Safety Data Sheet

Document group:	28-8088-8	**Version number:**	1.02
Revision date:	15/02/2012	**Supersedes date:**	14/02/2012
Transportation version number:			

This Safety Data Sheet has been prepared in accordance with the REACH Regulation (EC) 1907/2006 and its modifications.

IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier
3M™ Scotch-Weld™ Acrylic Structural Adhesive DP-8005 Kit

Product identification numbers
FS-9100-2896-8 FS-9100-4049-2

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.3. Details of the supplier of the substance or mixture
Address: 3M United Kingdom PLC, 3M Centre, Cain Road, Bracknell, Berkshire, RG12 8HT.

E Mail: tox.uk@mmm.com
Website: www.3M.com/uk

1.4. Emergency telephone number
+44 (0)1344 858 000

This product is a kit or a multipart product which consists of multiple, independently packaged components. A Safety Data Sheet for each of these components is included. Please do not separate the component Safety Data Sheets from this cover page. The document numbers of the MSDSs for components of this product are:

28-8085-4, 28-8077-1

TRANSPORTATION INFORMATION

KIT LABEL

2.2. Label elements

Dangerous substances(67/548/EEC)/preparations(1999/45/EC) directive

Symbols
Xn Harmful.

Contains:
Consult the component labels for disclosable ingredients.

Risk phrases

R41	Risk of serious damage to eyes.
R38	Irritating to skin.
R42/43	May cause sensitisation by inhalation and skin contact.
R68	Possible risks of irreversible effects.
R52	Harmful to aquatic organisms.

Safety phrases

S23A	Do not breathe vapour.
S22	Do not breathe dust.
S36/37	Wear suitable protective clothing and gloves.
S39A	Wear eye protection.
S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S45	In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S61	Avoid release to the environment. Refer to special instructions/safety data sheets.

Special provisions concerning the labelling of certain substances

Warning - this preparation contains a substance not yet tested completely.

Revision information:
Revision Changes:
Safety phrase was modified.
Section 2: Symbol was modified.
Section 2: Risk phrase information was modified.
Section 1: Product identification numbers was modified.
Copyright was modified.
Section 1: Initial issue message was modified.

Safety Data Sheet

Document group:	28-8077-1	**Version number:**	1.01
Revision date:	14/02/2012	**Supersedes date:**	16/06/2011

Transportation version number: 1.00 (16/06/2011)

This Safety Data Sheet has been prepared in accordance with the REACH Regulation (EC) 1907/2006 and its modifications.

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier
3M™ Scotch-Weld™ Acrylic Structural Adhesive DP-8005 (Part B)

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses
Structural adhesive.

1.3. Details of the supplier of the substance or mixture

Address: 3M United Kingdom PLC, 3M Centre, Cain Road, Bracknell, Berkshire, RG12 8HT.

E Mail: tox.uk@mmm.com
Website: www.3M.com/uk

1.4. Emergency telephone number
+44 (0)1344 858 000

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

Dangerous substances(67/548/EEC)/preparations(1999/45/EC) directive
Indication of danger
Irritant.
Sensitising

2.2. Label elements

Dangerous substances(67/548/EEC)/preparations(1999/45/EC) directive

Symbols
Xi Irritant.

Contains:
[2-[(2-Methyl-1-oxoallyl)oxy]ethyl] hydrogen succinate

Risk phrases

R36/38	Irritating to eyes and skin.
R43	May cause sensitisation by skin contact.
R52	Harmful to aquatic organisms.

Safety phrases

S24	Avoid contact with skin.
S37	Wear suitable gloves.
S61	Avoid release to the environment. Refer to special instructions/safety data sheets.

2.3. Other hazards

None known.

SECTION 3: Composition/information on ingredients

Ingredient	CAS Nbr	EU Inventory	% by Wt	Classification
Tetrahydrofurfuryl methacrylate	2455-24-5	EINECS 219-529-5	30 - 70	Xi:R36-38; R52 (Self Classified) Skin Irrit. 2, H315; Eye Irrit. 2, H319 (Self Classified)
Acrylate polymer	Trade Secret		15 - 30	
2-Ethylhexyl methacrylate	688-84-6	EINECS 211-708-6	10 - 30	Xi:R36-37-38 (Vendor) R52 (Self Classified) Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335 (Vendor) Aquatic Chronic 3, H412 (Self Classified)
Methacrylate	Trade Secret		1 - 15	
[2-[(2-Methyl-1-oxoallyl)oxy]ethyl] hydrogen succinate	20882-04-6	EINECS 244-096-4	1 - 10	Xi:R36-38; R43 (Self Classified) Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317 (Self Classified)
Ashes	68131-74-8	EINECS 268-627-4	1 - 10	
2-Hydroxyethyl methacrylate	868-77-9	EINECS 212-782-2	< 0.5	Xi:R36-38; R43 - Nota D (EU) Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317 - Nota D (CLP)

Please see section 16 for the full text of any R phrases and H statements referred to in this section
Please refer to section 15 for the any applicable Notas that have been applied to the above components

For information on ingredient occupational exposure limits or PBT or vPvB status, see sections 8 and 12 of this SDS

SECTION 4: First aid measures

4.1. Description of first aid measures

Eye contact
Immediately flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. Get medical

attention.

