Fire Barrier Foam

Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

Date of issue: 13 August 2018 Version: 1.0

SECTION 1: Identification

1.1. Product identifier

Product form	:	Mixture
Trade name	:	Fire Barrier Foam
Product code	:	US150B

1.2. Recommended use and restrictions on use

Recommended uses and restrictions	:	Fill, Void Or Cavity Materials

1.3. Supplier

International Fireproof Technology, Inc.
17528 Von Karman Ave.
Irvine, CA 92614
T 949-975-8588
ptp@painttoprotect.com

1.4. Emergency telephone number

Emergency number	:	CHEMTREC 1-800-424-9300

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

Classification (GHS-CA)

Acute toxicity (inhalation:dust,mist) Category 4	Harmful if inhaled.
Skin corrosion/irritation, Category 2	Causes skin irritation.
Serious eye damage/eye irritation, Category 2	Causes serious eye irritation.
Respiratory sensitisation, Category 1	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Skin sensitisation, Category 1	May cause an allergic skin reaction.
Carcinogenicity, Category 2	Suspected of causing cancer.
Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation	May cause respiratory irritation.
Specific target organ toxicity — Repeated exposure, Category 2	May cause damage to organs (respiratory system) through prolonged or repeated exposure (Inhalation).

2.2. GHS Label elements, including precautionary statements

GHS-CA labelling

Hazard pictograms (GHS-CA) :

Signal word (GHS-CA) : Danger

Hazard statements (GHS-CA) :
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 (respiratory system) through prolonged or repeated exposure (Inhalation).

Precautionary statements (GHS-CA) :
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Do not breathe mist, vapours, spray.
Wash hands thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Contaminated work clothing should not be allowed out of the workplace.
Wear eye protection, protective clothing, 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.
IF exposed or concerned: Get medical advice/attention.
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.
Take off contaminated clothing and wash it before reuse.
Store in a well-ventilated place. Keep container tightly closed.
Store locked up.
Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

2.3. Other hazards not contributing to the classification

other hazards which do not result in classification : Lachrymator.

2.4. Unknown acute toxicity (GHS-CA)

No data available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Chemical name / Synonyms	Product identifier	%	Classification (GHS-CA)
4,4'-Methylenediphenyl diisocyanate	Benzene, 1,1'-methylenebis[4-isocyanato- / 4,4'-Diisocyanatodiphenylmethane / Diphenylmethane 4,4'-diisocyanate / 4,4'-Diphenylmethane diisocyanate / Methylenebis(4-phenylene isocyanate) / 4,4'-Methylenebis(phenyl isocyanate) / Diphenylmethane-4,4'-diisocyanate / MDI / 1,1'-Methylenebis(4-isocyanatobenzene) / Methylenediphenyl diisocyanate, 4,4'- / Methylenebis(4,1-phenylene) diisocyanate / 4,4'-MDI / Methylenebis(1,4-phenylene) diisocyanate / Methylenebis(4-phenyl isocyanate) / 1-Isocyanato-4-[(4-isocyanatophenyl)methyl]benzene / Methylenebis(4-phenylisocyanate) / Methylene diphenyl diisocyanate / Bis(4-isocyanatophenyl)methane	(CAS-No.) 101-68-8	80 - 100	Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Resp. Sens. 1, H334 Skin Sens. 1, H317 Carc. 2, H351 STOT SE 3, H335 STOT RE 2, H373

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Allow victim to breathe fresh air. Allow the victim to rest. Call a physician immediately.

First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Contaminated work clothing should not be allowed out of the workplace. Get medical advice/attention.

First-aid measures after eye contact : Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Call a poison center or a doctor if you feel unwell.

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible). Call a physician immediately.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects : Suspected of causing cancer. May cause damage to organs (respiratory system) through prolonged or repeated exposure (Inhalation).

Symptoms/effects after inhalation : Harmful if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation.

Symptoms/effects after skin contact : Causes skin irritation. May cause an allergic skin reaction.

Symptoms/effects after eye contact : Causes serious eye irritation.

Symptoms/effects after ingestion : May cause gastric irritation.

