Safety Data Sheet

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This Safety Data Sheet has been prepared in accordance with the New Zealand, Hazardous Substances (Safety Data Sheets) Notice 2017.

SECTION 1: Identification

1.1. Product identifier
3M(TM) Screen Cleaner #CL681

Product Identification Numbers
70-0051-5249-4

1.2. Recommended use and restrictions on use

Recommended use
Screen cleaner for computer monitors, Cleaning solution

1.3. Supplier's details
Address: 3M New Zealand Ltd, 94 Apollo Drive, Rosedale 0632, Auckland
Telephone: (09) 477 4040
E Mail: innovation@nz.mmm.com
Website: 3m.co.nz

1.4. Emergency telephone number
24 hr Medical Emergency, National Poisons Centre, 0800 764 766 (0800 POISON)

SECTION 2: Hazard identification

Classified as hazardous in accordance with the relevant criteria of the HSNO Act 1996, the Hazardous Substances (Classification) Notice 2017 and Hazardous Substances (Minimum Degrees of Hazard) Notice 2017.
Refer to Section 14 of this Safety Data Sheet for product Dangerous Goods Classification.

2.1. Classification of the substance or mixture

GHS	HSNO
Serious Eye Damage/Irritation: Category 2	6.4A Irritating to the eye
Skin Corrosion/Irritation: Category 3	6.3B Irritating to the skin
Acute Aquatic Toxicity: Category 2	9.1D Aquatic toxicity (acute)

2.2. Label elements
SIGNAL WORD

WARNING!

Symbols:
Not applicable.

HAZARD STATEMENTS:

H320	Causes eye irritation.
H316	Causes mild skin irritation.
H401	Toxic to aquatic life.

PRECAUTIONARY STATEMENTS

Prevention:

P264B	Wash exposed skin thoroughly after handling.

Response:

P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313	If eye irritation persists: Get medical advice/attention.
P332 + P313	If skin irritation occurs: Get medical advice/attention.

Disposal:

P501	Dispose of contents/container in accordance with applicable local/regional/national/international regulations.

SECTION 3: Composition/information on ingredients

Ingredient	CAS Nbr	% by Weight
Water	7732-18-5	90 - 99
Acrylic polymer	9003-01-4	0 - 5
Sodium dodecyl sulphate	151-21-3	0 - 3
2,2',2"-Nitrilotriethanol	102-71-6	0 - 2
Sulfonic acid derivative	Trade Secret	0 - 2
Sodium hydroxide	1310-73-2	< 0.1

SECTION 4: First aid measures

4.1. Description of first aid measures

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

Skin contact
Wash with soap and water. If signs/symptoms develop, get medical attention.

Eye contact
Flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. If signs/symptoms persist, get medical attention.
A product risk assessment is recommended to determine if eye wash facilities may be required when using this product in the workplace.

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. Suitable extinguishing media
Non-combustible. Use a fire fighting agent suitable for surrounding fire.

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.
Oxides of nitrogen.	During combustion.
Oxides of sulphur.	During combustion.

5.3. Special protective actions for fire-fighters
No special protective actions for fire-fighters are anticipated.

5.4. Hazchem code: Not applicable.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Evacuate area. Ventilate the area with fresh air. 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.

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 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

Refer to Section 15 - Controls for more information

7.1. Precautions for safe handling
Avoid eye contact. Avoid breathing dust/fume/gas/mist/vapours/spray. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Avoid release to the environment.

7.2. Conditions for safe storage including any incompatibilities
No special storage requirements.

7.3. Certified handler
Not required

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
2,2',2"-Nitrilotriethanol	102-71-6	ACGIH	TWA:5 mg/m3	
2,2',2"-Nitrilotriethanol	102-71-6	New Zealand WES	TWA(8 hours):5 mg/m3	
Sodium hydroxide	1310-73-2	ACGIH	CEIL:2 mg/m3	
Sodium hydroxide	1310-73-2	New Zealand WES	CEIL:2 mg/m3	

ACGIH : American Conference of Governmental Industrial Hygienists
AIHA : American Industrial Hygiene Association
CMRG : Chemical Manufacturer's Recommended Guidelines
New Zealand WES : New Zealand Workplace Exposure Standards.
TWA: Time-Weighted-Average
STEL: Short Term Exposure Limit
ppm: parts per million
mg/m^3: 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

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended:
Indirect vented goggles.