Skin contact
Immediately wash with soap and water. Remove contaminated clothing and wash before reuse. If signs/symptoms develop, get medical attention.

Inhalation
Remove person to fresh air. If you feel unwell, get medical attention.

If swallowed
Rinse mouth. If you feel unwell, get medical attention.

4.2. Most important symptoms and effects, both acute and delayed
See Section 11.1 Information on toxicological effects

4.3. Indication of any immediate medical attention and special treatment required
Not applicable

SECTION 5: Fire-fighting measures

5.1. Extinguishing media
In case of fire: Use a carbon dioxide or dry chemical extinguisher for extinction.

5.2. Special hazards arising from the substance or mixture
None inherent in this product.

Hazardous Decomposition or By-Products

Substance	Condition
Hydrocarbons.	During combustion.
Carbon monoxide.	During combustion.
Carbon dioxide.	During combustion.
Hydrogen cyanide.	During combustion.
Oxides of nitrogen.	During combustion.

5.3. Advice for fire-fighters
No unusual fire or explosion hazards are anticipated.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Evacuate area. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapours, in accordance with good industrial hygiene practice. Warning: A motor could be an ignition source and could cause flammable gases or vapours in the spill area to burn or explode. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

6.2. Environmental precautions
Avoid release to the environment. For larger spills, cover drains and build dykes to prevent entry into sewer systems or bodies of water.

6.3. Methods and material for containment and cleaning up
Contain spill. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent material does not remove a toxic, corrosivity or flammability hazard. Collect as much of the spilled material as possible. Clean up residue with an appropriate solvent selected by a qualified and authorised person. Ventilate the area with fresh air.

Read and follow safety precautions on the solvent label and Safety Data Sheet. Place in a closed container approved for transportation by appropriate authorities. Seal the container. Dispose of collected material as soon as possible.

6.4. Reference to other sections
Refer to Section 8 and Section 13 for more information

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Do not use in a confined area or areas with little or no air movement. Avoid breathing dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage including any incompatibilities
Store in a well-ventilated place. Keep cool. Protect from sunlight. Store away from acids.

7.3. Specific end use(s)
See information in Section 7.1 and 7.2 for handling and storage recommendations. See Section 8 for exposure controls and personal protection recommendations.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits
No occupational exposure limit values exist for any of the components listed in Section 3 of this Safety Data Sheet.

8.2. Exposure controls

8.2.1. Engineering controls
Provide appropriate local exhaust ventilation for cutting, grinding, sanding or machining. Provide ventilated enclosure for heat curing. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapours/spray. If ventilation is not adequate, use respiratory protection equipment.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

Wear eye/face protection.
The following eye protection(s) are recommended: Safety glasses with side shields.
Indirect vented goggles.

Skin/hand protection

Wear protective gloves and protective clothing.
Gloves made from the following material(s) are recommended: Polyvinyl alcohol (PVA).
Polymer laminate

The following protective clothing material(s) are recommended:Apron - polymer laminate
Rubber boots.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.
Select one of the following approved respirators based on airborne concentration of contaminants and in accordance with regulations:
Half facepiece or fullface air-purifying respirator with organic vapour cartridges and P2 particulate prefilters.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid.
Specific Physical Form:	Paste
Appearance/Odour	Off-white; Acrylic odour.
pH	*Not applicable.*
Boiling point/boiling range	*Not applicable.*
Melting point	*Not applicable.*
Flammability (solid, gas)	Not classified
Explosive properties	Not classified
Oxidising properties	Not classified
Flash point	*No data available.*
Autoignition temperature	*No data available.*
Flammable Limits(LEL)	*No data available.*
Flammable Limits(UEL)	*No data available.*
Vapour pressure	*No data available.*
Relative density	1.15 - 1.20 [*Ref Std:*WATER=1]
Water solubility	*Not applicable.*
Partition coefficient: n-octanol/water	*No data available.*
Evaporation rate	*Not applicable.*
Vapour density	*No data available.*
Viscosity	1,000 - 2,000 Pa-s
Density	1.15 - 1.2 g/ml

9.2. Other information

SECTION 10: Stability and reactivity

10.1 Reactivity
This material may be reactive with certain agents under certain conditions - see the remaining headings in this section

10.2 Chemical stability
Stable.

10.3 Possibility of hazardous reactions
Hazardous polymerisation will not occur.

10.4 Conditions to avoid
Heat.
Sparks and/or flames.
Light.

10.5 Incompatible materials
Strong acids.

10.6 Hazardous decomposition products

Substance	Condition
None known.	

SECTION 11: Toxicological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labelling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

11.1 Information on Toxicological effects

Signs and Symptoms of Exposure

Based on test data and/or information on the components, this material may produce the following health effects:

Eye contact
Severe eye irritation: Signs/symptoms may include significant redness, swelling, pain, tearing, cloudy appearance of the cornea, and impaired vision. Dust created by cutting, grinding, sanding, or machining may cause eye irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

Skin contact
Allergic skin reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching. Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, dryness, cracking, blistering, and pain.

