MATERIAL SAFETY DATA SHEET FOR: MAXBOND CONSTRUCTION ADHESIVE

Replaces: September 2007 Date of issue: July 2008

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name
Maxbond
Other Names
ADHESIVES containing flammable liquids
Manufacturer's Code
Not applicable
Recommended Use
Solvent borne adhesive used mainly in the building and construction industry for bonding a variety of substrates. Place cartridge or sausage into a cartridge gun and extrude via nozzle
Company
H. B. Fuller Company Australia Pty. Ltd.
Address
16-22 Red Gum Drive, Dandenong South,VIC 3175
Telephone
(03) 9797 6222
Emergency Telephone No
1800 033 111

2. HAZARD IDENTIFICATION

NOHSC Classification: Hazardous substance
ADG Classification: Dangerous goods
SUSDP Classification: Exempt

RISK PHRASES

R38	Irritating to skin.
R67	Vapours may cause drowsiness and dizziness.

SAFETY PHRASES

S9	Keep container in a well ventilated place.
S16	Keep away from sources of ignition.
S23	Do not breathe vapour.
S24	Avoid contact with skin.
S37	Wear suitable gloves.
S61	Avoid release to the environment. Refer to special instructions in this MSDS.

3. COMPOSITION

Ingredients
Mixture

CHEMICAL ENTITY	CAS No	PROPORTION
Kaolin	1332-58-7	30 - 60%
Naphtha (petroleum), hydrotreated light	64742-49-0	30 - 60%
1, 3-styrene butadiene block copolymer	Confidential	10 - < 30 %
Other ingredients determined not to be hazardous	Not applicable	10 - < 30 %

4. FIRST AID MEASURES

Swallowed
If swallowed do NOT induce vomiting (risk of aspiration). If casualty is alert and conscious give a glass of water or milk to drink. Seek medical advice without delay.

Eyes:
If in eye, irrigate immediately with plenty of water for15 minutes with eyelids held open. Seek prompt medical advice.

Skin:
Remove contaminated clothing and footwear. Wash affected areas with soap and plenty of water immediately. Decontaminate footwear and wash contaminated clothing before reuse. Seek medical advice if adverse symptoms develop.

Inhaled:
Move casualty to fresh air. If breathing but unconscious, place casualty in the recovery position. If breathing has stopped apply artificial respiration. If a pulse is absent give external cardiac compression. Seek medical advice immediately.

First Aid Facilities:
Have eyewashes, safety showers and normal wash room facilities available in the vicinity where exposure may occur

Advice to Doctor
No specific antidote - treat symptomatically. Inhalation of vapours causes CNS depression. Check for possible aspiration into lungs

5. FIRE FIGHTING MEASURES

Extinguishing Media
This substance is flammable. Use alcohol resistant foam, water spray or fog, dry chemical or carbon dioxide

Hazardous combustion products
Carbon dioxide, carbon monoxide, flammable vapours/gases of unknown composition

Precautions for Firefighters
Containers may explosively rupture in a fire; therefore keep containers cool with water spray. Wear full protective equipment for a chemical fire including a self-contained breathing apparatus. The vapour of this product is heavier than air and will travel considerable distances. An ignition source within its range may ignite the vapour and flash back along the vapour trail potentially initiating an explosion. Prevent fire fighting medium from entering drains or waterways.

HAZCHEM Code
3Y

6. ACCIDENTAL RELEASE MEASURES

Special protection
Wearing full PPE (see Section 8); isolate hazard area and restrict access. Increase ventilation.Remove all sources of ignition. Dyke spill to minimise environmental damage. Inform emergency services if substance has spilled into sewers, drains or waterways.

Small Spills:
Introduce good ventilation and remove ignition sources. Wear eye protection and suitable gloves and wipe up spills with rags/squeegee. Place the recovered material in a suitable waste disposal container. Seal the container and label it in accordance with the NOHSC labelling code to ensure proper disposal. Wash wipe-up medium and spill area with a suitable non-flammable, low toxicity solvent.

Large spills:
Prevent run-off into drains or waterways. Wearing full protective equipment (see Section 8), contain spill with earth, sand, Vermiculite or containment socks. Take precautionary measures against static discharge. Using flameproof and non-sparking equipment to bail or pump any free liquid into the original or similar containers and seal them. Using non-sparking implements place adsorbed material into suitable waste disposal containers and seal them. Label the containers in accordance with the NOHSC labelling code. Wash residue away with a suitable non-flammable, low toxicity solvent. Ensure that washings do not enter drains or waterways. If contamination of sewers or waterways has occurred, inform the local emergency services.