Refer AS/NZS 1336 - Recommended practices for occupational eye protection and for performance specifications AS/NZS 1337, Parts 1 - 6 - Personal eye-protection.

Skin/hand protection
Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing.
Gloves made from the following material(s) are recommended: Nitrile rubber.

Respiratory protection

Select and use respiratory protection to prevent an inhalation exposure based on the results of an exposure assessment. Consult with your respirator manufacturer for selection of appropriate types of respirators. An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:
Half facepiece or full facepiece air-purifying respirator suitable for particulates.

For questions about suitability for a specific application, consult with your respirator manufacturer.

Refer AS/NZS 1715 - Selection, use and maintenance of respiratory protective equipment and AS/NZS 1716 - Respiratory protective devices.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid.
Appearance/Odour	Clear liquid with no odour.
Odour threshold	*No data available.*
pH	7
Melting point/Freezing point	*Not applicable.*
Boiling point/Initial boiling point/Boiling range	100 ºC
Flash point	No flash point
Evaporation rate	*No data available.*
Flammability (solid, gas)	Not applicable.
Flammable Limits(LEL)	*Not applicable.*
Flammable Limits(UEL)	*Not applicable.*
Vapour pressure	2,399.8 Pa [@ 20 ºC]
Vapour density	*No data available.*
Density	1 g/ml
Relative density	1 [*Ref Std:*WATER=1]
Water solubility	Complete
Solubility- non-water	*No data available.*
Partition coefficient: n-octanol/water	*No data available.*
Autoignition temperature	*Not applicable.*
Decomposition temperature	*No data available.*
Viscosity	*No data available.*

SECTION 10: Stability and reactivity

10.1 Reactivity
This material is considered to be non reactive under normal use conditions

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
None known.

10.6 Hazardous decomposition products

Substance	Condition
None known.	

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

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

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

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

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	Dermal		No data available; calculated ATE >5,000 mg/kg
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
Acrylic polymer	Dermal	Rabbit	LD50 > 3,000 mg/kg
Acrylic polymer	Ingestion	Rat	LD50 > 2,500 mg/kg
Sodium dodecyl sulphate	Dermal	Rabbit	LD50 580 mg/kg
Sodium dodecyl sulphate	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 0.975 mg/l
Sodium dodecyl sulphate	Ingestion	Rat	LD50 1,650 mg/kg
2,2',2"-Nitrilotriethanol	Dermal	Rabbit	LD50 > 2,000 mg/kg
2,2',2"-Nitrilotriethanol	Ingestion	Rat	LD50 9,000 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value

Sodium dodecyl sulphate	Rabbit	Irritant
2,2',2"-Nitrilotriethanol	Rabbit	Minimal irritation
Sodium hydroxide	Rabbit	Corrosive

Serious Eye Damage/Irritation

Name	Species	Value
Sodium dodecyl sulphate	Rabbit	Corrosive
2,2',2"-Nitrilotriethanol	Rabbit	Mild irritant
Sodium hydroxide	Rabbit	Corrosive

Skin Sensitisation

Name	Species	Value
2,2',2"-Nitrilotriethanol	Human	Not classified
Sodium hydroxide	Human	Not classified

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
2,2',2"-Nitrilotriethanol	In Vitro	Not mutagenic
2,2',2"-Nitrilotriethanol	In vivo	Not mutagenic
Sodium hydroxide	In Vitro	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
2,2',2"-Nitrilotriethanol	Dermal	Multiple animal species	Not carcinogenic
2,2',2"-Nitrilotriethanol	Ingestion	Mouse	Some positive data exist, but the data are not sufficient for classification

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test result	Exposure Duration
2,2',2"-Nitrilotriethanol	Ingestion	Not classified for development	Mouse	NOAEL 1,125 mg/kg/day	during organogenesis

