

SAFETY DATA SHEET

THERMAL BONDING SYSTEM

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY:

PRODUCT NAME: THERMAL BONDING SYSTEM

PART No.: ETBS-B

SUPPLIER: H K WENTWORTH PTY LIMITED
P.O. BOX 339
BROOKVALE, NSW 2100
AUSTRALIA
Tel: 02 9938 1566
Fax: 02 9938 1566

2. COMPOSITION/INFORMATION ON INGREDIENTS:

NAME	EINECS Nr.:	CLASSIFICATION	CONTENT
CAS No.: TRIETHYLENETETRAMINE 112-24-3	203-950-6	C R-21, 34, 43, 52/53	5-10 %
4,4'-METHYLENEDIANILINE 101-77-9	202-974-4	T,N R-45, 39/23/24/25, 43, 48/20/21/22, 51/53 Carc2 Mut3	1-5 %
ZINC OXIDE 1314-13-2		N R-50/53	30-60 %

The Full Text for all R-Phrases are Displayed in Section 16

3. HAZARDS IDENTIFICATION:

Irritating to eyes and skin. May cause sensitisation by skin contact. May cause cancer. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Harmful: possible risk of irreversible effects through inhalation, in contact with skin and if swallowed. Carcinogen Category 2. Mutagen Category 3.

HAZARDOUS SUBSTANCE: DANGEROUS GOODS

4. FIRST AID MEASURES:

GENERAL: Move the exposed person to fresh air at once. Get medical attention if any discomfort continues.

INHALATION: Move the exposed person to fresh air at once. Provide rest, warmth and fresh air. Get medical attention if any discomfort continues. Perform artificial respiration if breathing has stopped. When breathing is difficult, properly trained personnel may assist affected person by administering 100% oxygen. Get medical attention.

INGESTION: DO NOT INDUCE VOMITING! NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! Rinse mouth thoroughly. Provide rest, warmth and fresh air. Get medical attention immediately!

SKIN: Remove affected person from source of contamination. Wash the skin immediately with soap and water. Get medical attention promptly if symptoms occur after washing.

EYES: Remove victim immediately from source of exposure. Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes and get medical attention.

5. FIRE FIGHTING MEASURES:

EXTINGUISHING MEDIA: Fire can be extinguished using: Foam. Dry chemicals, sand, dolomite etc.
DO NOT use water if avoidable.

6. ACCIDENTAL RELEASE MEASURES:

SPILL CLEANUP METHODS: Wear necessary protective equipment. Stop leak if possible without risk. DO NOT touch spilled material. Absorb in vermiculite, dry sand or earth and place into containers.

7. HANDLING AND STORAGE:

USAGE PRECAUTIONS: Avoid spilling, skin and eye contact. Keep away from heat, sparks and open flame. Ventilate well, avoid breathing vapours. Use approved respirator if air contamination is above accepted level.

STORAGE PRECAUTIONS: Keep in cool, dry, ventilated storage and closed containers. Keep in original container.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION:

INGREDIENT NAME:	CAS No.:	STD	LT EXP 8 Hrs	ST EXP 15 Min
4,4'-METHYLENEDIANILINE	101-77-9	MEL	0.08 mg/m ³	

INGREDIENT COMMENTS: MEL = Maximum Exposure Limit.

PROTECTIVE EQUIPMENT:



VENTILATION: Provide adequate general and local exhaust ventilation.

RESPIRATORS: No specific recommendation made, but respiratory protection must be used if the general level exceeds the Occupational Exposure Level (OEL).

PROTECTIVE GLOVES: Use protective gloves.

EYE PROTECTION: Wear approved safety goggles.

OTHER PROTECTION: Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact.

HYGIENIC WORK PRACTICES: DO NOT SMOKE IN WORK AREA! Wash at the end of each work shift and before eating, smoking and using the toilet. Wash promptly with soap & water if skin becomes contaminated. Promptly remove any clothing that becomes contaminated. No eating or drinking while working with this material.

9. PHYSICAL AND CHEMICAL PROPERTIES:

APPEARANCE: Paste or slurry.

COLOUR: Cream.

SOLUBILITY DESCRIPTION: Immiscible with water.

FLASH POINT (°C): >100 **Method:**

10. STABILITY AND REACTIVITY:

STABILITY:	Normally stable.
CONDITIONS TO AVOID:	Avoid heat, flames and other sources of ignition. Avoid contact with strong oxidisers.
HAZARDOUS DECOMP. PRODUCTS:	Fire creates: Acrid smoke/fumes of: Carbon monoxide (CO). Carbon dioxide (CO ₂).

