chemical Listings (EPCRA Section 313)

Toxics Release Inventory: Specific Toxic Chemical Listings

Name of substance	CAS No	Remarks	Effective date
Hexamethylene-di-isocyanate	822-06-0		1995-01-01

#### Clean Air Act

none of the ingredients are listed

#### California Environmental Protection Agency (Cal/EPA): Proposition 65 - Safe Drinking Water and Toxic Enforcement Act of 1987

not listed none of the ingredients are listed

# Safety Data Sheet

acc. to 29 CFR 1910.1200 App D



Date of compilation: 2024-08-19

Replaces version of: 2024-02-20

## Industry or sector specific available guidance(s)

### NPCA-HMIS® III

Hazardous Materials Identification System. American Coatings Association.

Category	Rating	Description
Chronic	*	chronic (long-term) health effects may result from repeated overexposure
Health	3	major injury likely unless prompt action is taken and medical treatment is given
Flammability	1	material that must be preheated before ignition can occur
Physical hazard	0	material that is normally stable, even under fire conditions, and will not react with water, polymerize, decompose, condense, or self-react. Non-explosive
Personal protection	-	

### NFPA® 704

National Fire Protection Association: Standard System for the Identification of the Hazards of Materials for Emergency Response (United States).

Category	Degree of hazard	Description
Flammability	1	material that must be preheated before ignition can occur
Health	3	material that, under emergency conditions, can cause serious or permanent injury
Instability	0	material that is normally stable, even under fire conditions
Special hazard		

## SECTION 16: Other information, including date of preparation or last revision

### Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
49 CFR US DOT	49 CFR U.S. Department of Transportation
ACGIH® 2023	From ACGIH®, 2023 TLVs® and BEIs® Book. Copyright 2023. Reprinted with permission. Information on the proper use of the TLVs® and BEIs®: <a href="http://www.acgih.org/tlv-bei-guidelines/policies-procedures-presentations/tlv-bei-position-statement">http://www.acgih.org/tlv-bei-guidelines/policies-procedures-presentations/tlv-bei-position-statement</a>
Acute Tox.	Acute toxicity
ATE	Acute Toxicity Estimate
Cal/OSHA PEL	California Division of Occupational Safety and Health (Cal/OSHA): Permissible Exposure Limits (PELs)
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
Ceiling-C	Ceiling value
DGR	Dangerous Goods Regulations (see IATA/DGR)
EC50	Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval
ED	Endocrine disruptor
ErC50	≡ EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control
Eye Dam.	Seriously damaging to the eye
Eye Irrit.	Irritant to the eye

# Safety Data Sheet

acc. to 29 CFR 1910.1200 App D



Date of compilation: 2024-08-19

Replaces version of: 2024-02-20

Abbr.	Descriptions of used abbreviations
Flam. Liq.	Flammable liquid
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
LC50	Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval
LD50	Lethal Dose 50 %: the LD50 corresponds to the dose of a tested substance causing 50 % lethality during a specified time interval
NIOSH REL	National Institute for Occupational Safety and Health (NIOSH): Recommended Exposure Limits (RELs)
NPCA-HMIS® III	National Paint and Coatings Association: Hazardous Materials Identification System - HMIS® III, Third Edition
OSHA	Occupational Safety and Health Administration (United States)
PBT	Persistent, Bioaccumulative and Toxic
ppm	Parts per million
Resp. Sens.	Respiratory sensitization
Skin Corr.	Corrosive to skin
Skin Irrit.	Irritant to skin
Skin Sens.	Skin sensitization
STEL	Short-term exposure limit
STOT SE	Specific target organ toxicity - single exposure
TLV®	Threshold Limit Values
TWA	Time-weighted average
VOC	Volatile Organic Compounds
vPvB	Very Persistent and very Bioaccumulative

## Key literature references and sources for data

OSHA Hazard Communication Standard (HCS), 29 CFR 1910.1200.

Transport of dangerous goods by road or rail (49 CFR US DOT). International Maritime Dangerous Goods Code (IMDG).

Dangerous Goods Regulations (DGR) for the air transport (IATA).

## Classification procedure

Physical and chemical properties: The classification is based on the tested mixture and/or formulator knowledge.

Health hazards, Environmental hazards: The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

## List of relevant phrases (code and full text as stated in section 2 and 3)

Code	Text
H225	Highly flammable liquid and vapor.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.

# Safety Data Sheet

acc. to 29 CFR 1910.1200 App D



Date of compilation: 2024-08-19

Replaces version of: 2024-02-20

Code	Text
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H331	Toxic if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.

## Disclaimer

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.