



Safety Data Sheet

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Document group:	38-2758-1	Version number:	2.00
Issue Date:	02/04/2019	Supersedes date:	13/08/2018

This Safety Data Sheet has been prepared in accordance with the GHS guidelines & India Hazardous substances (Classification, Labeling & Packaging) Draft Rules 2011.

SECTION 1: Identification

1.1. Product identifier

3M™ WB 54I water based Adhesive

Product Identification Numbers

IS-1201-1537-0

1.2. Recommended use and restrictions on use

Recommended use

Adhesive

1.3. Supplier's details

Address: 3M India Limited, plot-48-51, Electronic city, Hosur road, Bangalore-560100
Telephone: 080-39143000, contact Product EHS team
E Mail: productehs.in@mmm.com
Website: <http://solutions.3mindia.co.in>

1.4. Emergency telephone number

080-39143000 (Contact hours: 8:00 AM to 5:00 PM)

SECTION 2: Hazard identification

Under MSIHC Rules, information is noted below on flammability, acute toxicity and explosivity relevant to this product. In line with international standards, information on other hazard classes and associated precautionary statements relevant to this product are included as well.

2.1. Classification of the substance or mixture

Not classified as hazardous according to UN GHS criteria.

2.2. Label elements

Signal Word

Symbols

Pictograms

Not applicable.

2.3. Other hazards

None known.

SECTION 3: Composition/information on ingredients

This material is a mixture.

Ingredient	CAS Nbr	% by Wt
Acrylic copolymer	Trade Secret	50 - 60
Water	7732-18-5	40 - 50
Acrylate monomers	Trade Secret	< 1

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation

No need for first aid is anticipated.

Skin contact

No need for first aid is anticipated.

Eye contact

No need for first aid is anticipated.

If swallowed

No need for first aid is anticipated.

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. Suitable Extinguishing media

In case of fire: Use a fire fighting agent suitable for ordinary combustible material such as water or foam to extinguish.

5.2. Special hazards arising from the substance or mixture

None inherent in this product.

Hazardous Decomposition or By-Products

Substance

Carbon monoxide.

Carbon dioxide.

Irritant vapours or gases.

Condition

During combustion.

During combustion.

During combustion.

5.3. Special protective actions for fire-fighters

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice.

6.2. Environmental precautions

Avoid release to the environment.

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 physical, health, or environmental hazard. Collect as much of the spilled material as possible. Place in a closed container approved for transportation by appropriate authorities. Clean up residue with detergent and water. Seal the container. Dispose of collected material as soon as possible in accordance with applicable local/regional/national/international regulations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

For industrial/occupational use only. Not for consumer sale or use. Avoid release to the environment.

7.2. Conditions for safe storage including any incompatibilities

Store away from heat. Store away from acids. Store away from strong bases.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

If a component is disclosed in section 3 but does not appear in the table below, an occupational exposure limit is not available for the component.

Ingredient	CAS Nbr	Agency	Limit type	Additional comments
Acrylate monomers	Trade Secret	ACGIH	TWA:2 ppm	Dermal Sensitizer, A4: Not class. as human carcin

ACGIH : American Conference of Governmental Industrial Hygienists

AIHA : American Industrial Hygiene Association

CMRG : Chemical Manufacturer's Recommended Guidelines

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

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

None required.

Skin/hand protection

PPE No chemical protective gloves are required.

Respiratory protection

None required.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid.
Specific Physical Form:	Emulsion
Appearance/Odour	Dull White
Odour threshold	<i>No data available.</i>
pH	4 - 6 [Details:@ 30°C]
Melting point/Freezing point: NA	<i>Not applicable.</i>
Boiling point/Initial boiling point/Boiling range	100 °C
Flash point	100 °C
Evaporation rate	<i>No data available.</i>
Flammability (solid, gas)	Not applicable.
Flammable Limits(LEL)	<i>No data available.</i>
Flammable Limits(UEL)	<i>No data available.</i>
Vapour pressure	<i>No data available.</i>
Vapour density	<i>No data available.</i>
Density	1.025 - 1.075 g/cm ³
Relative density	<i>No data available.</i>
Water solubility	<i>No data available.</i>
Water solubility	Moderate
Solubility- non-water	<i>No data available.</i>
Partition coefficient: n-octanol/water	<i>Not applicable.</i>
Autoignition temperature	<i>No data available.</i>
Decomposition temperature	<i>Not applicable.</i>
Viscosity	11,000 - 12,000 mPa-s [Test Method:Brookfield]

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.