Inhalation
Respiratory tract irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain. Dust from cutting, grinding, sanding or machining may cause irritation of the respiratory system: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, nose and throat pain.

Ingestion
May be harmful if swallowed.
Gastrointestinal irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhoea.

Toxicological Data

Acute Toxicity

Name	Route	Species	Value	UN GHS Classification
Overall product	Ingestion		No test data available; calculated ATE2,095 mg/kg	Category5 (54% unknown)
Tetrahydrofurfuryl methacrylate	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg	Category5
2-Ethylhexyl methacrylate			No data available	
[2-[(2-Methyl-1-oxoallyl)oxy]ethyl] hydrogen succinate	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg	Category5
Ashes			No data available	
Methacrylate			No data available	
2-Hydroxyethyl methacrylate	Dermal	Rabbit	LD50 > 3,000 mg/kg	Category5
2-Hydroxyethyl methacrylate	Ingestion	Rat	LD50 5,564 mg/kg	Not classified

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value	UN GHS Classification
Overall product		No test data available; calculated to be irritant	Category 2
Tetrahydrofurfuryl methacrylate		Irritant	Category 2
2-Ethylhexyl methacrylate		No data available	
Ashes		No data available	
[2-[(2-Methyl-1-oxoallyl)oxy]ethyl] hydrogen succinate		Irritant	Category 2
Methacrylate		No data available	
2-Hydroxyethyl methacrylate		Mild irritant	Category 3

Serious Eye Damage/Irritation

Name	Species	Value	UN GHS Classification
Overall product		No test data available; calculated to be severe irritant	Category 2A
Tetrahydrofurfuryl methacrylate		Severe irritant	Category 2A
2-Ethylhexyl methacrylate		No data available	
Ashes		No data available	
[2-[(2-Methyl-1-oxoallyl)oxy]ethyl] hydrogen succinate		Severe irritant	Category 2A
Methacrylate		No data available	
2-Hydroxyethyl methacrylate		Moderate irritant	Category 2B

Skin Sensitisation

Name	Species	Value	UN GHS Classification
Overall product		No test data available.	Category 1 based on component data
Tetrahydrofurfuryl methacrylate		Some positive data exist, but the data are not sufficient for classification	Not classified
2-Ethylhexyl methacrylate		No data available	
Ashes		No data available	
[2-[(2-Methyl-1-oxoallyl)oxy]ethyl] hydrogen succinate		Sensitising	Category 1
Methacrylate		No data available	
2-Hydroxyethyl methacrylate		Sensitising	Category 1

Respiratory Sensitisation

Name	Species	Value	UN GHS Classification
Overall product		No test data available.	Not classified based on component data
Tetrahydrofurfuryl methacrylate		No data available	
2-Ethylhexyl methacrylate		No data available	
Ashes		No data available	
[2-[(2-Methyl-1-oxoallyl)oxy]ethyl] hydrogen succinate		No data available	
Methacrylate		No data available	
2-Hydroxyethyl methacrylate		No data available	

Germ Cell Mutagenicity

Name	Route	Value	UN GHS Classification
Overall product		No data available	Overall Germ Cell Mutagenicity classification Not classified
Overall product		No test data available.	
Tetrahydrofurfuryl methacrylate		No data available	
2-Ethylhexyl methacrylate		No data available	
Ashes		No data available	

[2-[(2-Methyl-1-oxoallyl)oxy]ethyl] hydrogen succinate		No data available	
Methacrylate		No data available	
2-Hydroxyethyl methacrylate	In Vitro	Some positive data exist, but the data are not sufficient for classification	Not classified

Carcinogenicity

Name	Route	Species	Value	UN GHS Classification
Overall product			No test data available.	Not classified based on component data
Tetrahydrofurfuryl methacrylate			No data available	
2-Ethylhexyl methacrylate			No data available	
Ashes			No data available	
[2-[(2-Methyl-1-oxoallyl)oxy]ethyl] hydrogen succinate			No data available	
Methacrylate			No data available	
2-Hydroxyethyl methacrylate			No data available	

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test result	Exposure Duration	UN GHS Classification
Overall product		No test data available.				Not classified based on component data
Tetrahydrofurfuryl methacrylate		No data available				
2-Ethylhexyl methacrylate		No data available				
Ashes		No data available				
[2-[(2-Methyl-1-oxoallyl)oxy]ethyl] hydrogen succinate		No data available				
Methacrylate		No data available				
2-Hydroxyethyl methacrylate	Ingestion	Not toxic to reproduction and/or development		NOAEL 1,000 mg/kg/day		

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration	UN GHS Classification
Tetrahydrofurfuryl methacrylate	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		Irritation Positive		Not classified
2-Ethylhexyl methacrylate			No data available				
[2-[(2-Methyl-1-oxoallyl)oxy]ethyl] hydrogen succinate	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		Irritation Positive		Not classified
Ashes			No data available				

Methacrylate			No data available				
2-Hydroxyethyl methacrylate			No data available				

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration	UN GHS Classification
Overall product			No test data available.				Not classified based on component data
Tetrahydrofurfuryl methacrylate			No data available				
2-Ethylhexyl methacrylate			No data available				
Ashes			No data available				
[2-[(2-Methyl-1-oxoallyl)oxy] ethyl] hydrogen succinate			No data available				
Methacrylate			No data available				
2-Hydroxyethyl methacrylate			No data available				