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Sodium dodecyl sulphate	Inhalation	respiratory irritation	May cause respiratory irritation	similar health hazards	NOAEL Not available	
Sodium hydroxide	Inhalation	respiratory irritation	May cause respiratory irritation	Human	NOAEL Not available	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
2,2',2"-Nitrilotriethanol	Dermal	kidney and/or	Not classified	Multiple	NOAEL	2 years

		bladder		animal species	2,000 mg/kg/day	
2,2',2"-Nitrilotriethanol	Dermal	liver	Not classified	Mouse	NOAEL 4,000 mg/kg/day	13 weeks
2,2',2"-Nitrilotriethanol	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 1,000 mg/kg/day	2 years
2,2',2"-Nitrilotriethanol	Ingestion	liver	Not classified	Guinea pig	NOAEL 1,600 mg/kg/day	24 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
Ecotoxic to the aquatic environment.
Acute Aquatic Toxicity: Category 2 (HSNO 9.1D Aquatic toxicity)

No product test data available.

Material	CAS Number	Organism	Type	Exposure	Test endpoint	Test result
Acrylic polymer	9003-01-4	Zebra Fish	Experimental	96 hours	LC50	>200 mg/l
Acrylic polymer	9003-01-4	Green Algae	Experimental	72 hours	EC50	40 mg/l
Acrylic polymer	9003-01-4	Water flea	Experimental	48 hours	EC50	>200 mg/l
Acrylic polymer	9003-01-4	Green algae	Experimental	96 hours	NOEC	32.8 mg/l
Acrylic polymer	9003-01-4	Water flea	Experimental	21 days	NOEC	5.6 mg/l
Acrylic polymer	9003-01-4	Fathead minnow	Experimental	32 days	NOEC	56 mg/l
Sodium dodecyl sulphate	151-21-3	Crustecea other	Experimental	48 hours	LC50	1.9 mg/l
Sodium dodecyl sulphate	151-21-3	Atlantic Silverside	Experimental	96 hours	LC50	2.8 mg/l
Sodium dodecyl sulphate	151-21-3	Water flea	Experimental	48 hours	LC50	1.4 mg/l
Sodium dodecyl sulphate	151-21-3	Fish other	Experimental	96 hours	LC50	0.59 mg/l

Sodium dodecyl sulphate	151-21-3	Algae or other aquatic plants	Experimental	96 hours	EC50	30.2 mg/l
Sodium dodecyl sulphate	151-21-3	Green algae	Experimental	96 hours	EC50	117 mg/l
Sodium dodecyl sulphate	151-21-3	Green Algae	Experimental	96 hours	Effect Concentration 10%	12 mg/l
Sodium dodecyl sulphate	151-21-3	Water flea	Experimental	7 days	NOEC	0.88 mg/l
Sodium dodecyl sulphate	151-21-3	Fathead minnow	Experimental	42 days	NOEC	1.357 mg/l
Sulfonic acid derivative	Trade Secret		Data not available or insufficient for classification			
2,2',2"-Nitrilotriethanol	102-71-6	Green algae	Experimental	72 hours	EC50	512 mg/l
2,2',2"-Nitrilotriethanol	102-71-6	Fathead minnow	Experimental	96 hours	LC50	11,800 mg/l
2,2',2"-Nitrilotriethanol	102-71-6	Water flea	Experimental	48 hours	EC50	609.98 mg/l
2,2',2"-Nitrilotriethanol	102-71-6	Green Algae	Experimental	72 hours	Effect Concentration 10%	26 mg/l
2,2',2"-Nitrilotriethanol	102-71-6	Water flea	Experimental	21 days	NOEC	16 mg/l
Sodium hydroxide	1310-73-2		Data not available or insufficient for classification			