High shear and high temperature conditions

Temperatures above the boiling point.

10.5 Incompatible materials

Strong acids.

Strong bases.

10.6 Hazardous decomposition products

Substance

None known.

Condition

Refer to section 5.2 for hazardous decomposition products during combustion.

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:

Inhalation

No known health effects.

Skin contact

Contact with the skin during product use is not expected to result in significant irritation.

Eye contact

Contact with the eyes during product use is not expected to result in significant irritation.

Ingestion

No known health effects.

Toxicological Data

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

Acute Toxicity

Name	Route	Species	Value
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
Acrylate monomers	Dermal	Rabbit	LD50 > 2,000 mg/kg
Acrylate monomers	Inhalation-Vapor (4 hours)	Rat	LC50 10.3 mg/l
Acrylate monomers	Ingestion	Rat	LD50 3,143 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Acrylate monomers	Rabbit	Irritant

Serious Eye Damage/Irritation

Name	Species	Value
Acrylate monomers	Rabbit	Severe irritant

Skin Sensitisation

3M™ WB 54I water based Adhesive

Name	Species	Value
Acrylate monomers	Mouse	Sensitising

Respiratory Sensitisation

For the component/components, either no data are currently available or the data are not sufficient for classification.

Germ Cell Mutagenicity

Name	Route	Value
Acrylate monomers	In Vitro	Not mutagenic
Acrylate monomers	In vivo	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
Acrylate monomers	Dermal	Mouse	Not carcinogenic
Acrylate monomers	Inhalation	Rat	Not carcinogenic

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

Name	Route	Value	Species	Test result	Exposure Duration
Acrylate monomers	Inhalation	Not classified for female reproduction	Rat	NOAEL 0.13 mg/l	during organogenesis
Acrylate monomers	Ingestion	Not classified for development	Mouse	NOAEL 1,000 mg/kg/day	during organogenesis
Acrylate monomers	Inhalation	Not classified for development	Rat	NOAEL 0.13 mg/l	during organogenesis

Target Organ(s)**Specific Target Organ Toxicity - single exposure**

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Acrylate monomers	Inhalation	respiratory irritation	May cause respiratory irritation	Rat	NOAEL 0.57 mg/l	13 weeks

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Acrylate monomers	Inhalation	endocrine system hematopoietic system liver kidney and/or bladder	Not classified	Rat	NOAEL 2.9 mg/l	13 weeks
Acrylate monomers	Inhalation	respiratory system	Not classified	Rat	NOAEL 0.11 mg/l	13 weeks
Acrylate monomers	Inhalation	heart	Not classified	Rat	NOAEL 2.9 mg/l	13 weeks
Acrylate monomers	Ingestion	kidney and/or bladder heart hematopoietic system liver nervous system	Not classified	Rat	NOAEL 84 mg/kg/day	13 weeks

Aspiration Hazard

For the component/components, either no data are currently available or the data are not sufficient for classification.

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:**

Not acutely toxic to aquatic life by GHS criteria.

Chronic aquatic hazard:

Not chronically toxic to aquatic life by GHS criteria.

No product test data available.

Material	CAS Nbr	Organism	Type	Exposure	Test endpoint	Test result
Acrylate monomers	Trade Secret	Green Algae	Experimental	96 hours	EC50	2.65 mg/l
Acrylate monomers	Trade Secret	Rainbow trout	Experimental	96 hours	LC50	5.2 mg/l
Acrylate monomers	Trade Secret	Sheepshead Minnow	Experimental	96 hours	LC50	2.1 mg/l
Acrylate monomers	Trade Secret	Water flea	Experimental	48 hours	EC50	8.2 mg/l
Acrylate monomers	Trade Secret	Water flea	Experimental	21 days	NOEC	0.136 mg/l

12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Acrylate monomers	Trade Secret	Estimated Photolysis		Photolytic half-life (in air)	2.2 days (t 1/2)	Other methods
Acrylate monomers	Trade Secret	Experimental Biodegradation	28 days	CO2 evolution	80-90 %CO2 evolution/THC O2 evolution	OECD 310 CO2 Headspace

12.3 : Bioaccumulative potential

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Acrylate monomers	Trade Secret	Experimental Bioconcentration		Log Kow	2.38	Other methods

12.4. Mobility in soil

Please contact manufacturer for more details

12.5 Other Adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Disposal methods

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

Prior to disposal, consult all applicable authorities and regulations to insure proper classification. Dispose of waste product in a permitted industrial waste facility. As a disposal alternative, incinerate in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. Empty and clean product containers may be disposed as non-hazardous waste. Consult your specific regulations and service providers to determine available options and requirements.