Aspiration Hazard

Name	Value	UN GHS Classification
Overall product	No test data available.	Not classified based on component and/or viscosity data
Tetrahydrofurfuryl methacrylate	Not an aspiration hazard	Not classified
2-Ethylhexyl methacrylate	Not an aspiration hazard	Not classified
Ashes	Not an aspiration hazard	Not classified
[2-[(2-Methyl-1-oxoallyl)oxy]ethyl] hydrogen succinate	Not an aspiration hazard	Not classified
Methacrylate	Not an aspiration hazard	Not classified
2-Hydroxyethyl methacrylate	Not an aspiration hazard	Not classified

Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

SECTION 12: Ecological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. Additional information leading to material classification in Section 2 is available upon request. In addition, environmental fate and effects data on ingredients may not be reflected in this section because an ingredient is present below the threshold for labelling, an ingredient is not expected to be available for exposure, or the data is considered not relevant to the material as a whole.

12.1. Toxicity

Acute aquatic hazard:
GHS Acute 3: Harmful to aquatic life.

Chronic aquatic hazard:

Not chronically toxic to aquatic life by GHS criteria.

No product test data available.
No component test data available.

12.2. Persistence and degradability
No test data available.

12.3 : Bioaccumulative potential
No test data available.

12.4. Mobility in soil
Please contact manufacturer for more details

12.5. Results of the PBT and vPvB assessment

No information available at this time, contact manufacturer for more details

12.6. Other adverse effects
No information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods
Dispose of contents/ container in accordance with the local/regional/national/international regulations

Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as hazardous as per applicable regulations) shall be considered,stored,treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities. Incinerate uncured product in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. Dispose of completely cured (or polymerised) material in a permitted industrial waste facility. If no other disposal options are available, waste product that has been completely cured or polymerised may be placed in a landfill properly designed for industrial waste.

The coding of a waste stream is based on the application of the product by the consumer. Since this is out of the control of 3M, no waste code(s) for products after use will be provided. Please refer to the European Waste Code (EWC - 2000/532/EC and amendments) to assign the correct waste code to your waste stream. Ensure national and/or regional regulations are complied with and always use a licensed waste contractor.

EU waste code (product as sold)

08 04 09*	Waste adhesives and sealants containing organic solvents or other dangerous substances
20 01 27*	Paint, inks, adhesives and resins containing dangerous substances

SECTION 14: Transportation information

ADR: Not restricted for transport.
IMDG: Not restricted for transport.
IATA: Not restricted for transport.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Global inventory status
Contact 3M for more information.

15.2. Chemical Safety Assessment
Not applicable

SECTION 16: Other information

List of relevant H statements

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H412	Harmful to aquatic life with long lasting effects.

List of relevant R-phrases

R36	Irritating to eyes.
R37	Irritating to respiratory system.
R38	Irritating to skin.
R43	May cause sensitisation by skin contact.
R52	Harmful to aquatic organisms.

Revision information:
Revision Changes:
Risk phrase was modified.
Safety phrase was modified.
Section 9: pH information was modified.
Section 2: Symbol was modified.
Section 9: Evaporation Rate information was modified.
Section 9: Viscosity information was modified.
Section 16: List of relevant R phrase information was modified.
Section 3: Composition/ Information of ingredients table was modified.
Section 9: n-octanol/water coefficient information was modified.
Section 9: Boiling point information was modified.
Section 9: Relative density information was modified.
Section 9: Solubility in water value was modified.
Section 13: EU waste code (product as sold) information was modified.
Section 12: Acute aquatic hazard information was modified.
Section 16: Regulations – Inventories – EU ONLY was modified.
Copyright was modified.
Section 9: Flash point information was modified.
Section 9: Melting point information was modified.
Section 9: Flammable limits (LEL) information was modified.
Section 9: Flammable limits (UEL) information was modified.
Section 9: Vapour density value was modified.
Section 9: Vapour pressure value was modified.
Section 9: Density information was modified.
Section 1: Initial issue message was modified.
Aspiration Hazard Table was modified.
Section 11: Acute Toxicity table was modified.
Carcinogenicity Table was modified.
Serious Eye Damage/Irritation Table was modified.
Germ Cell Mutagenicity Table was modified.
Skin Sensitisation Table was modified.

Respiratory Sensitisation Table was modified.
Reproductive Toxicity Table was modified.
Skin Corrosion/Irritation Table was modified.
Target Organs - Repeated Table was modified.
Target Organs - Single Table was modified.
Section 11: Health Effects - Skin information was modified.
Section 11: Health Effects - Ingestion information was modified.
Section 5: Hazardous combustion products table was modified.
Section 5: Fire - Extinguishing media information was modified.
Section 6: Accidental release personal information was modified.
Section 6: Accidental release environmental information was modified.
Section 6: Accidental release clean-up information was modified.
Section 7: Precautions safe handling information was modified.
Section 7: Conditions safe storage was modified.
Section 8: Personal Protection - Skin/hand information was modified.
Section 10: Hazardous decomposition or by-products table was modified.
Section 13: Standard Phrase Category Waste GHS was modified.
Two-column table displaying the unique list of H Codes and statements (std phrases) for all components of the given material. was modified.
Section 8: Appropriate Engineering controls information was added.
Section 8: Personal Protection - Respiratory Information was added.
Section 9: Autoignition temperature information was added.

