

**BOSSIL TECHNOLOGY SDN. BHD.****Safety Data Sheet****BS-2820
PU Foam**

Issued date: 25/09/18

Revision date: -

Revision No.: 0

1. Identification of the substance/preparation and of the company/undertaking**Product name** : BS-2820 PU Foam**Product use** : Aerosol foam**Company** : Bossil Technology Sdn. Bhd.
22A-1, Jalan Tasik Utama 10,
The Trillium @ Lake Fields,
Sg. Besi, 57000 Kuala Lumpur,
Malaysia.**Telefon** : +6016 - 2119190**Faks** : -**Emel** : sales@bossil.com**Laman web** : www.bossil.com**2. Hazard(s) identification****Substance/Mixture** : Mixture**Hazard classification** : Flam. Aerosol 1

Skin Irrit. 2

Skin Sens. 1

Eye Irrit. 2

Acute Tox. 4 (Inhalation)

Resp. Sens. 1

STOT SE 3

Carc. 2

STOT RE 2

Pictogram

: GHS02



Flame

GHS07



Exclamation mark

GHS08



Health hazard

Signal word

: Danger

Hazard statement(s):

H222

Extremely flammable aerosol.

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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 respiratory through prolonged or repeated exposure by inhalation.

Precautionary statement(s):

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211	Do not spray on an open flame or other ignition source.
P251	Pressurized container: Do not pierce or burn, even after use.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash hands thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P281	Use personal protective equipment as required.
P285	In case of inadequate ventilation wear respiratory protection.
P302+P352	IF ON SKIN: Wash with soap and water.

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P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P304+P341	IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P314	Get medical advice/attention if you feel unwell.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P333+P313	If skin irritation or a 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 or doctor/physician.
P362	Take off contaminated clothing and wash before reuse.
P363	Wash contaminated clothing before reuse.
P405	Store locked up.
P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C.

Other hazards which do not result in classification but contribute to overall hazards: None known**3. Composition/Information on ingredients**

Chemical name	CAS No.	EINECS No.	%
Polymeric diphenylmethane diisocyanate	9016-87-9	-	>25
Dimethyl ether	115-10-6	204-065-8	1 - 15
Propane	74-98-6	200-827-9	1 - 5
Isobutane	75-28-5	200-857-2	1 - 5

4. First-aid measures

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In case of inhalation:

Remove to fresh air, keep warm and at rest. Contact physician if symptom persists.

In case of skin contact:

Remove contaminated clothing. Rinse with copious amount of water and soap. Get medical advice if skin irritation or a rash occurs. Wash clothing before reuse.

In case of eye contact:

Contact lenses should be removed. Rinse with copious amount of water immediately. Seek medical advice if eye irritation develops and persists.

In case of ingestion:

DO NOT induce vomiting. Rinse mouth thoroughly with water. Get medical attention if a symptom persists.

Personal protection equipment for first-aiders:

Pay attention to any potential hazards and use recommended personal protection equipment if potential for exposure exists.

Most important symptoms and effects, acute and delayed:

May cause skin, eye, and respiratory irritation. May cause damage to respiratory system through prolonged or repeated exposure by inhalation. Suspected carcinogen.

5. Fire-fighting measures

Suitable extinguishing media:

Water spray, polyvalent foam, BC powder, carbon dioxide.

Unsuitable extinguishing media:

None known.

Specific firefighting procedures:

Remove undamaged containers from fire area if it is safe to do so. Use extinguishing media that is suitable to local circumstances and surrounding environment. Dilute toxic gases with water spray. Take account of toxic firefighting water. Do not move the load if exposed to heat.

Special person protection equipment for firefighters:

NIOSH-approved self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Specific hazards arising from firefighting:

Exposure to combustion products may be a hazard to health. Gas/vapour spreads at floor level: ignition hazard. Gas/vapour flammable with air within explosive limits.

Thermal decomposition products:

Carbon dioxide, carbon monoxide, hydrogen chloride, and other irritant gases.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedure:

Use recommended personal protective equipment. Keep unprotected persons away. Ensure adequate ventilation.

Measure for cleaning/collecting:

Allow to solidify and remove it by mechanical means. Remove uncured foam with acetone.

