



Safety Data Sheet

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This Safety Data Sheet has been prepared in accordance with the Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice (Safe Work Australia, December 2011)

SECTION 1: Identification

1.1. Product identifier

3M Glass Cleaner

Product Identification Numbers

AN-0105-5840-9

1.2. Recommended use and restrictions on use

Recommended use

Glass Cleaner, Glass cleaner

For Industrial or Consumer Use.

1.3. Supplier's details

Address: 3M Australia - Building A, 1 Rivett Road, North Ryde NSW 2113
Telephone: 136 136
E Mail: productinfo.au@mmm.com
Website: www.3m.com.au

1.4. Emergency telephone number

EMERGENCY: 1800 097 146 (Australia only)

SECTION 2: Hazard identification

This product is classified as a hazardous chemical according to the Model Work Health and Safety Regulations, 2011.

Refer to Section 14 of this Safety Data Sheets for product Dangerous Goods Classification.

2.1. Classification of the substance or mixture

Flammable Aerosol: Category 1.
Gas under pressure: Liquefied gas.
Serious Eye Damage/Irritation: Category 2.
Skin Corrosion/Irritation: Category 2.
Specific Target Organ Toxicity (single exposure): Category 2.
Specific Target Organ Toxicity (single exposure): Category 3.

2.2. Label elements

The label elements below were prepared in accordance with the Code of Practice on Preparation of Safety Data Sheets for Hazardous Chemicals (Safe Work Australia, December 2011). This information may be different from the actual product label.

Signal word

DANGER!

Symbols

Flame | Gas cylinder | Exclamation mark | Health Hazard |

Pictograms



Hazard statements

| | |
|------|------------------------------------------------------|
| H222 | Extremely flammable aerosol. |
| H280 | Contains gas under pressure; may explode if heated. |
| H319 | Causes serious eye irritation. |
| H315 | Causes skin irritation. |
| H336 | May cause drowsiness or dizziness. |
| H371 | May cause damage to organs: cardiovascular system |

Precautionary statements

Prevention:

| | |
|-------|--------------------------------------------------------------------|
| P210 | Keep away from heat/sparks/open flames/hot surfaces. - No smoking. |
| P211 | Do not spray on an open flame or other ignition source. |
| P251 | Do not pierce or burn, even after use. |
| P260 | Do not breathe dust/fume/gas/mist/vapours/spray. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P280B | Wear protective gloves and eye/face protection. |
| P270 | Do not eat, drink or smoke when using this product. |
| P264 | Wash thoroughly after handling. |

Response:

| | |
|--------------------|----------------------------------------------------------------------------------------------------------------------------------|
| P304 + P340 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. |
| 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. |
| P302 + P352 | IF ON SKIN: Wash with plenty of soap and water. |
| P332 + P313 | If skin irritation occurs: Get medical advice/attention. |
| P362 + P364 | Take off contaminated clothing and wash it before reuse. |
| P309 + P311 | IF exposed or you feel unwell: Call a POISON CENTRE or doctor/physician. |

Storage:

| | |
|-------------|----------------------------------------------------------------------|
| P410 + P412 | Protect from sunlight. Do not expose to temperatures exceeding 50°C. |
| P403 + P233 | Store in a well-ventilated place. Keep container tightly closed. |
| P405 | Store locked up. |

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Disposal:

P501

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

2.3. Other assigned/identified product hazards

3M Intentional misuse by deliberately concentrating and inhaling contents can be harmful or fatal.

2.4. Other hazards which do not result in classification

Harmful to aquatic life with long lasting effects.

SECTION 3: Composition/information on ingredients

This material is a mixture.

| Ingredient | CAS Nbr | % by Weight |
|-----------------|-----------|-------------|
| Water | 7732-18-5 | 80 - 90 |
| 2-Butoxyethanol | 111-76-2 | 5 - 10 |
| Propane | 74-98-6 | 1 - 10 |
| Butane | 106-97-8 | 1 - 5 |
| 2-Aminoethanol | 141-43-5 | 0.5 - 1 |

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation

Remove person to fresh air. 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.