7. HANDLING AND STORAGE

Handling
Practice sound industrial hygiene. Avoid breathing vapours. Wash hands before work breaks and at the end of a shift. Avoid skin contact. Minimise exposure by always wearing the recommended personal protection equipment (See Section 8) when handling this mixture. Do not smoke in the work area. Work only in a well ventilated area. Take precautionary measures against static discharge

Storage
Store in a cool (< 30ºC), dry place away from heat sources and out of direct sunlight. Keep containers closed, securely sealed and protected against physical damage when not in use. This substance is Class 3 flammable liquid and must be stored according to the dictates of AS/NZ 1940.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

An Australian exposure standard for this mixture has not been set by NOHSC However, an Australian exposure standard for the major hazardous components of this mixture have been set by NOHSC as shown below

Exposure Standard [HSIS Jun08)]	TWA	STEL
Naphtha (petroleum), hydrotreated light (Supplier's recommendation)	1400 mg/m3	No data
Toluene	50 ppm	150 ppm
n-Heptane	400 ppm	500 ppm
1,3-butadiene monomer	10 ppm	No data
Styrene monomer	50 ppm	100 ppm

Biological Limit Value
Not applicable

Engineering Controls
Good general dilution ventilation. Use local exhaust ventilation if vapours are produced. Ensure that ventilation is sufficient to control exposure levels below exposure standards.

Personal Protective Equipment
Use personal protective equipment that minimizes skin and eye contact, and vapour inhalation. The type of protective equipment to be used depends largely on the volume and the manner in which the mixture is used. To ensure proper protection for any given situation, seek guidance from the following sources: protective clothing – AS 2919; gloves – AS 2161; eye protection – AS 1337; respiratory protection – AS 1715; feet protection – AS 2210. The suitability of each PPE for use with this substance should then be ascertained with the respective PPE suppliers.

Under condition of ordinary use, wear safety glasses with side shields, nitrile rubber gloves, long sleeved overalls, and impervious boots. In unusual situations such as a large spill or if working in confined spaces, or if vapours are generated and their airborne concentration is unknown wear, in the addition to the above, a full-face AS/NZ 1716 compliant cartridge type respirator with a suitable organic vapour filter (for selection guidance see AS/NZ 1715). If the normal, ordinary work environment necessitates the use of respiratory protection, and the respirator is the sole means of respiratory protection, use a full-face air supplied respirator.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:
Thick beige paste
Odour:
Paraffinic
pH:
Not applicable
Vapour Pressure:
6-7.7 kPa at 20℃ (Naphtha (petroleum), hydrotreated light)
Vapour Density:
3.52 (Air = 1) (Naphtha (petroleum), hydrotreated light)

Boiling Point:
90-100℃ (Naphtha (petroleum), hydrotreated light
Freezing/Melting Point:
Not established
Solubility in Water:
Insoluble
Specific Gravity:
ca. 1.07
Explosive Limits
(%v/v): LEL = ca. 1; UEL = ca. 7 (Naphtha (petroleum), hydrotreated light)
Ignition temperature:
246 260℃ (Naphtha (petroleum), hydrotreated light)

10. STABILITY AND REACTIVITY

Chemical Stability
This material is stable under normal ambient and anticipated storage and handling conditions.
Conditions to Avoid
Ignition sources, hot surfaces or strong heating.
Chemical incompatability
Strong oxidising agents.
Hazardous polymerisation
Hazardous polymerization will not occur.
Hazardous decomposition products
Carbon monoxide, carbon dioxide and other noxious vapours, gases and solids of unknown composition

11. TOXICOLOGICAL INFORMATION

Health Effects
Swallowed:
May cause headaches, dizziness, nausea, vomiting, CNS effects and coma due to the presence of naphtha (petroleum), hydrotreated light. May cause stomach discomfort and constipation. LD_{50} (rat)[Naphtha (petroleum), hydrotreated light] > 2000 mg/kg;
Eyes:
Direct contact with the eyes may result in moderate irritation. May cause reddening of the affected eye and lacrimation but is unlikely to cause permanent damage.
Skin:
May be irritating to skin contact due to the presence of Naphtha (petroleum), hydrotreated light. Irritation may produce itching, burning sensation, reddening swelling and/or blistering of the exposed area. Risk of skin absorption LD_{50} (rat)[Naphtha (petroleum), hydrotreated light] > 2000 mg/kg;
Inhaled:
Inhalation of vapour from the mixture may cause irritation of the nose, throat and respiratory system. Symptoms include a burning sensation, coughing and breathing difficulties due to the presence of naphtha (petroleum), hydrotreated light. Inhalation of very high concentrations of vapour may produce CNS effects due to the presence of naphtha (petroleum), hydrotreated light resulting in dizziness, light-headedness, headache, nausea and loss of coordination. LC_{50} (rat)[Naphtha (petroleum), hydrotreated light] > 20 mg/L/4 h
Chronic Health Effects
Repeated or prolonged contact may lead to adverse effects to the CNS and possibly the kidneys due to the presence naphtha (petroleum), hydrotreated light. This mixture is not expected to be a mutagen, carcinogen or reprotoxin.