12.2. Persistence and degradability

Material	CAS Number	Test type	Duration	Study Type	Test result	Protocol
Acrylic polymer	9003-01-4	Data not availbl-insufficient			N/A	
Sodium dodecyl sulphate	151-21-3	Experimental Biodegradation	28 days	CO2 evolution	95 % weight	OECD 301B - Modified sturm or CO2
Sulfonic acid derivative	Trade Secret	Estimated Biodegradation	28 days	BOD	0.3 % weight	OECD 301C - MITI test (I)
2,2',2"-Nitrilotriethanol	102-71-6	Experimental Biodegradation	19 days	Dissolv. Organic Carbon Deplet	96 % weight	Other methods
Sodium hydroxide	1310-73-2	Data not availbl-			N/A	

		insufficient				

12.3 : Bioaccumulative potential

Material	CAS Number	Test type	Duration	Study Type	Test result	Protocol
Acrylic polymer	9003-01-4	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Sodium dodecyl sulphate	151-21-3	Experimental Bioconcentration		Log Kow	≤-2.03	Other methods
Sulfonic acid derivative	Trade Secret	Estimated Bioconcentration		Bioaccumulation factor	2.7	Estimated: Bioconcentration factor
2,2',2"-Nitrilotriethanol	102-71-6	Experimental BCF-Carp	42 days	Bioaccumulation factor	<3.9	Other methods
Sodium hydroxide	1310-73-2	Data not available or insufficient for classification	N/A	N/A	N/A	N/A

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
In accordance with the Hazardous Substances (Disposal) Notice 2017 and the relevant criteria of the HSNO Act 1996.

Dispose of waste product in a permitted industrial waste facility. 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.

Packaging (that may or may not contain any residual substance) may be lawfully disposed of by householders or other consumers through public or commercial waste collection services.

SECTION 14: Transport Information

New Zealand Land Transport Rule: Dangerous Goods - Road/Rail Transport
UN No.: Not applicable.
Proper Shipping Name: Not applicable.
Class/Division: Not applicable.
Sub Risk: Not applicable.
Packing Group: Not applicable.

Hazchem Code: Not applicable.
IERG: Not applicable.

International Air Transport Association (IATA) - Air Transport
UN No.: Not applicable.
Proper Shipping Name: Not applicable.
Class/Division: Not applicable.
Sub Risk: Not applicable.
Packing Group: Not applicable.

International Maritime Dangerous Goods Code (IMDG) - Marine Transport
UN No.: Not applicable.
Proper Shipping Name: Not applicable.
Class/Division: Not applicable.
Sub Risk: Not applicable.
Packing Group: Not applicable.
Marine Pollutant: Not applicable.

SECTION 15: Regulatory information

HSNO Approval number	HSR002530
Group standard name	Cleaning Products (Subsidiary Hazard) Group Standard 2017
HSNO Hazard classification	Refer to Section 2: Hazard identification

NZ Inventory of Chemicals (NZIoC) Status
All applicable chemical ingredients in this material are in compliance with NZIoC listing requirements.

Controls in accordance with the Health and Safety at Work (Hazardous Substances) Regulations 2017

Certified handler	Not required
Location Compliance Certificate	Not required
Hazardous atmosphere zone	Not required
Fire extinguishers	Not required
Emergency response plan	100 L or 100 kg (for a HSNO 9.1A substance); or 1,000 L or 1,000 kg (for a HSNO 6.1D, 6.5A, 6.5B, 9.1B or 9.1C substance); or 10,000 L or 10,000 kg (for a HSNO 6.6A, 6.8A, 6.9A, 8.3A, 9.1D substance)
Secondary containment	100 L or 100 kg (for a HSNO 9.1A substance); or 1,000 L or 1,000 kg (for a HSNO 6.1D, 6.5A, 6.5B, 9.1B or 9.1C substance); or 10,000 L or 10,000 kg (for a HSNO 6.6A, 6.8A, 6.9A, 8.3A, 9.1D substance)
Tracking	Not required
Warning signage	100 L or 100 kg (for a HSNO 9.1A substance); or 1,000 L or 1,000 kg (for a HSNO 8.3A, 9.1B or 9.1C substance); or 10,000 L or 10,000 kg (for a HSNO 6.1D or 9.1D substance)

SECTION 16: Other information

Revision information:
Complete document review.

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Key to abbreviations and acronyms
GHS means the Globally Harmonised System of Classification and Labelling of Chemicals, 5th revised edition 2013
HSNO means Hazardous Substances and New Organisms Act 1996

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