Eye contact

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

Exposure may increase myocardial irritability. Do not administer sympathomimetic drugs unless absolutely necessary.

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

Use a fire fighting agent suitable for the surrounding fire.

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

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Substance

Carbon monoxide.
Carbon dioxide.
Irritant vapours or gases.

Condition

During combustion.
During combustion.
During combustion.

5.3. Special protective actions for fire-fighters

No special protective actions for fire-fighters are anticipated.

Hazchem Code: 2YE

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate area. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. 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. **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

If possible, seal leaking container. Place leaking containers in a well-ventilated area, preferably an operating exhaust hood, or if necessary outdoors on an impermeable surface until appropriate packaging for the leaking container or its contents is available. Contain spill. Cover spill area with a fire-extinguishing foam. An appropriate aqueous film forming foam (AFFF) is recommended. 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 using non-sparking tools. 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.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

For industrial or professional use only. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Do not breathe 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. Vapours may travel long distances along the ground or floor to an ignition source and flash back.

7.2. Conditions for safe storage including any incompatibilities

Store in a well-ventilated place. Keep container tightly closed. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. Store away from heat.

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

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for the component.

| Ingredient | CAS Nbr | Agency | Limit type | Additional comments |
|-----------------|----------|----------------|----------------------------------------------------------------------------------------------|----------------------------------|
| Butane | 106-97-8 | ACGIH | STEL:1000 ppm | |
| Butane | 106-97-8 | Australia OELs | TWA(8 hours):1900 mg/m ³ (800 ppm) | |
| Natural gas | 106-97-8 | ACGIH | Limit value not established: | |
| 2-Butoxyethanol | 111-76-2 | ACGIH | TWA:20 ppm | A3: Confirmed animal carcinogen. |
| 2-Butoxyethanol | 111-76-2 | Australia OELs | TWA(8 hours):96.9 mg/m ³ (20 ppm);STEL(15 minutes):242 mg/m ³ (50 ppm) | SKIN |
| 2-Aminoethanol | 141-43-5 | ACGIH | TWA:3 ppm;STEL:6 ppm | |
| 2-Aminoethanol | 141-43-5 | Australia OELs | TWA(8 hours): 7.5 mg/m ³ (3 ppm); STEL(15 minutes): 15 mg/m ³ (6 ppm) | |
| Propane | 74-98-6 | ACGIH | Limit value not established: | |
| Propane | 74-98-6 | Australia OELs | Limit value not established: | Explosion hazard, asphyxiant |

ACGIH : American Conference of Governmental Industrial Hygienists

AIHA : American Industrial Hygiene Association

Australia OELs : Australia. Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment

CMRG : Chemical Manufacturer's Recommended Guidelines

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

CEIL: Ceiling

Sen: Sensitiser

Sk: Absorption through the skin may be a significant source of exposure.

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.

Select and use eye protection in accordance with AS/NZS 1336. Eye protection should comply with the performance specifications of AS/NZS 1337.

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: Butyl rubber.

Fluoroelastomer

if this product is used in a manner that presents a higher potential for exposure (eg. spraying, high splash potential etc.), then use of protective coveralls may be necessary. Select and use body protection to prevent contact based on the results of an exposure assessment. The following protective clothing material(s) are recommended: Apron – Butyl rubber

Select and use gloves according to AS/NZ 2161.

Respiratory protection

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 organic vapours

Half facepiece or full facepiece supplied-air respirator.

Organic vapour respirators may have short service life.

