3M UK PLC

3M CENTRE, CAIN RD,

BRACKNELL, BERKSHIRE RG12 8HT

Tel: 01344 858000

MATERIAL SAFETY DATA SHEET

Document status : Issued Format : 1

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION

Tradename:

SCOTCH-WELD (TM) DP-760 PART A

3M Product ID:

2 COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient name and classification CAS number Percentage
-----TRIETHYLENETETRAMINE 112-24-3 60.0 - 70.0

EU Hazard Symbols and Risk Phrases: EU - Adaptation 21 (C,Xn; R:21-34-43-52-53)

EPOXY RESIN 25068-38-6 20.0 - 30.0

EU Hazard Symbols and Risk Phrases: EU - Adaptation 25 (N,Xi; R:36-38-43-51-53)

GLASS MICROSPHERES 65997-17-3 5.0 - 10.0 TREATED FUMED SILICA 67762-90-7 1.0 - 5.0

TITANIUM DIOXIDE 13463-67-7 1.0 - 5.0 POLYAMIDE WAX --- 1.0 - 5.0

3 HAZARDS IDENTIFICATION

Critical hazards:

Corrosive. Harmful in contact with skin. Causes burns. May cause sensitisation by skin contact. Harmful to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

4 FIRST-AID MEASURES

Eye Contact:

Immediately flush eyes with large amounts of water for at least 15 minutes. Get immediate medical attention.

Skin Contact:

Immediately flush skin with large amounts of water. Remove contaminated clothing. If irritation persists, call a medical doctor. Wash contaminated clothing before reuse.

Inhalation:

Remove person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, get immediate medical attention.

Ingestion:

If swallowed, do NOT induce vomiting. Drink two glasses of water. Call a medical doctor immediately. Never give anything by mouth to an unconscious person.

5 FIRE-FIGHTING MEASURES

Suitable Extinguishing Media:

Water, Carbon dioxide, Dry powder. Dry chemical, Alcohol-type foam.

Hazardous Decomposition:

Under recommended usage conditions, hazardous decomposition products are not expected. Hazardous decomposition products anticipated as a result of oxidation (excluding burning), heating, or reaction with another material may include: Carbon Monoxide and Carbon Dioxide. Oxides of Nitrogen, Amine Compounds. Irritant vapours or gases.

Fire-Fighting Procedures:

Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, tunic and trousers (leggings), bands around arms, waist and legs, face mask, and protective covering for exposed areas of the head.

6 ACCIDENTAL RELEASE MEASURES

Personal Precautions:

Refer to other sections of this Material Safety Data Sheet for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

Methods for Cleaning up:

Collect as much of the spilled material as possible. Clean up residue. Place in a closed container approved for transportation by appropriate authorities.

7 HANDLING AND STORAGE

Precautions for Safe Storage:

Store in a cool place. Avoid contact with water to prevent potentially violent reaction or fire.

Fire Prevention:

Not applicable.

Precautions for Safe Handling:

For industrial or professional use only. Not intended for consumer sale or use.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye Protection:

Avoid eye contact. The following should be worn alone or in combination, as appropriate to prevent eye contact: Wear unvented goggles during operations in which exposure is likely or wear full-face shield.

Hand Protection:

Wear appropriate gloves when handling this material. Butyl rubber. Neoprene, Nitrile rubber.

Skin Protection:

Avoid skin contact.

Respiratory Protection:

Avoid inhalation of vapours. Avoid inhalation of thermal decomposition products. Select one of the following approved respirators based on airborne concentration of contaminants and in accordance with regulations: Half-mask organic vapour respirator.

Ingestion:

Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Do not ingest. Keep out of the reach of children.

Recommended Ventilation:

Use with appropriate local exhaust ventilation. If exhaust ventilation is not adequate, use appropriate respiratory protection.

Exposure Limits:

GLASS MICROSPHERES (65997-17-3)

UK HSE TWA: 0.15 mg/m3 (as Pb) MEL 3M TWA Exposure Limit: 10 mg/m3 as dust

TITANIUM DIOXIDE (13463-67-7)

UK HSE TWA: 10 mg/m3 Total inhalable dust; 4 mg/m3 Respirable dust OES

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odour: Off white liquid with amine

odour.

pH: Not applicable

Boiling point/boiling range: Greater than 204.4 C

Melting point/melting range: Not determined

Flash point: Greater than 100 C

Autoflammability: Greater than 290 C

Vapour pressure: Less Than 0.1 mmHg

Water Solubility: Appreciable

Specific gravity: 1.0 - 1.05 Water=1

Vapour density: 5.04 Air=1

Volatile organic compounds: Not determined

Evaporation rate: Not determined

Viscosity: 5000 - 10000 centipoise

Percent Volatile:

10 STABILITY AND REACTIVITY

Conditions to Avoid:

Store away from acids.