Additional information:

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Prevent spillage from entering drainage/sewer systems. Spillages or uncontrolled discharges into watercourses must be IMMEDIATELY alerted to the Environmental Agency or other appropriate regulatory body.

7. Handling and storage**Handling:**

Ensure good ventilation during use. Avoid contact with skin and eyes. Do not eat, drink, or smoke when using the product. In case of insufficient ventilation: keep naked flames/sparks away.

Storage:

Ensure containers and cartridges are tightly closed. Store in a dry, well-ventilated area, and protected from direct sunlight with temperature not exceeding 30 °C. Keep away from heat sources and incompatibles. Refer to section 10 for incompatible materials.

8. Exposure controls/personal protection

Components	CAS No.	Form of exposure (Value type)	Control Parameter	Basis
Dimethyl ether	115-10-6	8 hours TWA	766 mg/m ³	UK WEL
Dimethyl ether	115-10-6	8 hours TWA	760 mg/m ³	Safe Work Australia
Propane	74-98-6	8 hours TWA	2,500 ppm	Malaysia OSHA
Propane	74-98-6	8 hours TWA	1,800 mg/m ³	US OSHA

Engineering controls:

Product curing may form hazardous compounds. Ensure adequate ventilation and minimise workplace exposure concentrations.

Industrial hygiene:

Remove immediately all contaminated clothing. Do not inhale vapour. Wash hands and contaminated areas with water and soap before leaving the work site. Change clothing before leaving workplace and wash before reuse. Do not eat, drink, or smoke while using product.

Hand protection:

Suitable impervious protective gloves (neoprene, nitrile, etc.). Breakthrough time is not tested for this product. Change gloves often if possible.

Respiratory protection:

A NIOSH-approved respirator with filter for organic vapours is recommended where local ventilation is not adequate.

Eye/Face protection:

Protective goggles/safety glasses.

9. Physical and chemical properties

Appearance : Aerosol foam
Odour : Characteristic odour

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Odour threshold	: Not determined
pH	: Not applicable
Freezing/Melting point	: Not determined
Boiling point range	: Not determined
Flash point	: Contains extremely flammable components
Evaporation rate	: Not applicable
Flammability	: Highly flammable
Explosive properties	: Not classified as explosive
Oxidising properties	: Not classified as oxidising
Vapour pressure	: Not applicable
Vapour density	: Not applicable
Relative density	: Not determined
Solubility in water	: Insoluble
N-octanol/water partition coefficient	: Not determined
Decomposition temperature	: Not determined
Viscosity	: Not applicable

10. Stability and reactivity**Reactivity:**

No reactive hazards known.

Stability:

Stable under recommended handling and storage conditions.

Conditions to avoid:

Avoid sources of ignition.

Hazardous reactions:

May polymerise on exposure to temperature rise. May polymerise with a lot of compounds.

Hazardous decomposition products:

None known.

Incompatible materials:

Strong oxidising agents, acids, bases, and sources of ignition.

11. Toxicology information

No specific oral, inhalation or dermal toxicology data is known for this product. Any toxicological data included in this section is based on the data associated with the components.

Acute oral toxicity, LD₅₀ (rat):

Not classified based on available information and/or concentration of components.

Polymeric diphenylmethane diisocyanate

>10,000 mg/kg

Acute dermal toxicity, LD₅₀ (rabbit):

Not classified based on available information and/or concentration of components.

Polymeric diphenylmethane diisocyanate

>5,000 mg/kg

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Acute inhalation toxicity, LC₅₀ (4 hours, rat):

Classified as acutely toxic by inhalation.

Polymeric diphenylmethane diisocyanate	Harmful by inhalation
Propane	513 mg/L
Isobutane	658 mg/L

Serious eye damage/eye irritation:

Classified as eye irritant.

Polymeric diphenylmethane diisocyanate	Moderate eye irritation.
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Skin corrosion/skin irritation:

Classified as skin irritant.

Polymeric diphenylmethane diisocyanate	Moderate eye irritation.
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Respiratory/Skin sensitisation:

Classified as skin and respiratory sensitiser.

Polymeric diphenylmethane diisocyanate	Sensitising on skin and respiratory.
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Germ cell mutagenicity:

Not classified based on available information and/or concentration of components.

Carcinogenicity:

Classified as suspected human carcinogen.

Polymeric diphenylmethane diisocyanate	Limited evidence of carcinogenicity in animal studies.
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Reproductive toxicity:

Not classified based on available information and/or concentration of components.