DISCLAIMER: The information on this Safety 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 United Kingdom MSDSs are available at www.3M.com/uk

Safety Data Sheet

Document group:	28-8085-4	**Version number:**	1.01
Revision date:	14/02/2012	**Supersedes date:**	16/06/2011

Transportation version number: 1.00 (16/06/2011)

This Safety Data Sheet has been prepared in accordance with the REACH Regulation (EC) 1907/2006 and its modifications.

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier
3M™ Scotch-Weld™ Acrylic Structural Adhesive DP-8005 (Part A)

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses
Structural adhesive.

1.3. Details of the supplier of the substance or mixture

Address: 3M United Kingdom PLC, 3M Centre, Cain Road, Bracknell, Berkshire, RG12 8HT.

E Mail: tox.uk@mmm.com
Website: www.3M.com/uk

1.4. Emergency telephone number
+44 (0)1344 858 000

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

Dangerous substances(67/548/EEC)/preparations(1999/45/EC) directive
Indication of danger
Harmful.
Mutagenic (Category 3).
Sensitising

2.2. Label elements

Dangerous substances(67/548/EEC)/preparations(1999/45/EC) directive

Symbols
Xn Harmful.

Contains:

Organo Boran; 2-Ethyl-2-[[3-(2-methylaziridin-1-yl)propionyl]methyl]propane-1,3-diyl bis(2-methylaziridine-1-propionate)

Risk phrases

R41	Risk of serious damage to eyes.
R42/43	May cause sensitisation by inhalation and skin contact.
R68	Possible risks of irreversible effects.

Safety phrases

S23A	Do not breathe vapour.
S22	Do not breathe dust.
S24	Avoid contact with skin.
S36/37	Wear suitable protective clothing and gloves.
S39A	Wear eye protection.
S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S45	In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Special provisions concerning the labelling of certain substances

Warning - this preparation contains a substance not yet tested completely.

Polyfunctional aziridine is classified as T; R23 based on dust/mist (aerosol) data. When incorporated into this product, this substance cannot become aerosolized. Therefore, the classification is not applicable for this material when used as intended.

2.3. Other hazards

None known.

SECTION 3: Composition/information on ingredients

Ingredient	CAS Nbr	EU Inventory	% by Wt	Classification
Polyester Plasticiser	Trade Secret		30 - 60	
2-Ethyl-2-[[3-(2-methylaziridin-1-yl)propionyl]methyl]propane-1,3-diyl bis(2-methylaziridine-1-propionate)	64265-57-2	EINECS 264-763-3	15 - 40	Muta.Cat.3:R68; T:R23; Xi:R41; R42-43 (Self Classified) Acute Tox. 2, H330; Eye Dam. 1, H318; Resp. Sens. 1, H334; Skin Sens. 1, H317; Muta. 2, H341; STOT SE 1, H370 (Self Classified)
Organo Boran (REACH Reg. No.:01-0000017250-82)	223674-50-8	ELINCS 426-100-8	10 - 30	F:R11; Xn:R22; Xi:R36; R43 (Self Classified) Acute Tox. 4, H302; Eye Irrit. 2, H319; Skin Sens. 1, H317 (Self Classified)
Dimethyl siloxane, reaction product with silica	67762-90-7		0.5 - 1.5	
Titanium dioxide	13463-67-7	EINECS 236-675-5	0.1 - 1	

Please see section 16 for the full text of any R phrases and H statements referred to in this section
Please refer to section 15 for the any applicable Notas that have been applied to the above components

For information on ingredient occupational exposure limits or PBT or vPvB status, see sections 8 and 12 of this SDS

SECTION 4: First aid measures

4.1. Description of first aid measures

Eye contact
Immediately flush with large amounts of water for at least 15 minutes. Remove contact lenses if easy to do. Continue rinsing. Immediately get medical attention.

Skin contact
Immediately wash with soap and water. Remove contaminated clothing and wash before reuse. If signs/symptoms develop, get medical attention.

Inhalation
Remove person to fresh air. If you feel unwell, get medical attention.

If swallowed
Rinse mouth. If you feel unwell, get medical attention.

4.2. Most important symptoms and effects, both acute and delayed
See Section 11.1 Information on toxicological effects

4.3. Indication of any immediate medical attention and special treatment required
Not applicable

SECTION 5: Fire-fighting measures

5.1. Extinguishing media
In case of fire: Use a fire fighting agent suitable for flammable liquids or gases such as dry chemical or carbon dioxide.

5.2. Special hazards arising from the substance or mixture
Closed containers exposed to heat from fire may build pressure and explode.

Hazardous Decomposition or By-Products

Substance	Condition
Aldehydes.	During combustion.
Carbon monoxide.	During combustion.
Carbon dioxide.	During combustion.
Irritant vapours or gases.	During combustion.
Oxides of nitrogen.	During combustion.

