



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 LO100 Cyanoacrylate Adhesive

Product identification numbers

GS-2000-4435-1	GS-2000-4436-9	GS-2000-4683-6	GS-2000-4766-9	GS-2000-4930-1
GS-2000-5361-8	GS-2000-5453-3			

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

Identified uses

Industrial use.

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

This product is not classified as hazardous according to EU Directive 1999/45/EC.

2.2. Label elements

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

Symbols None.

3M Scotch-Weld LO100 Cyanoacrylate Adhesive

Contains:

No ingredients are assigned to the label.

Risk phrases None.

Safety phrases

S2 Keep out of the reach of children.
S24/25 Avoid contact with the skin and eyes.
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Special provisions concerning the labelling of certain substances

CYANOACRYLATE, DANGER: Bonds skin and eyes in seconds.

If eyelids are bonded, do not force open. In case of skin bonding, quickly soak in warm water and avoid excessive force to free bonded area.

2.3. Other hazards

May bond tissue rapidly.

SECTION 3: Composition/information on ingredients

Ingredient	CAS Nbr	EU Inventory	% by Wt	Classification
2-Methoxyethyl 2-cyanoacrylate	27816-23-5	EINECS 248-670-5	90 - 99	
Poly(methyl methacrylate)	9011-14-7		1 - 10	
Hydroquinone	123-31-9	EINECS 204-617-8	< 0.1	Carc. Cat. 3: R40; Muta. Cat. 3: R68; Xn: R22; Xi: R41; N: R50; R43 (EU) Acute Tox. 4, H302; Eye Dam. 1, H318; Skin Sens. 1, H317; Muta. 2, H341; Carc. 2, H351; Aquatic Acute 1, H400, M=10 (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 eyes with large amounts of water for at least 15 minutes. Get immediate medical attention. DO NOT force eyelids open.

Skin contact

For skin bonds: Quickly soak in warm water and avoid use of excessive force to free bonded area. If unable to free bonded area, or if lips or mouth are bonded, get medical attention. If irritation persists, 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

Carbon monoxide.
Carbon dioxide.
Oxides of nitrogen.

Condition

During combustion.
During combustion.
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

Evacuate area. Ventilate the area with fresh air. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. 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 using non-sparking tools. 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 metal 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

For industrial or professional use only. Avoid eye contact. Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid breathing of vapours created during the cure cycle. Avoid breathing of dust created by cutting, sanding, grinding or machining. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid contact with oxidising agents (eg. chlorine, chromic acid etc.) Vapours may travel long distances along the ground or floor to an ignition source and flash back. Avoid release to the environment.

7.2. Conditions for safe storage including any incompatibilities

Store away from acids. Store away from oxidising agents. Store in a well-ventilated place. Keep cool. Store away from strong bases. Keep container tightly closed to prevent contamination with water or air. If contamination is suspected, do not reseal container.

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
Hydroquinone	123-31-9	Health and Safety Comm. (UK)	TWA: 0.5 mg/m ³	

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

CELL: Ceiling

8.2. Exposure controls**8.2.1. Engineering controls**

Curing enclosures must be exhausted to outdoors or to a suitable emission control device. 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

Gloves made from the following material(s) are recommended: Fluoroelastomer

Polyethylene.

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.
Appearance/Odour	Clear liquid, with a sharp, pungent odour.
pH	<i>Not applicable.</i>
Boiling point/boiling range	≥ 150 °C [<i>Details: @ 2 mmHg</i>]
Melting point	<i>Not applicable.</i>
Flammability (solid, gas)	Flammable Liquid: Category 4.
Explosive properties	Not classified
Oxidising properties	Not classified
Flash point	≥ 85 °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	≤ 5.3 Pa [<i>@ 20 °C</i>]
Relative density	1.06 [<i>Ref Std: WATER=1</i>]
Water solubility	Nil
Partition coefficient: n-octanol/water	<i>No data available.</i>
Evaporation rate	Negligible
Vapour density	<i>No data available.</i>
Viscosity	0.08 - 0.12 Pa-s [<i>@ 23 °C</i>]
Density	1.06 g/ml

9.2. Other information

Hazardous air pollutants	≤ 0.1 % weight
Volatile organic compounds (VOC)	<i>No data available.</i>
VOC less H₂O & 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. May occur in large quantities only.