11. TOXICOLOGICAL INFORMATION:

INHALATION:	Harmful: possible risk of irreversible effects through inhalation.
INGESTION:	Harmful: possible risk of irreversible effects if swallowed. May cause stomach pain or vomiting.
SKIN:	Harmful: possible risk of irreversible effects in contact with skin. May cause sensitisation by skin contact.
EYES:	Irritating to eyes.
HEALTH WARNINGS:	Known or suspected carcinogen for humans. Known or suspected mutagen.
OTHER HEALTH EFFECTS:	Carcinogen Category 2. Mutagen Category 3.

12. ECOLOGICAL INFORMATION:

ECOLOGICAL INFORMATION:	Dangerous for the environment if discharged into watercourses.
--------------------------------	--

13. DISPOSAL CONSIDERATIONS:

DISPOSAL METHODS:	Dispose of in accordance with Local Authority requirements.
--------------------------	---

14. TRANSPORT INFORMATION:**LABEL FOR CONVEYANCE:**

UN No. ROAD:	2735
UK ROAD TRANSPORT CLASS:	8
UK ROAD PACK GR.:	III
ADR CLASS No.:	8
ADR CLASS:	Class 8: Corrosive substances.
ADR ITEM No.:	III
ADR LABEL No.:	8

HAZCHEM CODE:	3X
CEFIC TEC(R) No.:	80GC7-II+III
PROPER SHIPPING NAME I:	AMINES, LIQUID, CORROSIVE, N.O.S. or POLYAMINES, LIQUID, CORROSIVE, N.O.S (TRIETHYLENETETRAMINE)
RID CLASS No.:	8
RID ITEM No.:	III
UN No. SEA:	2735
IMDG CLASS:	8
IMDG PACK GR.:	III
EmS No.:	F-A; S-B
MFAG TABLE No.:	See Guide
MARINE POLLUTANT:	No.
UN No., AIR:	2735
ICAO CLASS:	8
AIR PACK GR.:	III

15. REGULATORY INFORMATION:

LABEL FOR SUPPLY:



RISK PHRASES:	R-36/38 Irritating to eyes and skin. R-43 May cause sensitisation by skin contact. R-45 May cause cancer. R-50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R-68/20/21/22 Harmful: possible risk of irreversible effects through inhalation, in contact with skin and if swallowed.
SAFETY PHRASES:	P-11 Restricted to professional users. S-24/25 Avoid contact with skin and eyes. S-36/37 Wear suitable protective clothing and gloves. S-38 In case of insufficient ventilation, wear suitable respiratory equipment. S-45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). S-53 Avoid exposure - obtain special instructions before use.
ENVIRONMENTAL LISTING:	Rivers (Prevention of Pollution) Act 1961. Control of Pollution (Special Waste Regulations) Act 1980.
EU DIRECTIVES:	System of specific information relating to Dangerous Preparations. 91\155. Dangerous Substance Directive 67\548. Dangerous Preparations Directive 88\379.
STATUTORY INSTRUMENTS:	Chemicals (Hazard Information and Packaging) Regulations. Control of Substances Hazardous to Health.
APPROVED CODE OF PRACTICE:	Classification and Labelling of Substances and Preparations Dangerous for Supply. Safety Data Sheets for Substances and Preparations L62.
GUIDANCE NOTES:	Occupational Exposure Limits EH40. Introduction to Local Exhaust Ventilation HS(G)37. CHIP for everyone HSG(108).

16. OTHER INFORMATION:

USER NOTES:	CN No 39073000
REVISION COMMENTS:	Revised in accordance with CHIP3 and EU Directive 1999/45/EC
ISSUED BY:	Helen O'Reilly
REVISION DATE:	NOVEMBER 2003
REV. No./REPL. SDS GENERATED:	1
SDS No.:	10988
DISCLAIMER:	This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process unless specified in the text. The information contained in this safety data sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for the safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification
R-PHRASES (Full Text):	R-45 May cause cancer. R-39/23/24/25 Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed. R-43 May cause sensitisation by skin contact. R-48/20/21/22 Harmful: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed. R-51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R-21 Harmful in contact with skin. R-34 Causes burns. R-52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R-50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.