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

Select and use respirators according to AS/NZS 1715. Respirators should comply with AS/NZS 1716 performance specifications. For information about respirators, call 3M on 1800 024 464.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|---------------------------------------------------|--------------------------------------------------|
| Physical state | Liquid. |
| Specific Physical Form: | Aerosol |
| Appearance/Odour | Light floral odor; Clear colour |
| Odour threshold | <i>No data available.</i> |
| pH | 9.5 - 11 |
| Melting point/Freezing point | <i>No data available.</i> |
| Boiling point/Initial boiling point/Boiling range | 100 °C [<i>Test Method:Estimated</i>] |
| Flash point | No flash point [<i>Test Method:Closed Cup</i>] |
| 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 | 0.998 g/ml |
| Relative density | 0.99 [<i>Ref Std:WATER=1</i>] |
| Water solubility | Complete |
| Solubility- non-water | <i>No data available.</i> |
| Partition coefficient: n-octanol/water | <i>No data available.</i> |
| Autoignition temperature | <i>No data available.</i> |
| Decomposition temperature | <i>No data available.</i> |
| Viscosity | <i>No data available.</i> |
| Percent volatile | <i>No data available.</i> |
| Heat of Combustion | <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. Conditions to avoid

Heat.

Sparks and/or flames.

Static discharge (Solids can generate static electricity charges when transferred and in mixing operations sufficient to be an ignition source.)

10.4. Possibility of hazardous reactions

Hazardous polymerisation will not occur.

10.5 Incompatible materials

Not determined

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:

Inhalation

Respiratory tract irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain. May cause additional health effects (see below).

Skin contact

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

Eye contact

Severe eye irritation: Signs/symptoms may include significant redness, swelling, pain, tearing, cloudy appearance of the cornea, and impaired vision.

Ingestion

Gastrointestinal irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhoea. May cause additional health effects (see below).

Additional Health Effects:

Single exposure may cause target organ effects:

Central nervous system (CNS) depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness.

Single exposure, above recommended guidelines, may cause:

Cardiac sensitisation: Signs/symptoms may include irregular heartbeat (arrhythmia), faintness, chest pain, and may be fatal.

Toxicological Data

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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 | Inhalation-Vapour(4 hr) | | No data available; calculated ATE >50 mg/l |
| Overall product | Ingestion | | No data available; calculated ATE >5,000 mg/kg |
| Propane | Inhalation-Gas (4 hours) | Rat | LC50 > 200,000 ppm |
| 2-Butoxyethanol | Dermal | Guinea pig | LD50 > 2,000 mg/kg |
| 2-Butoxyethanol | Inhalation-Vapour (4 hours) | Guinea pig | LC50 > 2.6 mg/l |
| 2-Butoxyethanol | Ingestion | Guinea pig | LD50 1,414 mg/kg |
| Butane | Inhalation-Gas (4 hours) | Rat | LC50 277,000 ppm |
| 2-Aminoethanol | Inhalation-Vapour | official classification | LC50 estimated to be 10 - 20 mg/l |
| 2-Aminoethanol | Dermal | Rabbit | LD50 1,000 mg/kg |
| 2-Aminoethanol | Ingestion | Rat | LD50 1,720 mg/kg |

ATE = acute toxicity estimate

Skin Corrosion/Irritation

| Name | Species | Value |
|-----------------|------------------------|---------------------------|
| Propane | Rabbit | Minimal irritation |
| 2-Butoxyethanol | Rabbit | Irritant |
| Butane | Professional judgement | No significant irritation |
| 2-Aminoethanol | Rabbit | Corrosive |

Serious Eye Damage/Irritation

| Name | Species | Value |
|-----------------|---------|---------------------------|
| Propane | Rabbit | Mild irritant |
| 2-Butoxyethanol | Rabbit | Severe irritant |
| Butane | Rabbit | No significant irritation |
| 2-Aminoethanol | Rabbit | Corrosive |

Skin Sensitisation

| Name | Species | Value |
|-----------------|------------|------------------------------------------------------------------------------|
| 2-Butoxyethanol | Guinea pig | Not sensitizing |
| 2-Aminoethanol | Guinea pig | Some positive data exist, but the data are not sufficient for classification |

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 |
|-----------------|----------|------------------------------------------------------------------------------|
| Propane | In Vitro | Not mutagenic |
| 2-Butoxyethanol | In Vitro | Some positive data exist, but the data are not sufficient for classification |
| Butane | In Vitro | Not mutagenic |

