



Safety Data Sheet

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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 UV301 UV Curing Adhesive

Product identification numbers

GS-2000-4526-7 GS-2000-4582-0 GS-2000-4734-7 GS-2000-5136-4

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

Identified uses

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.

Sensitising

2.2. Label elements

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

Symbols

Xn Harmful.

3M Scotch-Weld UV301 UV Curing Adhesive**Contains:**

Hexane-1,6-diol diacrylate; N,N-Dimethylacrylamide

Risk phrases

R20 Harmful by inhalation.
 R36/37/38 Irritating to eyes, respiratory system and skin.
 R43 May cause sensitisation by skin contact.
 R52/53 Harmful to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

Safety phrases

S23A Do not breathe vapour.
 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
Urethane Acrylate	Trade Secret		30 - 60	
exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate	5888-33-5	EINECS 227-561-6	10 - 30	Xi:R36-37-38; N:R51/53 - Nota A (EU) Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335 - Nota A (CLP) Aquatic Acute 1, H400,M=1 (Self Classified)
N,N-Dimethylacrylamide	2680-03-7	EINECS 220-237-5	10 - 30	T:R23; Xn:R21-22; Xi:R36 (Self Classified) Acute Tox. 2, H330; Acute Tox. 3, H311; Acute Tox. 3, H301; Eye Irrit. 2, H319 (Self Classified)
Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	75980-60-8	EINECS 278-355-8	1 - 5	Repr.Cat.3:R62; N:R51/53 (Self Classified) Repr. 2, H361f; Aquatic Chronic 2, H411 (Self Classified)
Hexane-1,6-diol diacrylate	13048-33-4	EINECS 235-921-9	1 - 5	Xi:R36-38; R43 - Nota D (EU) Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317 - Nota D (CLP)
Hydroxycyclohexyl phenyl ketone	947-19-3	EINECS 213-426-9	1 - 5	

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

Flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. If signs/symptoms persist, 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 ordinary combustible material such as water or foam.

5.2. Special hazards arising from the substance or mixture

None inherent in this product.

Hazardous Decomposition or By-Products

<u>Substance</u>	<u>Condition</u>
Carbon monoxide.	During combustion.
Carbon dioxide.	During combustion.
Irritant vapours or gases.	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

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

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 eat, drink or smoke when using this product. Wash thoroughly after handling. Avoid release to the environment. Avoid eye contact. Avoid breathing dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Do not breathe dust/fume/gas/mist/vapours/spray. Do not handle until all safety precautions have been read and understood. Use personal protective equipment (eg. gloves, respirators...) as required. For industrial or professional use only. Avoid contact with oxidising agents (eg. chlorine, chromic acid etc.)

7.2. Conditions for safe storage including any incompatibilities

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

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

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

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: Fluoroelastomer

Nitrile rubber.

Polyethylene.

Respiratory protection

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Select one of the following approved respirators based on airborne concentration of contaminants and in accordance with regulations:

Half face piece or full face air-purifying respirator with organic vapour cartridges.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid.
Appearance/Odour	Clear liquid, acrylate odour.
pH	<i>Not applicable.</i>
Boiling point/boiling range	≥ 100 °C
Melting point	<i>Not applicable.</i>
Flammability (solid, gas)	Not classified
Explosive properties	Not classified
Oxidising properties	Not classified
Flash point	≥ 100 °C [<i>Test Method: Closed Cup</i>]
Flammable Limits(LEL)	<i>No data available.</i>
Flammable Limits(UEL)	<i>No data available.</i>
Vapour pressure	≤ 133.3 Pa [<i>@ 20 °C</i>]
Relative density	1.07 [<i>Ref Std: WATER=1</i>]
Water solubility	Nil
Partition coefficient: n-octanol/water	<i>No data available.</i>
Evaporation rate	<i>No data available.</i>
Vapour density	<i>No data available.</i>
Viscosity	0.2 - 0.3 Pa-s [<i>@ 23 °C</i>]
Density	1.07 g/ml

9.2. Other information

Volatile organic compounds (VOC)	<i>No data available.</i>
Percent volatile	<i>No data available.</i>
VOC less H ₂ O & exempt solvents	<i>No data available.</i>

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 may occur. Avoid exposure to temperatures above 50°C.

10.4 Conditions to avoid

Heat.

Light.

10.5 Incompatible materials

Strong oxidising agents.

Strong bases.
Reducing agents.

10.6 Hazardous decomposition products

<u>Substance</u>	<u>Condition</u>
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

Moderate eye irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

Skin contact

Moderate skin irritation: Signs/symptoms may include localised redness, swelling, itching, and dryness. Allergic skin reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

Inhalation

Respiratory tract irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

Ingestion

Harmful if swallowed.

Gastrointestinal irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhoea.

Target Organ Effects:

Dermal effects: Signs/symptoms may include redness, itching, acne, or bumps on the skin.

Reproductive/Developmental Toxicity:

Contains a chemical or chemicals which can cause birth defects or other reproductive harm.