5.3. Advice for fire-fighters
Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapours, in accordance with good industrial hygiene practice. Warning: A motor could be an ignition source and could cause flammable gases or vapours in the spill area to burn or explode. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment. Ventilate the area with fresh air.

6.2. Environmental precautions

For larger spills, cover drains and build dykes to prevent entry into sewer systems or bodies of water.

6.3. Methods and material for containment and cleaning up
Collect as much of the spilled material as possible. Remember, adding an absorbent material does not remove a toxic, corrosivity or flammability hazard. Seal the container.

6.4. Reference to other sections
Refer to Section 8 and Section 13 for more information

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapours/spray. Avoid breathing dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Use personal protective equipment (eg. gloves, respirators…) as required. Avoid breathing of dust created by cutting, sanding, grinding or machining. Vapours may travel long distances along the ground or floor to an ignition source and flash back. For industrial or professional use only. Do not use in a confined area or areas with little or no air movement. Avoid contact with oxidising agents (eg. chlorine, chromic acid etc.)

7.2. Conditions for safe storage including any incompatibilities
Store away from acids. Store away from oxidising agents.

7.3. Specific end use(s)
See information in Section 7.1 and 7.2 for handling and storage recommendations. See Section 8 for exposure controls and personal protection recommendations.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

Ingredient	CAS Nbr	Agency	Limit type	Additional comments
Titanium dioxide	13463-67-7	Health and Safety Comm. (UK)	TWA(Inhalable):10 mg/m3;TWA(respirable):4 mg/m³	

Health and Safety Comm. (UK) : UK Health and Safety Commission
TWA: Time-Weighted-Average
STEL: Short Term Exposure Limit
ppm: parts per million
mg/m³: milligrams per cubic metre
CEIL: Ceiling

8.2. Exposure controls

8.2.1. Engineering controls
Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapours/spray. If ventilation is not adequate, use respiratory protection equipment.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

Wear eye/face protection.
The following eye protection(s) are recommended: Safety glasses with side shields.

Indirect vented goggles.

Skin/hand protection

Wear protective gloves.
Gloves made from the following material(s) are recommended: Butyl rubber.
Nitrile rubber.
Polyethylene
Polyvinyl alcohol (PVA).

Respiratory protection

In case of inadequate ventilation wear respiratory protection.
Select one of the following approved respirators based on airborne concentration of contaminants and in accordance with regulations:
Half facepiece or fullface air-purifying respirator with organic vapour cartridges and P2 particulate prefilters.
Half facepiece or fullface air-purifying respirator with organic vapour cartridges and P2 particulate prefilters.
Half facepiece or fullface air-purifying respirator with organic vapour cartridges and P3 particulate prefilters.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid.
Specific Physical Form:	Paste
Appearance/Odour	White, mild odour.
pH	*Not applicable.*
Boiling point/boiling range	>=93 ºC
Melting point	*No data available.*
Flammability (solid, gas)	Not classified
Explosive properties	Not classified
Oxidising properties	Not classified
Flash point	>=93.3 ºC [*Test Method:*Closed Cup]
Autoignition temperature	*No data available.*
Flammable Limits(LEL)	*No data available.*
Flammable Limits(UEL)	*No data available.*
Vapour pressure	*No data available.*
Relative density	1.06 [*Ref Std:*WATER=1]
Water solubility	Slight (less than 10%)
Partition coefficient: n-octanol/water	*No data available.*
Evaporation rate	*No data available.*
Vapour density	*No data available.*
Viscosity	49 Pa-s [@ 23 ºC]
Density	1.06 g/ml

9.2. Other information

Volatile organic compounds (VOC)	65 g/l [*Test Method:*EPA method 24A]
VOC less H2O & exempt solvents	65 g/l [*Test Method:*EPA method 24A]

SECTION 10: Stability and reactivity

10.1 Reactivity
This material may be reactive with certain agents under certain conditions - see the remaining headings in this section

10.2 Chemical stability
Stable.

10.3 Possibility of hazardous reactions
Hazardous polymerisation will not occur.

10.4 Conditions to avoid
None known.

10.5 Incompatible materials
Strong acids.
Strong bases.
Strong oxidising agents.
Amines.

10.6 Hazardous decomposition products

Substance	Condition
None known.	

SECTION 11: Toxicological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labelling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

11.1 Information on Toxicological effects

Signs and Symptoms of Exposure

Based on test data and/or information on the components, this material may produce the following health effects:

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. Dust created by cutting, grinding, sanding, or machining may cause eye irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

Skin contact
Allergic skin reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching. Mild Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, and dryness.

Inhalation
Allergic respiratory reaction: Signs/symptoms may include difficulty breathing, wheezing, cough, and tightness of chest. Dust from cutting, grinding, sanding or machining may cause irritation of the respiratory system: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, nose and throat pain. Respiratory tract irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

Ingestion
May be harmful if swallowed.
Gastrointestinal irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhoea.

Target Organ Effects:
Respiratory effects: Signs/symptoms may include cough, shortness of breath, chest tightness, wheezing, increased heart rate, bluish coloured skin (cyanosis), sputum production, changes in lung function tests, and respiratory failure.

