



SAFETY DATA SHEET

H.B. Fuller® FH-3503-A

Version 1.4

Revision Date 10/13/2016

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : H.B. Fuller® FH-3503-A
Product code : 10000002477

Manufacturer or supplier's details

Company : H.B. Fuller Company
Address : 1200 Willow Lake Boulevard
Vadnais Heights, MN 55110
Telephone : 1-888-423-8553
Medical Emergency Phone Number (24 Hours): 1-888-853-1758
Transport Emergency Phone Number (CHEMTREC): 1-800-424-9300

Recommended use of the chemical and restrictions on use

Recommended use : Isocyanate based product
Restrictions on use : For industrial use only.

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance	liquid
Color	colorless
Odor	sweet

GHS Classification

Skin irritation : Category 2
Eye irritation : Category 2A
Respiratory sensitization : Category 1
Skin sensitization : Category 1

GHS label elements

Hazard pictograms :



Signal Word : Danger

Hazard Statements:

H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Precautionary Statements:

Prevention: P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray. P264 Wash skin thoroughly after handling. P272 Contaminated work clothing must not be allowed out of the workplace. P280

SAFETY DATA SHEET**H.B. Fuller® FH-3503-A**

Version 1.4

Revision Date 10/13/2016

Wear eye protection/ face protection. P280 Wear protective gloves. P285 In case of inadequate ventilation wear respiratory protection.

Response: P302 + P352 IF ON SKIN: Wash with plenty of soap and water. P304 + P341 IF INHALED: If breathing is difficult, remove person to fresh air and keep comfortable for breathing. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention. P337 + P313 If eye irritation persists: Get medical advice/ attention. P342 + P311 If experiencing respiratory symptoms: Call a POISON CENTER/doctor. P362 Take off contaminated clothing and wash before reuse.

Disposal: P501 Dispose of contents/ container to an approved waste disposal plant.

Potential Health Effects

Aggravated Medical Condition : None known.
Symptoms of Overexposure : Breathing difficulties

Carcinogenicity:

IARC No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous ingredients

Chemical name	CAS-No.	Concentration [%]
Hydrogenated MDI-based isocyanate prepolymer	Not Assigned	70 - 90
4,4'-methylenedicyclohexyl diisocyanate	5124-30-1	10 - 20

SECTION 4. FIRST AID MEASURES

General advice : Show this material safety data sheet to the doctor in attendance.

If inhaled : Move to fresh air.
If symptoms persist, call a physician.

In case of skin contact : Wash off with soap and water.
Get medical attention if irritation develops and persists.
Take off contaminated clothing and shoes immediately.
Wash contaminated clothing before re-use.

In case of eye contact : In the case of contact with eyes, rinse immediately with plenty



SAFETY DATA SHEET
H.B. Fuller® FH-3503-A

Version 1.4

Revision Date 10/13/2016

of water and seek medical advice.

If swallowed : Do not induce vomiting. If conscious, give 2 glasses of water. Get immediate medical attention.

Most important symptoms and effects, both acute and delayed : Breathing difficulties

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Specific hazards during fire fighting : Burning produces irritant fumes.

Special protective equipment for fire-fighters : In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Refer to protective measures listed in sections 7 and 8.

Methods and materials for containment and cleaning up : Soak up with inert absorbent material. Shovel into suitable container for disposal. Neutralize with the following product(s): Ammonia

SECTION 7. HANDLING AND STORAGE

Local/Total ventilation : Use only with adequate ventilation.

Advice on safe handling : Protect from moisture. Avoid inhalation, ingestion and contact with skin and eyes.

Materials to avoid : No special restrictions on storage with other products.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
Ingredients with workplace control parameters

Ingredients	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis

SAFETY DATA SHEET**H.B. Fuller® FH-3503-A**

Version 1.4

Revision Date 10/13/2016

4,4'-methylenedicyclohexyl diisocyanate	5124-30-1	TWA	0.005 ppm	ACGIH
		C	0.01 ppm 0.11 mg/m ³	OSHA P0

Engineering measures : Use local exhaust ventilation or other engineering controls to minimize exposures.

Personal protective equipment

Respiratory protection : Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.

Hand protection
Material : Nitrile rubber

Eye protection : Safety glasses with side-shields

Hygiene measures : Avoid contact with skin, eyes and clothing.
Provide adequate ventilation.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid
Color : colorless
Odor : sweet
Odor Threshold : No data available
Melting point/freezing point : not determined
Initial boiling point and boiling range : not determined
Flash point : 149 °C
Evaporation rate : not determined
Flammability (solid, gas) : Not classified as a flammability hazard

Upper explosion limit : upper flammability limit not determined
Lower explosion limit : lower flammability limit not determined

Density : 8.910 lb/gal
Solubility(ies)
Water solubility : not determined
Partition coefficient: n-octanol/water : No data available
Autoignition temperature : not determined

Viscosity



SAFETY DATA SHEET**H.B. Fuller® FH-3503-A**

Version 1.4

Revision Date 10/13/2016

Viscosity, dynamic : not determined
Viscosity, kinematic : not determined
Solid Content, % by weight: : 99.5

SECTION 10. STABILITY AND REACTIVITY

Reactivity : Container can be pressurized by carbon dioxide due to reaction with humid air and/or water.