Materials to Avoid:

Strong acids. Strong oxidising agents. Metal powder. Can absorb carbon dioxide from air to form amine carbamate.

Hazardous Decomposition:

Stable. Hazardous polymerisation will not occur.

11 TOXICOLOGICAL INFORMATION

Effects from Eye Contact:

Corrosive (Eye Burns): Signs/symptoms may include cloudy appearance of the cornea, chemical burns, severe pain, tearing, ulcerations, significantly impaired vision or complete loss of vision.

Effects from Skin Contact:

Allergic Skin Reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching. Corrosive (Skin Burns): Signs/symptoms may include localised redness, swelling, itching, intense pain, blistering, ulceration, and tissue destruction.

Effects from Inhalation:

Upper Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

Effects from Ingestion:

Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, nausea, diarrhoea and vomiting.

Product Based Information

12 ECOLOGICAL INFORMATION

Other Effects and Information:
Not applicable.

13 DISPOSAL CONSIDERATIONS

Special Instructions:

As a disposal alternative, incinerate uncured product in an industrial or commercial incinerator. Dispose of completely cured (or polymerised) wastes in a sanitary landfill. Since regulations vary, consult applicable regulations or authorities before disposal.

14 TRANSPORT INFORMATION

UN NUMBER:

UN number: UN2735

UK ROAD/SEA FREIGHT (IMO) CLASSIFICATION:

Substance Identification Number: UN2735

Class: 8.0

Packing Group: II

Proper Shipping Name: Amines, Liquid, Corrosive,

N.O.S. (Contains 4,4

_

methylene bis
(cyclohexylamine)

CDG-ROAD (if applicable) If the product is in container

size of 10 litres or more

CDG-ROAD applies.

ADR/RID CLASSIFICATION:

Class: 8.0

Item Number: 53 b

ICAO/IATA CLASSIFICATION:

Class: 8.0

Sub-Risk: Not applicable

Packing Group: II

Proper Shipping Name: Amines, Liquid, Corrosive,

N.O.S. (Contains 4,4

-

methylene bis
(cyclohexylamine)

15 REGULATORY INFORMATION

Symbol(s):

Hand and Testube (Corrosive)

Risk Phrases:

Harmful in contact with skin. Causes burns. May cause sensitisation by skin contact. Harmful to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

Safety Phrases:

Avoid contact with the skin and eyes. Wear suitable protective clothing, gloves, and eye and face protection. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. After contact with skin, wash immediately with plenty of water for 15 minutes. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Contains Epoxy Resins. See information supplied by manufacturer. Avoid release to the environment. Refer to special instructions/safety data sheets.

16 OTHER INFORMATION

Regulatory Information:

The following UK Regulations as amended may affect the product as supplied: The Chemicals (Hazard Information and Packaging for supply)
Regulations, as amended. The

Carriage of Dangerous Goods (Classification, Packaging and Labelling) and use of Transportable Pressure Receptacles Regulations 1996, as amended. Carriage of Dangerous Goods by Road regulations, 1996, as amended. The Petroleum (Consolidation) Act 1928. The Control of Substances Hazardous to Health Regulations 1999 as amended.

The Special Waste Regulations 1996, as amended. The Environmental Protection Act, 1990 The Health and Safety at Work Act, 1974.

Reissue date/Reason for reissue.
Updated label information.

Intended Use of Product:
 For bonding various substrates.

The information on this Data Sheet is based on our experience and is correct to the best of our knowledge at the date of publication, but we do not accept any liability for any loss, damage or injury resulting from its use (except as required by law). The information may not be valid for any use not referred to in this Data Sheet or use of the product in combination with other materials. For these reasons, it is important that customers carry out their own test to satisfy themselves as to the suitability of the product for their own intended applications.