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|----------------|----------|---------------|
| 2-Aminoethanol | In Vitro | Not mutagenic |
| 2-Aminoethanol | In vivo | Not mutagenic |

Carcinogenicity

| Name | Route | Species | Value |
|-----------------|------------|-------------------------|------------------------------------------------------------------------------|
| 2-Butoxyethanol | Inhalation | Multiple animal species | 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-Butoxyethanol | Dermal | Not toxic to development | Rat | NOAEL 1,760 mg/kg/day | during gestation |
| 2-Butoxyethanol | Ingestion | Some positive developmental data exist, but the data are not sufficient for classification | Rat | NOAEL 100 mg/kg/day | during organogenesis |
| 2-Butoxyethanol | Inhalation | Some positive developmental data exist, but the data are not sufficient for classification | Multiple animal species | NOAEL 0.48 mg/l | during organogenesis |
| 2-Aminoethanol | Dermal | Not toxic to development | Rat | NOAEL 225 mg/kg/day | during organogenesis |
| 2-Aminoethanol | Ingestion | Not toxic to development | Rat | NOAEL 616 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 |
|-----------------|------------|-----------------------------------|------------------------------------------------------------------------------|-------------------------|---------------------|-------------------|
| Propane | Inhalation | cardiac sensitization | Causes damage to organs | Human | NOAEL Not available | |
| Propane | Inhalation | central nervous system depression | May cause drowsiness or dizziness | Human | NOAEL Not available | |
| Propane | Inhalation | respiratory irritation | All data are negative | Human | NOAEL Not available | |
| 2-Butoxyethanol | Dermal | endocrine system | Some positive data exist, but the data are not sufficient for classification | Rabbit | NOAEL 902 mg/kg | 6 hours |
| 2-Butoxyethanol | Dermal | liver | Some positive data exist, but the data are not sufficient for classification | Rabbit | LOAEL 72 mg/kg | not available |
| 2-Butoxyethanol | Dermal | kidney and/or bladder | Some positive data exist, but the data are not sufficient for classification | Rabbit | LOAEL 451 mg/kg | 6 hours |
| 2-Butoxyethanol | Dermal | blood | Some positive data exist, but the | Multiple animal species | NOAEL Not available | |

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|-----------------|------------|-----------------------------------|------------------------------------------------------------------------------|-------------------------|---------------------|------------------------|
| 1 | | | data are not sufficient for classification | | | |
| 2-Butoxyethanol | Inhalation | central nervous system depression | May cause drowsiness or dizziness | Human | NOAEL Not available | |
| 2-Butoxyethanol | Inhalation | respiratory irritation | Some positive data exist, but the data are not sufficient for classification | Human | NOAEL Not available | |
| 2-Butoxyethanol | Inhalation | blood | Some positive data exist, but the data are not sufficient for classification | Multiple animal species | NOAEL Not available | |
| 2-Butoxyethanol | Ingestion | central nervous system depression | May cause drowsiness or dizziness | Professional judgement | NOAEL Not available | |
| 2-Butoxyethanol | Ingestion | blood | Some positive data exist, but the data are not sufficient for classification | Multiple animal species | NOAEL Not available | |
| 2-Butoxyethanol | Ingestion | kidney and/or bladder | Some positive data exist, but the data are not sufficient for classification | Human | NOAEL Not available | poisoning and/or abuse |
| Butane | Inhalation | cardiac sensitization | Causes damage to organs | Human | NOAEL Not available | |
| Butane | Inhalation | central nervous system depression | May cause drowsiness or dizziness | Human and animal | NOAEL Not available | |
| Butane | Inhalation | heart | Some positive data exist, but the data are not sufficient for classification | Dog | NOAEL 5,000 ppm | 25 minutes |
| Butane | Inhalation | respiratory irritation | All data are negative | Rabbit | NOAEL Not available | |
| 2-Aminoethanol | Inhalation | respiratory irritation | May cause respiratory irritation | Human and animal | NOAEL Not available | |