10.4 Conditions to avoid

Heat.

10.5 Incompatible materials

Strong oxidising agents.

Water

3M Scotch-Weld LO100 Cyanoacrylate Adhesive

Strong bases.
Amines.
Alcohols.

Material polymerises rapidly by contact with water, alcohol, amines, and alkalis.

10.6 Hazardous decomposition products

Substance

None known.

Condition

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

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

Bonds skin rapidly. Mild Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, and dryness.

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

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 ATE >5000 mg/kg	Not classified (0% unknown)
2-Methoxyethyl 2-cyanoacrylate			No data available	
Poly(methyl methacrylate)	Ingestion	Rat	LD50 > 5,000 mg/kg	Not classified
Hydroquinone	Dermal	Rat	LD50 > 4,800 mg/kg	Not classified
Hydroquinone	Ingestion	Rat	LD50 302 mg/kg	Category4

ATE = acute toxicity estimate

Skin Corrosion/Irritation

3M Scotch-Weld LO100 Cyanoacrylate Adhesive

Name	Species	Value	UN GHS Classification
Overall product		No test data available; calculated to be mild irritant	Category 3
2-Methoxyethyl 2-cyanoacrylate		No data available	
Poly(methyl methacrylate)		No data available	
Hydroquinone		Minimal irritation	Not classified

Serious Eye Damage/Irritation

Name	Species	Value	UN GHS Classification
Overall product		No test data available; calculated to be moderate irritant	Category 2B
2-Methoxyethyl 2-cyanoacrylate		No data available	
Poly(methyl methacrylate)		No data available	
Hydroquinone		Severe irritant	Category 2A

Skin Sensitisation

Name	Species	Value	UN GHS Classification
Overall product		No test data available.	Not classified based on component data
2-Methoxyethyl 2-cyanoacrylate		No data available	
Poly(methyl methacrylate)		No data available	
Hydroquinone		Sensitising	Category 1

Respiratory Sensitisation

Name	Species	Value	UN GHS Classification
Overall product		No test data available.	Not classified based on component data
2-Methoxyethyl 2-cyanoacrylate		No data available	
Poly(methyl methacrylate)		No data available	
Hydroquinone		No data available	

Germ Cell Mutagenicity

Name	Route	Value	UN GHS Classification
Overall product		No data available	Overall Germ Cell Mutagenicity classificationNot classified
Overall product		No test data available.	
2-Methoxyethyl 2-cyanoacrylate		No data available	
Poly(methyl methacrylate)		No data available	
Hydroquinone	In vivo	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
2-Methoxyethyl 2-cyanoacrylate			No data available	
Poly(methyl methacrylate)			No data available	
Hydroquinone	Dermal		Not carcinogenic	Not classified
Hydroquinone	Ingestion		Some positive data	Not classified

3M Scotch-Weld LO100 Cyanoacrylate Adhesive

			exist, but the data are not sufficient for classification	
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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-Methoxyethyl 2-cyanoacrylate		No data available				
Poly(methyl methacrylate)		No data available				
Hydroquinone	Ingestion	Some positive reproductive/developmental data exist, but the data are not sufficient for classification		NOEL 100 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
2-Methoxyethyl 2-cyanoacrylate			No data available				
Poly(methyl methacrylate)			No data available				
Hydroquinone	Ingestion	nervous system	Some positive data exist, but the data are not sufficient for classification		NOEL N/A		Not classified
Hydroquinone	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification		LOEL 400 mg/kg		Not classified

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

3M Scotch-Weld LO100 Cyanoacrylate Adhesive

2-Methoxyethyl 2-cyanoacrylate			No data available				
Poly(methyl methacrylate)			No data available				
Hydroquinone	Ingestion	blood	Some positive data exist, but the data are not sufficient for classification		LOAEL 15 mg/kg/day		Not classified
Hydroquinone	Ingestion	bone marrow liver	Some positive data exist, but the data are not sufficient for classification		NOAEL N/A		Not classified
Hydroquinone	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification		LOEL 50 mg/kg/day		Not classified
Hydroquinone	Ocular	eyes	Some positive data exist, but the data are not sufficient for classification		NOAEL N/A		Not classified