3M UK PLC 3M CENTRE, CAIN RD,

BRACKNELL, BERKSHIRE RG12 8HT

Tel: 01344 858000

MATERIAL SAFETY DATA SHEET

Document status : Issued Format : 1

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION		
Tradename: 3M SCOTCH-WELD(TM) DP-760 PART B		
3M Product ID:		
2 COMPOSITION/INFORMA	ATION ON INGREDIENT	TS .
Ingredient name and classification	CAS number	Percentage
EPOXY RESIN	5026-74-4	50.0 - 60.0
EU Hazard Symbols and Risk B		
R:21/22-38-68-43-51/53 (Vend		
AMORPHOUS SILICA	7631-86-9	
EPOXY RESIN	28064-14-4	
EU Hazard Symbols and Risk Phrases: Xi,N; R:36/38-43-51/53 (Vendor Classified)		
METHYL	25053-09-2	5.0 - 10.0
METHACRYLATE-BUTADIENE-STYRENE POLYMER		
EPOXY RESIN	25068-38-6	5.0 - 10.0
EU Hazard Symbols and Risk R:36-38-43-51-53)	Phrases: EU - Adapt	ation 25 (N,Xi;
EPOXY RESIN	2530-83-8	0.5 - 1.5
EU Hazard Symbols and Risk I (Vendor Classified)	Phrases: Xi, N; R:3	6/38-51/53
3 HAZARDS IDENTIFICATION		

3 HAZARDS IDENTIFICATION

Critical hazards:

Harmful. Dangerous to environment. Harmful in contact with skin and if swallowed. Irritating to eyes and skin. May cause sensitisation by skin contact. Possible risks of irreversible effects. Toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

4 FIRST-AID MEASURES

Eye Contact:

Immediately flush eyes with large amounts of water. Get immediate medical attention.

Skin Contact:

Flush skin with large amounts of water. If irritation persists, get immediate medical attention.

Inhalation:

Remove person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, get immediate medical attention.

Ingestion:

Do not induce vomiting. Drink two glasses of water. Call a medical doctor.

5 FIRE-FIGHTING MEASURES

Suitable Extinguishing Media:

Water spray, Carbon dioxide, Dry chemical, Foam.

Hazardous Decomposition:

Carbon Monoxide and Carbon Dioxide. Aldehydes.

Fire-Fighting Procedures:

Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, tunic and trousers (leggings), bands around arms, waist and legs, face mask, and protective covering for exposed areas of the head.

6 ACCIDENTAL RELEASE MEASURES

Personal Precautions:

Refer to other sections of this Material Safety Data Sheet for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

Methods for Cleaning up:

Ventilate the area with fresh air. Remove all ignition sources such as flames, smoking materials, and electrical spark sources. Use only non-sparking tools. Contain spill. Collect as much of the spilled material as possible. Clean up residue. Place in a closed container approved for transportation by appropriate authorities.

7 HANDLING AND STORAGE

Precautions for Safe Storage:

Store in a cool place. Avoid contact with water to prevent potentially violent reaction or fire.

Incompatible Materials/Conditions:

Store away from acids. Store away from heat. Store out of direct sunlight.

Ventilation:

Keep container in a well-ventilated area.

Fire Prevention:

No smoking while handling this material.

Explosion Prevention:

Keep away from heat, sparks, open flame, pilot lights and other sources of ignition.

Precautions for Safe Handling:

Keep container tightly closed.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye Protection:

Avoid eye contact. Wear unvented goggles during operations in which exposure is likely or wear full-face shield.

Hand Protection:

Wear appropriate gloves when handling this material. The following glove material(s) are recommended: Neoprene, Nitrile rubber.

Skin Protection:

Avoid skin contact.

Respiratory Protection:

Select one of the following approved respirators based on airborne concentration of contaminants and in accordance with regulations: Half-mask organic vapour respirator.

Ingestion:

Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water.

Recommended Ventilation:

Use with appropriate local exhaust ventilation. If exhaust ventilation is not adequate, use appropriate respiratory protection.