Genotoxicity:
Genotoxicity and Mutagenicity: May interact with genetic material and possibly alter gene expression.

Toxicological Data

Acute Toxicity

Name	Route	Species	Value	UN GHS Classification
Overall product	Ingestion		No test data available; calculated ATE2,252 mg/kg	Category5 (71.746% unknown)
2-Ethyl-2-[[3-(2-methylaziridin-1-yl)propionyl]methyl]propane-1,3-diyl bis(2-methylaziridine-1-propionate)	Inhalation-Dust/Mist (4 hours)	Rat	LC50 0.252 mg/l	Category2
Organo Boran			No data available	
Dimethyl siloxane, reaction product with silica			No data available	
Titanium dioxide			No data available	

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value	UN GHS Classification
Overall product		No test data available; calculated to be mild irritant	Category 3
2-Ethyl-2-[[3-(2-methylaziridin-1-yl)propionyl]methyl]propane-1,3-diyl bis(2-methylaziridine-1-propionate)		Mild irritant	Category 3
Organo Boran		No data available	
Dimethyl siloxane, reaction product with silica		No data available	
Titanium dioxide		No data available	

Serious Eye Damage/Irritation

Name	Species	Value	UN GHS Classification
Overall product		No test data available; calculated to be corrosive	Category 1
2-Ethyl-2-[[3-(2-methylaziridin-1-yl)propionyl]methyl]propane-1,3-diyl bis(2-methylaziridine-1-propionate)		Corrosive	Category 1
Organo Boran		No data available	
Dimethyl siloxane, reaction product with silica		No data available	
Titanium dioxide		No data available	

Skin Sensitisation

Name	Species	Value	UN GHS Classification
Overall product		No test data available.	Category 1 based on component data
2-Ethyl-2-[[3-(2-methylaziridin-1-yl)propionyl]methyl]propane-1,3-diyl bis(2-methylaziridine-1-propionate)		Sensitising	Category 1
Organo Boran		No data available	
Dimethyl siloxane, reaction product with silica		No data available	
Titanium dioxide		No data available	

Respiratory Sensitisation

Name	Species	Value	UN GHS Classification
Overall product		No test data available.	Category 1
2-Ethyl-2-[[3-(2-methylaziridin-1-yl)propionyl]methyl]propane-1,3-diyl bis(2-methylaziridine-1-propionate)		Sensitising	Category 1
Organo Boran		No data available	
Dimethyl siloxane, reaction product with silica		No data available	
Titanium dioxide		No data available	

Germ Cell Mutagenicity

Name	Route	Value	UN GHS Classification
Overall product		Mutagenic	Overall Germ Cell Mutagenicity classification Category 2
Overall product		No test data available.	
2-Ethyl-2-[[3-(2-methylaziridin-1-yl)propionyl]methyl]propane-1,3-diyl bis(2-methylaziridine-1-propionate)	In vivo	Mutagenic	Category 2
Organo Boran		No data available	
Dimethyl siloxane, reaction product with silica		No data available	
Titanium dioxide		No data available	

Carcinogenicity

Name	Route	Species	Value	UN GHS Classification
Overall product			No test data available.	Not classified based on component data
2-Ethyl-2-[[3-(2-methylaziridin-1-yl)propionyl]methyl]propane-1,3-diyl bis(2-methylaziridine-1-propionate)			No data available	
Organo Boran			No data available	
Dimethyl siloxane, reaction product with silica			No data available	
Titanium dioxide			No data available	

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test result	Exposure Duration	UN GHS Classification
Overall product		No test data available.				Not classified based on component data
2-Ethyl-2-[[3-(2-methylaziridin-1-yl)propionyl]methyl] propane-1,3-diyl bis(2-methylaziridine-1-propionate)		No data available				
Organo Boran		No data available				
Dimethyl siloxane, reaction product with silica		No data available				
Titanium dioxide		No data available				

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration	UN GHS Classification
Overall product			No test data available.				Category 1 based on component data
2-Ethyl-2-[[3-(2-methylaziridin-1-yl)propionyl]methyl]propane-1,3-diyl bis(2-methylaziridine-1-propionate)	Inhalation	respiratory system	Causes damage to organs		LOAEL 0.105 mg/l		Category 1
2-Ethyl-2-[[3-(2-methylaziridin-1-yl)propionyl]methyl]propane-1,3-diyl bis(2-methylaziridine-1-propionate)	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		Irritation Negative		Not classified
Organo Boran			No data available				
Dimethyl siloxane, reaction product with silica			No data available				
Titanium dioxide			No data available				

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration	UN GHS Classification
Overall product			No test data available.				Not classified based on component data
2-Ethyl-2-[[3-(2-methylaziridin-1-yl)propionyl]methyl]propane-1,3-diyl bis(2-methylaziridine-1-propionate)			No data available				
Organo Boran			No data available				
Dimethyl siloxane, reaction			No data available				

product with silica							
Titanium dioxide			No data available				

Aspiration Hazard

Name	Value	UN GHS Classification
Overall product	No test data available.	Not classified based on component and/or viscosity data
2-Ethyl-2-[[3-(2-methylaziridin-1-yl)propionyl]methyl]propane-1,3-diyl bis(2-methylaziridine-1-propionate)	Not an aspiration hazard	Not classified
Organo Boran	Not an aspiration hazard	Not classified
Dimethyl siloxane, reaction product with silica	Not an aspiration hazard	Not classified
Titanium dioxide	Not an aspiration hazard	Not classified

Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

SECTION 12: Ecological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. Additional information leading to material classification in Section 2 is available upon request. In addition, environmental fate and effects data on ingredients may not be reflected in this section because an ingredient is present below the threshold for labelling, an ingredient is not expected to be available for exposure, or the data is considered not relevant to the material as a whole.