Aspiration Hazard

Name	Value	UN GHS Classification
Overall product	No test data available.	Not classified based on component and/or viscosity data
2-Methoxyethyl 2-cyanoacrylate	Not an aspiration hazard	Not classified
Poly(methyl methacrylate)	Not an aspiration hazard	Not classified
Hydroquinone	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:

3M Scotch-Weld LO100 Cyanoacrylate Adhesive

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

Reclaim if feasible. Incinerate in an industrial or commercial facility. 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 10 Waste adhesives and sealants other than those mentioned in 08 04 09

20 01 28 Paint, inks, adhesives and resins other than those mentioned in 20 01 27

SECTION 14: Transportation information

GS-2000-4435-1, GS-2000-4436-9, GS-2000-4683-6, GS-2000-4930-1

ADR/RID: NOT RESTRICTED FOR ROAD (ADR/RID), (--).

IMDG-CODE: not regulated, LIMITED QUANTITY.

ICAO/IATA: UN3334, AVIATION REGULATED LIQUID,N.O.S., (CYANOCRYLATE ESTER), 9..

GS-2000-4766-9, GS-2000-5361-8

ADR/RID: NOT RESTRICTED FOR ROAD (ADR/RID), (--).

IMDG-CODE: NOT RESTRICTED FOR TRANSPORTATION FOR IMDG/GGVSEE, LIMITED QUANTITY, EMS: --.

ICAO/IATA: UN3334, AVIATION REGULATED LIQUID,N.O.S., (2-METHOXYETHYL-2-CYANOACRYLATE), 9..

GS-2000-5453-3

ADR/RID: NOT RESTRICTED FOR ROAD (ADR/RID), (--).

IMDG-CODE: NOT RESTRICTED FOR TRANSPORTATION FOR IMDG/GGVSEE, LIMITED QUANTITY, EMS: --.

ICAO/IATA: UN3334, AVIATION REGULATED LIQUID,N.O.S., (2-METHOXYETHYL-2-CYANOACRYLATE), 9..

SECTION 15: Regulatory information

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

Carcinogenicity

<u>Ingredient</u>	<u>CAS Nbr</u>	<u>Classification</u>	<u>Regulation</u>
Hydroquinone	123-31-9	Carc.Cat.3	Regulation (EC) No. 1272/2008, Table 3.2
Hydroquinone	123-31-9	Carc. 2	Regulation (EC) No. 1272/2008, Table 3.1
Hydroquinone	123-31-9	Gr. 3: Not classifiable	International Agency for Research on Cancer
Poly(methyl methacrylate)	9011-14-7	Gr. 3: Not classifiable	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.
H341	Suspected of causing genetic defects.
H351	Suspected of causing cancer.
H400	Very toxic to aquatic life.

List of relevant R-phrases

R22	Harmful if swallowed.
R40	Limited evidence of a carcinogenic effect.
R41	Risk of serious damage to eyes.
R43	May cause sensitisation by skin contact.
R50	Very toxic to aquatic organisms.
R68	Possible risks of irreversible effects.

Revision information:

Revision Changes:

Section 1: Product identification numbers was modified.

Section 15: Carcinogenicity information was modified.

Section 13: EU waste code (product as sold) information was modified.

Section 2: Other hazards phrase was modified.

Section 16: Regulations – Inventories – EU ONLY was modified.

Section 11: Health Effects - Eye information was modified.

Section 11: Health Effects - Skin information was modified.

Section 6: Accidental release personal information was modified.

Section 6: Accidental release clean-up information was modified.

3M Scotch-Weld LO100 Cyanoacrylate Adhesive
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Section 7: Precautions safe handling information was modified.
Section 7: Conditions safe storage was modified.
Section 8: Appropriate Engineering controls information was modified.
Section 8: Personal Protection - Eye information was modified.
Section 13: Standard Phrase Category Waste GHS was modified.
Section 2.1: Classification 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