Exposure Limits:

AMORPHOUS SILICA (7631-86-9)

UK HSE TWA: 6 mg/m3 Total inhalable dust; 3 mg/m3 Respirable dust OES

EPOXY RESIN (2530-83-8)

CMRG TWA Exposure Limit: 5 ppm

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odour: White viscous liquid.

pH: Not applicable

Boiling point/boiling range: Greater than 200 C

Melting point/melting range: Not determined

Flash point: Greater than 93.3 C

Autoflammability: Not determined

Vapour pressure: Less Than 0.1 mmHg

Water Solubility: Negligible

Specific gravity: 1.2 - 1.22 Water=1

Vapour density: Not determined

Volatile organic compounds: Not determined

Evaporation rate: Less Than 0.1 BuOAc=1

Viscosity: 5000 - 10000 centipoise

Percent Volatile:

10 STABILITY AND REACTIVITY

Conditions to Avoid:

Store away from acids. Store away from heat. Store out of direct sunlight.

Materials to Avoid:

Strong bases. Strong oxidising agents.

Hazardous Decomposition:

Stable. Hazardous polymerisation will not occur.

11 TOXICOLOGICAL INFORMATION

Effects from Eye Contact:

Severe Eye Irritation: Signs/symptoms may include significant redness, swelling, pain, tearing, cloudy appearance of the cornea, and impaired vision.

Effects from Skin Contact:

Allergic Skin Reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching. Moderate Skin Irritation: Signs/symptoms may include localised redness, swelling, itching, and dryness.

Effects from Inhalation:

Upper Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

Effects from Ingestion:

Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, nausea, diarrhoea and vomiting.

Mutagenicity:

Contains a chemical, CAS 5026-74-4, which the vendor has classified as Mutagen Category 3 based on mutagen assays and the European criteria.

Product Based Information

12 ECOLOGICAL INFORMATION ______

Other Effects and Information: No data available.

13 DISPOSAL CONSIDERATIONS

Potential for Recycling: Reclaim if feasible.

Special Instructions:

As a disposal alternative, incinerate uncured product in an industrial or commercial incinerator. Dispose of completely cured (or polymerised) wastes in a sanitary landfill. Since regulations vary, consult applicable regulations or authorities before disposal.

14 TRANSPORT INFORMATION UN NUMBER: UN number: UN2735 UK ROAD/SEA FREIGHT (IMO) CLASSIFICATION: Substance Identification Number: UN2735 Class: 8.0 Packing Group: ΙI Amines, Liquid, Corrosive, Proper Shipping Name: N.O.S. (Contains 4,4 methylenebis(cyclohexylamine). If the product is in container CDG-ROAD (if applicable) size of 10 litres or more CDG-ROAD applies. ADR/RID CLASSIFICATION: Class: 8.0 53 b Item Number: ICAO/IATA CLASSIFICATION: 8.0 Class: Sub-Risk: Not applicable Packing Group: ΙI Proper Shipping Name: Amines, Liquid, Corrosive,

N.O.S. (Contains 4,4 -

methylenebis(cyclohexylamine).

15 REGULATORY INFORMATION

Symbol(s):

St. Andrew's Cross (Harmful) N Dangerous to environment.

Risk Phrases:

Harmful in contact with skin and if swallowed. Irritating to eyes and skin. May cause sensitisation by skin contact. Possible risk of irreversible effects. Toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

Safety Phrases:

Avoid contact with the skin and eyes. Wear suitable protective clothing, gloves, and eye and face protection. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. After contact with skin, wash immediately with plenty of soap and water. Contains Epoxy Resins. See information supplied by manufacturer. Avoid release to the environment. Refer to special instructions/safety data sheets.

16 OTHER INFORMATION

Regulatory Information:

The following UK Regulations as amended may affect the product as supplied: The Chemicals (Hazard Information and Packaging for supply) Regulations, as amended. The Carriage of Dangerous Goods (Classification, Packaging and Labelling) and use of Transportable Pressure Receptacles Regulations 1996, as amended. Carriage of Dangerous Goods by Road regulations, 1996, as amended. The Petroleum (Consolidation) Act 1928.

The Control of Substances Hazardous to Health Regulations 1999 as amended.

The Special Waste Regulations 1996, as amended. The Environmental Protection Act, 1990 The Health and Safety at Work Act, 1974.

Reissue date/Reason for reissue. Updated handling and storage and label information.

Intended Use of Product: For bonding various substrates.

The information on this Data Sheet is based on our experience and is correct to the best of our knowledge at the date of publication, but we do not accept any liability for any loss, damage or injury resulting from its use (except as required by law). The information may not be valid for any use not referred to in this Data Sheet or use of the product in combination with other materials. For these reasons, it is important that customers carry out their own test to satisfy themselves as to the suitability of the product for their own intended applications.