

Safety Data Sheet

BS-8300 / BS-8301 / BS-8302 / BS-8303 **All Purpose Adhesive**

Issued date: 27/12/16 Revision date: -**Revision No.: 0**

1. Identification of the substance/preparation and of the company/undertaking

Product name: BS-8300/BS-8301/BS-8302/BS-8303 All Purpose Adhesive

Product use : Solvent-based adhesive

Company : Bossil Technology Sdn. Bhd.

Telephone : +6016 - 2119190 22A-1, Jalan Tasik Utama 10, Fax

The Trillium @ Lake Fields, **Email** : sales@bossil.com Sg. Besi, 57000 Kuala Lumpur, Website : www.bossil.com

Malaysia.

2. Hazard(s) identification

Substance/Mixture : Mixture

<u>Hazard classification</u>: Flam.Liq.2

Skin Irrit.2

STOT SE 3

Pictogram : GHS02

Flame

GHS07

Exclamation mark

Signal word : Danger

Hazard statement(s):

H225	Highly flammable liquid and vapour.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.

Precautionary statement(s):

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233	Keep container tightly closed.
P240	Ground container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting equipment.



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P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
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.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352	IF ON SKIN: Wash with soap and water.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P362	Take off contaminated clothing and wash before reuse.
P403+P233	Store in a well ventilated place. Keep container tightly closed.
P403+P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.

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.	%
Naphtha (petroleum), hydrotreated light	64742-49-0	265-151-9	50 - 70
Styrene-butadiene-styrene block copolymer	-	-	10 - 30
Hydrogenated hydrocarbon resin	69430-35-9	-	10 - 30
Butylated hydroxytoluene	128-37-0	204-881-4	0.1 - 1.0

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4. First-aid measures

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:

Skin and eye irritant. Skin sensitizing. May cause drowsiness and dizziness.

5. Fire-fighting measures

Suitable extinguishing media:

Alcohol-resistant foam, carbon dioxide, dry chemical.

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.

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.

Thermal decomposition products:

Carbon dioxide, carbon monoxide, nitrogen oxides, 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:



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Wipe or soak with inert liquid binding material (sand, sawdust, etc.). Scrape away cured material. Dispose the spilt material according to local or national regulations. Section 13 of this safety data sheet provides information regarding certain local or national requirements.

Additional information:

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.

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 incompatibles. Refer to section 10 for incompatible materials.

8. Exposure controls/personal protection

Components	CAS No.	Form of exposure (Value type)	Control Parameter	Basis
Butylated hydroxytoluene	128-37-0	8 hours TWA	10 mg/m ³	Malaysia OSHA
Butylated hydroxytoluene	128-37-0	8 hours TWA	10 mg/m ³	US OSHA
Butylated hydroxytoluene	128-37-0	8 hours TWA	10 mg/m ³	UK WEL
Butylated hydroxytoluene	128-37-0	8 hours TWA	10 mg/m ³	Safe Work Australia

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.



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9. Physical and chemical properties

Appearance : Viscous liquid
Odour : Aromatic odour
Odour threshold : Not determined
pH : Not applicable
Freezing/Melting point : Not determined
Boiling point range : Not determined

Flash point : <23 °C
Evaporation rate : Not applicable
Flammability : Highly flammable

Explosive properties : Not classified as explosive **Oxidizing properties** : Not classified as oxidizing

Vapour pressure: Not applicableVapour density: Not applicableRelative density: Approximately 0.80

Solubility in water : Insoluble

N-octanol/water

partition coefficient : Not determinedDecomposition temperature : Not determinedViscosity : Not determined

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:

Hazardous polymerization will not occur.

Hazardous decomposition products:

None known.

Incompatible materials:

Strong oxidizing agents, acids, 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.

Naphtha (petroleum), hydrotreated light >5,000 mg/kg	Naphtha (petroleum), hydrotreated light	>5,000 mg/kg
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Styrene-butadiene-styrene block copolymer	>2,000 mg/kg
Hydrogenated hydrocarbon resin	>5,000 mg/kg
Butylated hydroxytoluene	>2,930 mg/kg

Acute dermal toxicity, LD₅₀ (rabbit):

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

Naphtha (petroleum), hydrotreated light	>2,000 mg/kg
Styrene-butadiene-styrene block copolymer	>2,000 mg/kg
Butylated hydroxytoluene	>2,000 mg/kg

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

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

Naphtha (petroleum), hydrotreated light	>5,610 mg/kg

Serious eye damage/eye irritation:

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

Naphtha (petroleum), hydrotreated light	Not eye irritant.
Hydrogenated hydrocarbon resin	Not eye irritant.
Butylated hydroxytoluene	Not eye irritant.