Specific Target Organ Toxicity - repeated exposure

| Name | Route | Target Organ(s) | Value | Species | Test result | Exposure Duration |
|-----------------|------------|------------------|------------------------------------------------------------------------------|-------------------------|---------------------|-------------------|
| 2-Butoxyethanol | Dermal | blood | Some positive data exist, but the data are not sufficient for classification | Multiple animal species | NOAEL Not available | not available |
| 2-Butoxyethanol | Dermal | endocrine system | All data are negative | Rabbit | NOAEL 150 mg/kg/day | 90 days |
| 2-Butoxyethanol | Inhalation | liver | Some positive data exist, but the data are not sufficient for classification | Rat | NOAEL 2.4 mg/l | 14 weeks |

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| | | | | | | |
|-----------------|------------|---------------------------------------------------------------------------|------------------------------------------------------------------------------|-------------------------|---------------------|---------------|
| 2-Butoxyethanol | Inhalation | kidney and/or bladder | Some positive data exist, but the data are not sufficient for classification | Rat | NOAEL 0.15 mg/l | 14 weeks |
| 2-Butoxyethanol | Inhalation | blood | Some positive data exist, but the data are not sufficient for classification | Rat | LOAEL 0.15 mg/l | 6 months |
| 2-Butoxyethanol | Inhalation | endocrine system | Some positive data exist, but the data are not sufficient for classification | Dog | LOAEL 1.9 mg/l | 8 days |
| 2-Butoxyethanol | Ingestion | blood | Some positive data exist, but the data are not sufficient for classification | Rat | LOAEL 69 mg/kg/day | 13 weeks |
| 2-Butoxyethanol | Ingestion | kidney and/or bladder | Some positive data exist, but the data are not sufficient for classification | Multiple animal species | NOAEL Not available | not available |
| Butane | Inhalation | kidney and/or bladder | Some positive data exist, but the data are not sufficient for classification | Rat | NOAEL 4,489 ppm | 90 days |
| Butane | Inhalation | blood | All data are negative | Rat | NOAEL 4,489 ppm | 90 days |
| 2-Aminoethanol | Inhalation | liver kidney and/or bladder respiratory system | Some positive data exist, but the data are not sufficient for classification | Multiple animal species | NOAEL 0.656 mg/l | 5 weeks |
| 2-Aminoethanol | Ingestion | hematopoietic system liver kidney and/or bladder respiratory system | Some positive data exist, but the data are not sufficient for classification | Rat | NOAEL Not available | |

Aspiration Hazard

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

Exposure Levels

Refer Section 8.1 **Control Parameters** of this Safety Data Sheet.

Interactive Effects

Not determined.

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

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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:

GHS Chronic 3: Harmful to aquatic life with long lasting effects.

No product test data available.

| Material | CAS Number | Organism | Type | Exposure | Test endpoint | Test result |
|-----------------|------------|---------------|-------------------------------------------------------|----------|---------------|-------------|
| 2-Butoxyethanol | 111-76-2 | Rainbow trout | Experimental | 96 hours | LC50 | 1,474 mg/l |
| 2-Butoxyethanol | 111-76-2 | Water flea | Experimental | 48 hours | EC50 | 1,550 mg/l |
| 2-Butoxyethanol | 111-76-2 | Crustacea | Experimental | 96 hours | EC50 | 89.4 mg/l |
| 2-Butoxyethanol | 111-76-2 | Green Algae | Experimental | 72 hours | EC50 | >1,000 mg/l |
| 2-Aminoethanol | 141-43-5 | Water flea | Experimental | 48 hours | EC50 | 97 mg/l |
| 2-Aminoethanol | 141-43-5 | Green Algae | Experimental | 72 hours | EC50 | 2.5 mg/l |
| 2-Aminoethanol | 141-43-5 | Goldfish | Experimental | 96 hours | LC50 | 170 mg/l |
| 2-Butoxyethanol | 111-76-2 | Water flea | Experimental | 21 days | NOEC | 100 mg/l |
| 2-Butoxyethanol | 111-76-2 | Green Algae | Experimental | 72 hours | NOEC | 130 mg/l |
| 2-Aminoethanol | 141-43-5 | Water flea | Experimental | 21 days | NOEC | 0.85 mg/l |
| Butane | 106-97-8 | | Data not available or insufficient for classification | | | |
| Propane | 74-98-6 | | Data not available or insufficient for classification | | | |
| 2-Aminoethanol | 141-43-5 | Green algae | Experimental | 72 hours | NOEC | 1 mg/l |
| 2-Aminoethanol | 141-43-5 | Rainbow trout | Experimental | 96 hours | LC50 | 150 mg/l |