12.1. Toxicity

No product test data available.
No component test data available.

12.2. Persistence and degradability
No test data available.

12.3 : Bioaccumulative potential
No test data available.

12.4. Mobility in soil
Please contact manufacturer for more details

12.5. Results of the PBT and vPvB assessment

No information available at this time, contact manufacturer for more details

12.6. Other adverse effects
No information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods
Dispose of contents/ container in accordance with the local/regional/national/international regulations

Incinerate uncured product in a permitted waste incineration facility. Dispose of completely cured (or polymerised) material in a permitted industrial waste facility. As a disposal alternative, incinerate uncured product in a permitted waste incineration

facility. If no other disposal options are available, waste product that has been completely cured or polymerised may be placed in a landfill properly designed for industrial waste.

The coding of a waste stream is based on the application of the product by the consumer. Since this is out of the control of 3M, no waste code(s) for products after use will be provided. Please refer to the European Waste Code (EWC - 2000/532/EC and amendments) to assign the correct waste code to your waste stream. Ensure national and/or regional regulations are complied with and always use a licensed waste contractor.

EU waste code (product as sold)

08 04 09*	Waste adhesives and sealants containing organic solvents or other dangerous substances
20 01 27*	Paint, inks, adhesives and resins containing dangerous substances

SECTION 14: Transportation information

ADR: Not restricted for transport.
IMDG: Not restricted for transport.
IATA: Not restricted for transport.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Carcinogenicity

Ingredient	CAS Nbr	Classification	Regulation
Titanium dioxide	13463-67-7	Grp. 2B: Possible human carc.	International Agency for Research on Cancer

Global inventory status
Contact 3M for more information.

15.2. Chemical Safety Assessment
Not applicable

SECTION 16: Other information

List of relevant H statements

H302	Harmful if swallowed.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H341	Suspected of causing genetic defects.
H370	Causes damage to organs.

List of relevant R-phrases

R11	Highly flammable.
R22	Harmful if swallowed.
R23	Toxic by inhalation.
R36	Irritating to eyes.
R41	Risk of serious damage to eyes.
R42	May cause sensitisation by inhalation.
R43	May cause sensitisation by skin contact.

R68 Possible risks of irreversible effects.

Revision information:
Revision Changes:
Section 8: Skin protection - recommended gloves information was modified.
Risk phrase was modified.
Safety phrase was modified.
Section 9: pH information was modified.
Section 1: Product use information was modified.
Section 2: Symbol was modified.
Section 9: Evaporation Rate information was modified.
Section 9: Viscosity information was modified.
Section 15: Carcinogenicity information was modified.
Section 16: List of relevant R phrase information was modified.
Section 3: Composition/ Information of ingredients table was modified.
Section 9: n-octanol/water coefficient information was modified.
Section 9: Boiling point information was modified.
Section 9: Relative density information was modified.
Section 9: Solubility in water text was modified.
Section 13: EU waste code (product as sold) information was modified.
Section 14: Transportation classification was modified.
Copyright was modified.
Section 9: Flash point information was modified.
Section 9: Melting point information was modified.
Section 9: Flammable limits (LEL) information was modified.
Section 9: Flammable limits (UEL) information was modified.
Section 9: Vapour density value was modified.
Section 9: Vapour pressure value was modified.
Section 9: Density information was modified.
Section 9: Property description for optional properties was modified.
Section 1: Initial issue message was modified.
Section 8: Occupational exposure limit table was modified.
Section 8: mg/m³ key was modified.
Aspiration Hazard Table was modified.
Section 11: Acute Toxicity table was modified.
Carcinogenicity Table was modified.
Serious Eye Damage/Irritation Table was modified.
Germ Cell Mutagenicity Table was modified.
Skin Sensitisation Table was modified.
Respiratory Sensitisation Table was modified.
Reproductive Toxicity Table was modified.
Skin Corrosion/Irritation Table was modified.
Target Organs - Repeated Table was modified.
Target Organs - Single Table was modified.
Section 11: Health Effects - Eye information was modified.
Section 11: Health Effects - Skin information was modified.
Section 11: Health Effects - Inhalation information was modified.
Section 5: Hazardous combustion products table was modified.
Section 7: Precautions safe handling information was modified.
Section 10: Hazardous decomposition or by-products table was modified.
Section 13: Standard Phrase Category Waste GHS was modified.
Two-column table displaying the unique list of H Codes and statements (std phrases) for all components of the given material. was modified.
Section 9: Autoignition temperature information was added.

DISCLAIMER: The information on this Safety 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 United Kingdom MSDSs are available at www.3M.com/uk