Skin corrosion/skin irritation:

Classified as a skin irritant.

Naphtha (petroleum), hydrotreated light	Causes skin irritation.
Hydrogenated hydrocarbon resin	Not skin irritant.
Butylated hydroxytoluene	Not skin irritant.

Respiratory/Skin sensitization:

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

Naphtha (petroleum), hydrotreated light	Not sensitizing on skin.
Hydrogenated hydrocarbon resin	Not sensitizing on skin.
Butylated hydroxytoluene	Not sensitizing on skin.

Germ cell mutagenicity:



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

Naphtha (petroleum), hydrotreated light	Negative genotoxicity <i>in vitro</i> . Negative genotoxicity <i>in vivo</i> .
Butylated hydroxytoluene	Negative genotoxicity <i>in vitro</i> . Negative genotoxicity <i>in vivo</i> .

Carcinogenicity:

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

Naphtha (petroleum), hydrotreated light	Negative carcinogenicity.
Butylated hydroxytoluene	Negative carcinogenicity. NOAEL: 25 mg/kg bw/day

Reproductive toxicity:

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

Naphtha (petroleum), hydrotreated light	No effect on fertility and foetal development.
Butylated hydroxytoluene	No effect on fertility and foetal development.

Specific target organ toxicity - single exposure: May cause drowsiness and dizziness.

Naphtha (petroleum), hydrotreated light	May cause drowsiness and dizziness.
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Specific target organ toxicity - repeated exposure:

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

Naphtha (petroleum), hydrotreated light	Exposure for 28 days by oral on mouse. NOAEL: <500 mg/kg bw/day Exposure for 107 weeks by inhalation on rats. NOAEC: 1,402 mg/m³ air
Butylated hydroxytoluene	Exposure by inhalation on rats for 22 months. NOAEC: 25 mg/kg bw/day

Aspiration toxicity:

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

Naphtha (petroleum), hydrotreated light	May be fatal if swallowed and enters airways

Likely route of administration:

Inhalation, skin contact, and ingestion.

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.

<u>Ecology toxicity</u>: No adverse effect on aquatic organisms is predicted based on available information and/or concentration of components.



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Naphtha (petroleum), hydrotreated light Toxicity to fish Toxicity to crustacean Toxicity to algae or other aquatic plants	Exposure for 96 hours, LL_{50} : 8.2 mg/L Exposure for 48 hours, EL_{50} : 4.5 mg/L Exposure for 72 days, EL_{50} : 3.1 mg/L
Styrene-butadiene-styrene block copolymer Toxicity to fish Toxicity to crustacean Toxicity to algae or other aquatic plants	Exposure for 96 hours, LC_{50} : >1,000 mg/L Exposure for 48 hours, EC_{50} : >1,000 mg/L Exposure for 72 hours, EL_{50} : >1,000 mg/L
Butylated hydroxytoluene Toxicity to fish Toxicity to crustacean Toxicity to algae or other aquatic plants	M-factor: 1 Exposure for 96 hours, LC ₅₀ : 0.199 mg/L Exposure for 48 hours, EC ₅₀ : 0.48 mg/L Exposure for 72 hours, EC ₅₀ : >0.4 mg/L

<u>Persistence and degradability:</u> Not likely to be persistent based on available information and/or concentration of components.

Naphtha (petroleum), hydrotreated light	Readily biodegradable. Exposure for 28 days, 77% biodegradation.
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<u>Bioaccumulative potential:</u> No bioaccumulation potential based on available information and/or concentration of components.

Naphtha (petroleum), hydrotreated light	Log K _{ow} : >3
Butylated hydroxytoluene	Log K _{ow} : 4.17

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 : UN1133

Proper shipping name: ADHESIVES containing flammable liquid

Technical name : Not applicable

Hazard class : 3 Classification code : F1 Packing group : II

Marine transport (IMDG):

UN number : UN1133

Proper shipping name: ADHESIVES containing flammable liquid

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Technical name: Not applicable

Hazard class : 3 **EmS** : F-E, S-D

Packing group : ||

Marine pollutant : Not marine pollutant

Air transport (IATA):.

UN number : UN1133

Proper shipping name: ADHESIVES containing flammable liquid

Technical name: Not applicable

Hazard class : 3 Packing group : II

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

Canada DSL

China IECSC

Japan ENCS

Korea KECI

Philippines PICCS

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

 ${\bf LD_{50}}$: 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.



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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
KECI
Korea Existing Chemical Substances.
ECSN
Existing Chemical Substance Nomination.

TSCA : Toxic Substances Control Act

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 characterizing 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.