4.3. Immediate medical attention and special treatment, if necessary

Note to physician : Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

5.2. Unsuitable extinguishing media

Unsuitable extinguishing media : Do not use a heavy water stream.

5.3. Specific hazards arising from the hazardous product

Fire hazard : On combustion, forms: carbon oxides (CO and CO2). Nitrogen oxides.

Explosion hazard : No direct explosion hazard.

5.4. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.

Protective equipment for firefighters : Do not enter fire area without proper protective equipment, including respiratory protection. Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Do not breathe mist, spray, vapours. Stop leak if safe to do so.

Personal Precautions, Protective Equipment and Emergency Procedures : Ventilate area. Wear personal protective equipment. Evacuate unnecessary personnel. Equip cleanup crew with proper protection.

Prevention Measures for Secondary Accidents : Avoid release to the environment. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.2. Methods and materials for containment and cleaning up

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials. Notify authorities if product enters sewers or public waters.

6.3. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection"

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Provide good ventilation in process area to prevent formation of vapour. Use only outdoors or in a well-ventilated area. Do not breathe mist, spray, vapours. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid contact with skin and eyes. Wear recommended personal protective equipment.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in original container. Keep container closed when not in use. Store locked up. Store in a dry, cool and well-ventilated place.

Incompatible products : Water. Amines. Strong bases. Alcohol.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

4,4'-Methylenediphenyl diisocyanate (101-68-8)		
USA - ACGIH	ACGIH TWA (ppm)	0.01 ppm
USA - ACGIH	Remark (ACGIH)	Resp sens
USA - ACGIH	Regulatory reference	ACGIH 2018
Canada (Quebec)	VEMP (mg/m³)	0.051 mg/m³
Canada (Quebec)	VEMP (ppm)	0.005 ppm
Alberta	OEL TWA (mg/m³)	0.05 mg/m³
Alberta	OEL TWA (ppm)	0.005 ppm
British Columbia	OEL Ceiling (ppm)	0.01 ppm
British Columbia	OEL TWA (ppm)	0.005 ppm
Manitoba	OEL TWA (ppm)	0.005 ppm
New Brunswick	OEL TWA (mg/m³)	0.051 mg/m³
New Brunswick	OEL TWA (ppm)	0.005 ppm
New Foundland & Labrador	OEL TWA (ppm)	0.005 ppm

4,4'-Methylenediphenyl diisocyanate (101-68-8)		
Nova Scotia	OEL TWA (ppm)	0.005 ppm
Nunavut	OEL STEL (ppm)	0.015 ppm
Nunavut	OEL TWA (ppm)	0.005 ppm
Northwest Territories	OEL STEL (ppm)	0.015 ppm
Northwest Territories	OEL TWA (ppm)	0.005 ppm
Ontario	OEL Ceiling (ppm)	0.02 ppm (designated substances regulation)
Ontario	OEL TWA (ppm)	0.005 ppm (designated substances regulation)
Prince Edward Island	OEL TWA (ppm)	0.005 ppm
Saskatchewan	OEL STEL (ppm)	0.015 ppm
Saskatchewan	OEL TWA (ppm)	0.005 ppm
Yukon	OEL Ceiling (mg/m³)	0.2 mg/m³
Yukon	OEL Ceiling (ppm)	0.02 ppm

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Avoid all unnecessary exposure.

Hand protection:

Wear protective gloves. Dispose of protective gloves after use.

Eye protection:

Chemical goggles or safety glasses. Use splash goggles when eye contact due to splashing is possible

Skin and body protection:

Long sleeved protective clothing

Respiratory protection:

An approved organic vapour respirator/supplied air or self-contained breathing apparatus must be used when vapour concentration exceeds applicable exposure limits

Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Appearance	:	No data available
Colour	:	colourless to slightly yellow
Odour	:	characteristic
Odour threshold	:	No data available
pH	:	No data available
Relative evaporation rate (butylacetate=1)	:	No data available
Relative evaporation rate (ether=1)	:	No data available
Melting point	:	< 18 °C
Freezing point	:	No data available
Boiling point	:	> 200 °C
Flash point	:	> 200 °C
Auto-ignition temperature	:	No data available
Decomposition temperature	:	> 230 °C
Flammability (solid, gas)	:	Not applicable
Vapour pressure	:	0.01 Pa
Vapour pressure at 50 °C	:	No data available
Relative density	:	No data available