12.2. Persistence and degradability

| Material | CAS Number | Test type | Duration | Study Type | Test result | Protocol |
|-----------------|------------|-----------------------------|----------|-------------------------------|-------------------------------|---------------------------|
| Propane | 74-98-6 | Experimental Photolysis | | Photolytic half-life (in air) | 27.5 days (t _{1/2}) | Other methods |
| Butane | 106-97-8 | Experimental Photolysis | | Photolytic half-life (in air) | 12.3 days (t _{1/2}) | Other methods |
| 2-Butoxyethanol | 111-76-2 | Experimental Biodegradation | 14 days | BOD | 96 % weight | OECD 301C - MITI test (I) |

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|----------------|----------|-----------------------------|---------|-----|-------------|---------------------------|
| 2-Aminoethanol | 141-43-5 | Experimental Biodegradation | 14 days | BOD | 83 % weight | OECD 301C - MITI test (I) |
|----------------|----------|-----------------------------|---------|-----|-------------|---------------------------|

12.3 : Bioaccumulative potential

| Material | CAS Number | Test type | Duration | Study Type | Test result | Protocol |
|-----------------|------------|-------------------------------------------------------|----------|------------|-------------|---------------|
| Butane | 106-97-8 | Experimental Bioconcentration | | Log Kow | 2.89 | Other methods |
| 2-Butoxyethanol | 111-76-2 | Experimental Bioconcentration | | Log Kow | 0.83 | Other methods |
| 2-Aminoethanol | 141-43-5 | Experimental Bioconcentration | | Log Kow | -1.31 | Other methods |
| Propane | 74-98-6 | Data not available or insufficient for classification | N/A | N/A | N/A | N/A |
| Propane | 74-98-6 | Experimental Bioconcentration | | Log Kow | 2.36 | 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.

Incinerate in a permitted waste incineration facility. Facility must be capable of handling aerosol cans. As a disposal alternative, utilize an acceptable permitted waste disposal facility.

SECTION 14: Transport Information**Australian Dangerous Goods Code (ADG) - Road/Rail Transport**

UN No.: UN1950

Proper shipping name: AEROSOLS

Class/Division: 2.1

Sub Risk: Not applicable.

Packing Group: Not applicable.

Hazchem Code: 2YE

IERG: 49

International Air Transport Association (IATA) - Air Transport

UN No.: UN1950

Proper shipping name: AEROSOLS, FLAMMABLE

Class/Division: 2.1

Sub Risk: Not applicable.

Packing Group: Not applicable.

International Maritime Dangerous Goods Code (IMDG)- Marine Transport

UN No.: UN1950

Proper shipping name: AEROSOLS

Class/Division: 2.1

Sub Risk: Not applicable.

Packing Group: Not applicable.

Marine Pollutant: Not applicable.

SECTION 15: Regulatory information

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

Australian Inventory Status:

This product is defined as an article under the Industrial Chemicals (Notification and Assessment) Act 1989, as amended, and is exempt from inventory requirements under the Industrial Chemicals (Notification and Assessment) Act 1989 as amended.

Poison Schedule: This product has not been assessed for poisons scheduling as the product is intended for industrial and professional use only.

SECTION 16: Other information

Revision information:

Complete document review.

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 Safety 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.

Greenguard ® is a United States based program. The 'Low VOC' reference related to United States Federal and State regulations exemptions for some solvents.

3M Australia SDSs are available at www.3m.com.au