Toxicological Data

Acute Toxicity

Name	Route	Species	Value	UN GHS Classification
Overall product	Ingestion		No test data available; calculated ATE997 mg/kg	Category4 (54.845% unknown)
exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate			No data available	
N,N-Dimethylacrylamide			No data available	
Hydroxycyclohexyl phenyl			No data available	

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ketone				
Hexane-1,6-diol diacrylate			No data available	
Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide			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
exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate		No data available	
N,N-Dimethylacrylamide		No data available	
Hydroxycyclohexyl phenyl ketone		No data available	
Hexane-1,6-diol diacrylate		No data available	
Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide		No data available	

Serious Eye Damage/Irritation

Name	Species	Value	UN GHS Classification
Overall product		No test data available; calculated to be moderate irritant	Category 2B
exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate		No data available	
N,N-Dimethylacrylamide		No data available	
Hydroxycyclohexyl phenyl ketone		No data available	
Hexane-1,6-diol diacrylate		No data available	
Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide		No data available	

Skin Sensitisation

Name	Species	Value	UN GHS Classification
Overall product		No test data available.	Category 1 based on component data
exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate		No data available	
N,N-Dimethylacrylamide		No data available	
Hydroxycyclohexyl phenyl ketone		No data available	
Hexane-1,6-diol diacrylate		Sensitising	Category 1
Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide		No data available	

Respiratory Sensitisation

Name	Species	Value	UN GHS Classification
Overall product		No test data available.	Not classified based on component data
exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate		No data available	
N,N-Dimethylacrylamide		No data available	
Hydroxycyclohexyl phenyl ketone		No data available	
Hexane-1,6-diol diacrylate		No data available	

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Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide		No data available	
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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.	
exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate		No data available	
N,N-Dimethylacrylamide		No data available	
Hydroxycyclohexyl phenyl ketone		No data available	
Hexane-1,6-diol diacrylate		No data available	
Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide		No data available	

Carcinogenicity

Name	Route	Species	Value	UN GHS Classification
Overall product			No test data available.	Not classified based on component data
exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate			No data available	
N,N-Dimethylacrylamide			No data available	
Hydroxycyclohexyl phenyl ketone			No data available	
Hexane-1,6-diol diacrylate			No data available	
Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide			No data available	

Reproductive Toxicity**Reproductive and/or Developmental Effects**

Name	Route	Value	Species	Test result	Exposure Duration	UN GHS Classification
Overall product		Toxic to reproduction and/or development				Overall Reproductive Toxicity classification Category 2 based on component data
exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate		No data available				
N,N-Dimethylacrylamide		No data available				
Hydroxycyclohexyl phenyl ketone		No data available				
Hexane-1,6-diol		No data available				

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diacrylate						
Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide		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
exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate			No data available				
N,N-Dimethylacrylamide	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		Irritation Positive		Not classified
Hydroxycyclohexyl phenyl ketone			No data available				
Hexane-1,6-diol diacrylate			No data available				
Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide			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.				Category 2 based on component data
exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate			No data available				
N,N-Dimethylacrylamide			No data available				
Hydroxycyclohexyl phenyl ketone			No data available				
Hexane-1,6-diol diacrylate	Dermal	skin	May cause damage to organs though		LOAEL 70 mg/kg/day		Category 2

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			prolonged or repeated exposure				
Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide			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
exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate	Not an aspiration hazard	Not classified
N,N-Dimethylacrylamide	Not an aspiration hazard	Not classified
Hydroxycyclohexyl phenyl ketone	Not an aspiration hazard	Not classified
Hexane-1,6-diol diacrylate	Not an aspiration hazard	Not classified
Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	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

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13.1 Waste treatment methods

Dispose of contents/ container in accordance with the local/regional/national/international regulations

As a disposal alternative, dispose of waste product in a facility permitted to accept chemical 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

GS-2000-4526-7, GS-2000-4582-0, GS-2000-4734-7, GS-2000-5136-4

Not hazardous for transportation

SECTION 15: Regulatory information

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

Global inventory status

All applicable chemical ingredients in this material are listed on the European Inventory of Existing Chemical Substances (EINECS), or are exempt polymers whose monomers are listed on EINECS. Contact 3M for more information. The components of this product are in compliance with the chemical notification requirements of TSCA.

15.2. Chemical Safety Assessment

Not applicable

SECTION 16: Other information

List of relevant H statements

H301	Toxic if swallowed.
H311	Toxic in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H335	May cause respiratory irritation.
H361f	Suspected of damaging fertility.
H400	Very toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.

List of relevant R-phrases

R21	Harmful in contact with skin.
R22	Harmful if swallowed.
R23	Toxic by inhalation.
R36	Irritating to eyes.
R37	Irritating to respiratory system.

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R38	Irritating to skin.
R43	May cause sensitisation by skin contact.
R51/53	Toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.
R62	Possible risk of impaired fertility.

Revision information:

Revision Changes:

Section 1: 3M Product identification numbers was modified.

DISCLAIMER: The information on this Safety Data Sheet is based on 3M's experience and is correct to the best of 3M's knowledge at the date of publication. 3M does not accept 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