SECTION 14: Transport Information

Not hazardous for transportation.

Air Transport (IATA) Regulations

UN No Not applicable

Proper Shipping Name Not applicable

Hazard Class/Division Not applicable

Subsidiary Risk Not applicable

Packing Group: Not applicable

Marine Transport (IMDG)

UN No Not applicable

Proper Shipping Name Not applicable

Hazard Class/Division Not applicable

Subsidiary Risk Not applicable

Packing Group: Not applicable

Environmental Hazards: Not applicable

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.

Applicable Environmental, Health and Safety Regulations

The Manufacture, Storage and Import of Hazardous Chemical Rules, 1989

Hazardous Waste(Management , Handling & Transboundary) Rules, 2008

The following ingredients are listed as hazardous on Part II of Schedule I of the India Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) rules

None.

The following ingredients are classified as hazardous based on the criteria listed under Part I of Schedule I of the India Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) rules:

The product is classified as Non Hazardous.

SECTION 16: Other information

NFPA Hazard Classification

Health: 0 **Flammability:** 1 **Instability:** 0 **Special Hazards:** None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address

the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

Revision information:

Label: GHS Classification information was deleted.
Label: GHS Classification information was modified.
Label: GHS Environmental Hazard Statements information was deleted.
Label: GHS Precautionary - Disposal information was deleted.
Label: GHS Precautionary - Prevention information was deleted.
Label: GHS Precautionary - Response information was deleted.
Label: Graphic information was modified.
Label: Signal Word information was deleted.
Label: Symbol information was deleted.
Section 2: Ingredient table information was modified.
Section 4: First aid for eye contact information information was modified.
Section 4: First aid for ingestion (swallowing) information information was modified.
Section 4: First aid for inhalation information information was modified.
Section 4: First aid for skin contact information information was modified.
Section 5: Hazardous combustion products table information was modified.
Section 6: Accidental release clean-up information information was modified.
Section 6: Accidental release environmental information information was modified.
Section 6: Accidental release personal information information was modified.
Section 7: Conditions safe storage information was modified.
Section 7: Precautions safe handling information information was modified.
Section 8: Eye protection information information was added.
Section 8: Eye/face protection information information was deleted.
Section 8: Occupational exposure limit table information was modified.
Section 8: Personal Protection - Eye information information was deleted.
Section 8: Personal Protection - Respiratory Information information was deleted.
Section 8: Personal Protection - Skin/body information information was deleted.
Section 8: Personal Protection - Skin/hand information information was modified.
Section 8: Respiratory protection - recommended respirators guide information was deleted.
Section 8: Respiratory protection - recommended respirators information information was deleted.
Section 8: Respiratory protection information information was added.
Section 8: Skin protection - protective clothing information information was deleted.
Section 8: Skin protection - recommended gloves information information was deleted.
Section 8: Skin protection - recommended gloves text information was deleted.
Section 9: Solubility (non-water) information was added.
Section 09: Solubility as text (non-water) information was deleted.
Section 9: Solubility in water text information was added.
Section 11: Acute Toxicity table information was modified.
Section 11: Carcinogenicity Table information was modified.
Section 11: Germ Cell Mutagenicity Table information was modified.
Section 11: Health Effects - Eye information information was modified.
Section 11: Health Effects - Ingestion information information was modified.
Section 11: Health Effects - Inhalation information information was modified.
Section 11: Health Effects - Skin information information was modified.
Section 11: Reproductive Toxicity Table information was modified.
Section 11: Serious Eye Damage/Irritation Table information was modified.
Section 11: Skin Corrosion/Irritation Table information was modified.
Section 11: Skin Sensitization Table information was modified.
Section 11: Target Organs - Repeated Table information was modified.
Section 11: Target Organs - Single Table information was modified.
Section 12: Acute aquatic hazard information information was modified.
Section 12: Component ecotoxicity information information was modified.

Section 12: Persistence and Degradability information information was modified.

Section 12:Biocumulative potential information information was modified.

Section 13: Standard Phrase Category Waste GHS information was modified.

Section 16: NFPA hazard classification for health information was modified.

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