Density	:	1.15 - 1.25
Solubility	:	Not miscible.
Log Pow	:	No data available
Explosive limits	:	No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	:	The product is non-reactive under normal conditions of use, storage and transport.
Chemical stability	:	Stable under normal conditions of use.
Possibility of hazardous reactions	:	May polymerize on exposure to temperature rise.
Conditions to avoid	:	Moisture. Overheating.
Incompatible materials	:	Water. Amines. Strong bases. alcohols.
Hazardous decomposition products	:	No hazardous decomposition products known at room temperature. On combustion forms: Carbon monoxide. Carbon dioxide. Nitrogen oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	:	Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (dermal)	:	Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation)	:	Inhalation:dust,mist: Harmful if inhaled.

ATE CA (dust,mist)	2 mg/l/4h

4,4'-Methylenediphenyl diisocyanate (101-68-8)	
LD50 oral rat	31600 mg/kg
LC50 inhalation rat (mg/l)	369 mg/m³ (Exposure time: 4 h)

Skin corrosion/irritation	:	Causes skin irritation.
Serious eye damage/irritation	:	Causes serious eye irritation.
Respiratory or skin sensitization	:	May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.
Germ cell mutagenicity	:	Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity	:	Suspected of causing cancer.
Reproductive toxicity	:	Not classified (Based on available data, the classification criteria are not met)
STOT-single exposure	:	May cause respiratory irritation.

4,4'-Methylenediphenyl diisocyanate (101-68-8)	
STOT-single exposure	May cause respiratory irritation.

STOT-repeated exposure	:	May cause damage to organs (respiratory system) through prolonged or repeated exposure (Inhalation).

4,4'-Methylenediphenyl diisocyanate (101-68-8)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard	:	Not classified (Based on available data, the classification criteria are not met)
Likely routes of exposure	:	Inhalation. Ingestion. Skin and eyes contact.
Symptoms/effects	:	Suspected of causing cancer. May cause damage to organs (respiratory system) through prolonged or repeated exposure (Inhalation).
Symptoms/effects after inhalation	:	Harmful if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation.
Symptoms/effects after skin contact	:	Causes skin irritation. May cause an allergic skin reaction.
Symptoms/effects after eye contact	:	Causes serious eye irritation.
Symptoms/effects after ingestion	:	May cause gastric irritation.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	:	This material has not been tested for environmental effects.

12.2. Persistence and degradability

Fire Barrier Foam	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

Fire Barrier Foam	
Bioaccumulative potential	Not established.

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Ozone : Not classified (Based on available data, the classification criteria are not met)

Other information : Avoid release to the environment.

4,4'-Methylenediphenyl diisocyanate (101-68-8)	
1990 Hazardous Air Pollutant (Clean Air Act)	Yes

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

14.1. Basic shipping description

In accordance with TDG

Transportation of Dangerous Goods

Not regulated for transport

14.2. Transport information/DOT

Department of Transport

Not regulated for transport

14.3. Air and sea transport

IMDG

Not regulated for transport

IATA

Not regulated for transport

SECTION 15: Regulatory information

15.1. National regulations

4,4'-Methylenediphenyl diisocyanate (101-68-8)
Listed on the Canadian DSL (Domestic Substances List)

15.2. International regulations

4,4'-Methylenediphenyl diisocyanate (101-68-8)
Listed on the AICS (Australian Inventory of Chemical Substances) Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China) Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances) Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory Listed on the Japanese ISHL (Industrial Safety and Health Law) Listed on the Korean ECL (Existing Chemicals List) Listed on NZIoC (New Zealand Inventory of Chemicals) Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances) Listed on the United States TSCA (Toxic Substances Control Act) inventory Japanese Pollutant Release and Transfer Register Law (PRTR Law) Listed on INSQ (Mexican National Inventory of Chemical Substances) Listed on Turkish inventory of chemical

SECTION 16: Other information

Date of issue : 13 August 2018

Other information : None.

Full text of H-statements:

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

SDS Canada (GHS)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product