Chemical stability : The product is chemically stable.

Possibility of hazardous reactions : Hazardous polymerization does not occur.

Incompatible materials : Amines
Strong acids and strong bases

Hazardous decomposition products : Stable under normal conditions.

SECTION 11. TOXICOLOGICAL INFORMATION**Acute toxicity****Product:**

Acute oral toxicity : Acute toxicity estimate : > 5,000 mg/kg
Method: Calculation method

Acute inhalation toxicity : Acute toxicity estimate : 21.93 mg/l
Exposure time: 4 h
Test atmosphere: vapor
Method: Calculation method

Ingredients:**4,4'-methylenedicyclohexyl diisocyanate:**

Acute oral toxicity : LD50 Oral Rat: 1,065 mg/kg

Acute inhalation toxicity : LC50 Rat: 0.434 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitization

No data available



SAFETY DATA SHEET**H.B. Fuller® FH-3503-A**

Version 1.4

Revision Date 10/13/2016

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

STOT-single exposure

No data available

STOT-repeated exposure

No data available

Aspiration toxicity

No data available

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity****Ingredients:****4,4'-methylenedicyclohexyl diisocyanate :**

Toxicity to fish : LC50 (Brachydanio rerio (zebrafish)): 1.2 mg/l
Exposure time: 96 h
Test Method: static test

Persistence and degradability

No data available

Bioaccumulative potential**Mobility in soil**

No data available

Other adverse effects

No data available

SECTION 13. DISPOSAL CONSIDERATIONS**Disposal methods**

Waste from residues : To the best of our knowledge, this product does not meet the definition of hazardous waste under the U.S. EPA Hazardous Waste Regulations 40 CFR 261. Disposal via incineration at an approved facility is recommended, as industry best practice. Consult state, local or provincial authorities for more restrictive requirements.



SAFETY DATA SHEET**H.B. Fuller® FH-3503-A**

Version 1.4

Revision Date 10/13/2016

SECTION 14. TRANSPORT INFORMATION**Special precautions for user**

Not applicable

Domestic regulation**49 CFR**

UN/ID/NA number : 3082
Proper shipping name : Other regulated substances, liquid, n.o.s.
(4,4'-DICYCLOHEXANEDIISOCYANATE)
Class : 9
Packing group : III
Labels : 9
ERG Code : 171
Marine pollutant : no

International Regulation**IATA-DGR**

UN/ID No. : 3334
Proper shipping name : Aviation regulated liquid, n.o.s.
(4,4'-DICYCLOHEXANEDIISOCYANATE)
Class : 9
Packing group : III
Labels : 9
Packing instruction (cargo aircraft) : 964
Packing instruction (passenger aircraft) : 964

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

SECTION 15. REGULATORY INFORMATION**SARA 311/312 Hazards** : Acute Health Hazard**SARA 302** : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SAFETY DATA SHEET**H.B. Fuller® FH-3503-A**

Version 1.4

Revision Date 10/13/2016

SARA 313

: The following components are subject to reporting levels established by SARA Title III, Section 313:

4,4'-methylenedicyclohexyl diisocyanate 5124-30-1

Clean Air Act

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

US State Regulations**California Prop 65**

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

The ingredients of this product are reported in the following inventories:**TSCA**

On TSCA Inventory

DSL

This product contains one or several components that are not on the Canadian DSL nor NDSL.

REACH

Not in compliance with the inventory

AICS

Not in compliance with the inventory

NZIoC

Not in compliance with the inventory

ENCS

Not in compliance with the inventory

KECI

Not in compliance with the inventory

PICCS

On the inventory, or in compliance with the inventory

IECSC

Not in compliance with the inventory

TWINV

Not in compliance with the inventory

Inventories LegendTSCA (USA), DSL (Canada), REACH(Europe), AICS (Australia), NZIoC (New Zealand), ENCS (Japan), KECI (Korea), PICCS (Philippines), IECSC (China), TWINV (Taiwan)

SECTION 16. OTHER INFORMATION

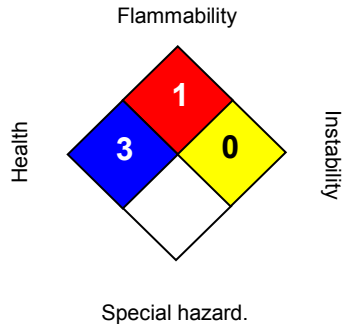
Prepared by: Global Regulatory Department - phone: 1-651-236-5842 - email: msds.request@hbfuller.com



SAFETY DATA SHEET
H.B. Fuller® FH-3503-A

Version 1.4

Revision Date 10/13/2016

Further information
NFPA:

HMIS III:

HEALTH	2*
FLAMMABILITY	1
PHYSICAL HAZARD	0

0 = not significant, 1 =Slight,
 2 = Moderate, 3 = High
 4 = Extreme, * = Chronic

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