12. ECOLOGICAL INFORMATION

The ecological effect of the mixture as a whole has not been tested. The ecological information of the two major components is given below:

	Naphtha (petroleum), hydrotreated light	**1, 3-styrene butadiene block copolymer**
Ecotoxicity	Expected to be toxic to fish, aquatic invertebrates, algae and micro organisms.	The information given in this column is based on the knowledge of similar high molecular weight polymers, considered to be non-toxic and biologically inactive. Expected to be practically non-toxic to fish, aquatic invertebrates, algae and micro organisms.
Persistence and degradability	*"Readily Biodegradable"* according to OECD guidelines. Oxidises rapidly by photo-chemical reaction in air.	Not expected to be inherently biodegradable. Persists under anaerobic conditions.
Mobility	Low mobility. Floats on water and adsorbs to soil.	Floats on water. Remains on surface of soil.
Bioaccumulation	Has the potential to bioaccumulate	No bioaccumulation is expected

13. DISPOSAL

This material and its empty containers are classified as prescribed waste and may only be disposed of in accordance with applicable State and local regulations. These regulations vary from jurisdiction to jurisdiction and hence the user is counselled to seek advice from the local authority and classify the waste before considering disposal. The disposal information given below is a general guide and does not replace the requirement of the local regulations.

Disposal

If possible recycle, otherwise dispose strictly in accordance with local industrial waste or environmental protection regulations. This substance may, if permitted by local authorities, be disposed of in an approved incineration facility. Send empty drums to a drum recycling organisation (ensure that the labels are legible and remain on the drums).

Special precautions

Do not allow this material to contaminate sewerage systems, soil, surface or ground water. The empty drums or other containers must not be reused, cut, welded drilled or subjected to a grinding operation or be stored in the vicinity of such operations.

When large amounts of this product need to be disposed of the services of a registered, professional waste disposal or recycling organisation is highly recommended.

14. TRANSPORT INFORMATION

This product has been classified as Dangerous Goods. It must be transported, labelled and the transport vehicle placarded in accordance with the ADG Code requirements.

TRANSPORT INFORMATION	**ADG**	**IMDG/IMO**	**ICAO/IATA**
UN Number	1133	1133	1133
Proper Shipping Name	ADHESIVES containing flammable liquid		
Class	3	3	3
Subsidiary Risk	None allocated	None allocated	None allocated
Packing Group	III	III	III
Hazchem Code	3[Y]	Not applicable	Not applicable

15. REGULATORY INFORMATION

All components of this material are registered with NICNAS and appear on the AICS. SUSDP exempt

16.OTHER INFORMATION

MSDS
Issue Number:
04
Changes made to the previous issue:
Rewrote the entire MSDS.

ACRONYMS
ADG Code: Australian Code for the Transport of Dangerous Goods by Road and Rail
AICS: Australian Inventory of Chemical Substances.
CAS Number: Chemical Abstracts Service Registry Number
CNS: Central nervous system
DG: Dangerous Goods
Hazchem Code: An emergency action code of numbers and letters, which gives information to emergency services.
IARC: International Agency for Research on Cancer.
N.O.S.: Not otherwise specified.
NOHSC: National Health and Safety Commission.
PPE: Personal protection equipment
R-Phrases: Risk Phrases.
S-Phrases: Safety Phrases.
SUSDP: Standard for the Uniform Scheduling of Drugs and Poisons.
UN Number: United Nations Number

This MSDS summarises at the date of issue our best knowledge of the health and safety hazard information of the product, and in particular, how to safely handle and use the product in the workplace. Since H.B. Fuller Company Australia Pty Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, review this MSDS in the context of how the user intends to handle and use then product in the workplace. If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this company. Our responsibility for the products sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available on request