Specific target organ toxicity – single exposure:

Classified as respiratory irritant.

Polymeric diphenylmethane diisocyanate	May cause respiratory irritation.
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Specific target organ toxicity – repeated exposure:

Classified as specific target organ toxicant.

Polymeric diphenylmethane diisocyanate	May cause damage to respiratory system through prolonged and repeated exposure by inhalation.
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Aspiration toxicity:

Not classified based on available information and/or concentration of components.

Likely route of administration:

Inhalation, skin contact, and ingestion.

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12. Ecological information

Individual components of this mixture have been independently tested by the raw material suppliers and any known results have been presented below. The results for the individual components may not be representative of the ecological toxicity of this finished product. This finished product has not been tested to determine individual toxicological/ecological limits.

Ecology toxicity:

No adverse effect on aquatic organisms is predicted based on available information and/or concentration of components..

Persistence and degradability:

Not likely to be persistent based on available information and/or concentration of components.

Bioaccumulative potential:

No bioaccumulation potential based on available information and/or concentration of components.

Mobility in soil:

No data available.

13. Disposal information**Waste treatment/disposal methods - unused products**

Disposal of waste to be in accordance with the Environmental Quality (Scheduled Wastes) Regulations and other guidelines issuance by DOE and/or local authorities.

Waste treatment/disposal methods - contaminated packaging

Dispose of as unused product. Empty container should be taken to an approved waste handling site for recycling or disposal.

14. Transport information**Road transport (UNRTDG):**

UN number : UN1950
Proper shipping name : AEROSOLS
Technical name : Not applicable
Hazard class : 2.1
Classification code : 5A
Packing group : -

Marine transport (IMDG):

UN number : UN1950
Proper shipping name : AEROSOLS
Technical name : Not applicable
Hazard class : 2.1
EmS : F-D, S-U
Packing group : -
Marine pollutant : Not marine pollutant

Air transport (IATA):

UN number : UN1950
Proper shipping name : AEROSOLS
Technical name : Not applicable

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Hazard class : 2.1
Packing group : -**15. Regulatory information****Safety, health, and environmental regulations specific for the hazardous chemical in question:**

Occupational Safety and Health (Use and Standards of Exposure of Chemicals Hazardous to Health) Regulations 2010 (Malaysia)

Occupational Safety and Health (Classification, Labelling, and Safety Data Sheet of Hazardous Chemicals) Regulations 2013 (Malaysia)

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (European Union)

Occupational Safety and Health Administration (OSHA) (2006) Air Contaminants. 29 CFR 1910.1000 (United States of America)

Work Health and Safety Act 2011 (Australia)

EH40/2005 Workplace exposure limits (United Kingdom)

Chemical inventory status:Australia AICS : All ingredients listed or exempt.
Canada DSL : All ingredients listed or exempt.
China IECSC : All ingredients listed or exempt.
Japan ENCS : All ingredients listed or exempt.
Korea KECI : All ingredients listed or exempt.
Philippines PICCS : All ingredients listed or exempt.
United States TCSA : All ingredients listed or exempt.**16. Other information****Definitions:****TWA** : Time-weighted average.
STEL : Short-term exposure level.
OSHA : Occupational Safe and Health Act
WEL : Workplace exposure limits
LD₅₀ : The minimum dose required for lethal effects in 50% of a given population of test specimens.
ppm : part per million
bw : body weight
BCF : Bioconcentration factor
NOAEL : No-observed-adverse-effect-level
LOAEL : Lowest-observed-adverse-effect level
NIOSH : National Institute for Occupational Safety and Health.
UNRTDG : United Nations Recommendations on the Transport of Dangerous Goods
IMDG : International Maritime Dangerous Goods
IATA : International Air Transport Association
AICS : Australian Inventory of Chemical Substances
DSL : Domestic Substance List
ENCS : Existing and New Chemical Substances.
KECI : Korea Existing Chemicals Inventory.
ECSN : Existing Chemical Substance Nomination.
TSCA : Toxic Substances Control Act



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All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee these are the only hazards that exist. The details contained herein are based on our present state of knowledge and experience in characterising our product with regard to any possible safety requirement at the date of its publication. We do, however, pass them on without any warranty or property assurances.