



## Safety Data Sheet

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### SECTION 1: Identification

#### 1.1. Product identifier

3M(TM) Keyboard Cleaner, #674

#### Product Identification Numbers

70-0051-2857-7, 70-0712-0791-7

#### 1.2. Recommended use and restrictions on use

##### Recommended use

COMPUTER KEYBOARD CLEANER

#### 1.3. Supplier's details

|                      |   |
|----------------------|---|
| <b>MANUFACTURER:</b> | 3M                                      |
| <b>DIVISION:</b>     | Office Supplies Division                |
| <b>ADDRESS:</b>      | 3M Center, St. Paul, MN 55144-1000, USA |
| <b>Telephone:</b>    | 1-888-3M HELPS (1-888-364-3577)         |

#### 1.4. Emergency telephone number

1-800-364-3577 or (651) 737-6501 (24 hours)

### SECTION 2: Hazard identification

#### 2.1. Hazard classification

Specific Target Organ Toxicity (single exposure): Category 1.

Specific Target Organ Toxicity (repeated exposure): Category 1.

#### 2.2. Label elements

##### Signal word

Danger

##### Symbols

Health Hazard |

##### Pictograms

**Hazard Statements**

Causes damage to organs:  
blood or blood-forming organs |

Causes damage to organs through prolonged or repeated exposure:  
blood or blood-forming organs |

**Precautionary Statements****General:**

Keep out of reach of children.

**Prevention:**

Do not breathe dust/fume/gas/mist/vapors/spray.  
Do not eat, drink or smoke when using this product.  
Wash thoroughly after handling.

**Response:**

IF exposed: Call a POISON CENTER or doctor/physician.

**Storage:**

Store locked up.

**Disposal:**

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

**Notes to Physician:**

Not applicable

**2.3. Hazards not otherwise classified**

None.

2% of the mixture consists of ingredients of unknown acute dermal toxicity.

2% of the mixture consists of ingredients of unknown acute inhalation toxicity.

## SECTION 3: Composition/information on ingredients

| Ingredient      | C.A.S. No. | % by Wt              |
|-----------------|------------|----------------------|
| WATER           | 7732-18-5  | 90 - 95              |
| 2-BUTOXYETHANOL | 111-76-2   | 1 - 5 Trade Secret * |
| BENZYL ALCOHOL  | 100-51-6   | 2 - 5 Trade Secret * |
| SODIUM CITRATE  | 68-04-2    | 1 - 5                |

\*The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

## 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.

**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**

Carbon monoxide  
Carbon dioxide

**Condition**

During Combustion  
During Combustion

**5.3. Special protective actions for fire-fighters**

No unusual fire or explosion hazards are anticipated.

## SECTION 6: Accidental release measures

**6.1. Personal precautions, protective equipment and emergency procedures**

Evacuate area. Ventilate the area with fresh air.

**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.

## SECTION 7: Handling and storage

**7.1. Precautions for safe handling**

Keep out of reach of children. Do not breathe dust/fume/gas/mist/vapors/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. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.)

**7.2. Conditions for safe storage including any incompatibilities**

Store away from oxidizing agents.

**SECTION 8: Exposure controls/personal protection****8.1. Control parameters****Occupational exposure limits**

| <b>Ingredient</b> | <b>C.A.S. No.</b> | <b>Agency</b>                  | <b>Limit type</b>      | <b>Additional Comments</b> |
|-------------------|-------------------|--------------------------------|------------------------|----------------------------|
| BENZYL ALCOHOL    | 100-51-6          | American Indust. Hygiene Assoc | TWA:44.2 mg/m3(10 ppm) |                            |
| 2-BUTOXYETHANOL   | 111-76-2          | Amer Conf of Gov. Indust. Hyg. | TWA:20 ppm             |                            |
| 2-BUTOXYETHANOL   | 111-76-2          | US Dept of Labor - OSHA        | TWA:240 mg/m3(50 ppm)  | Skin Notation              |

Amer Conf of Gov. Indust. Hyg. : American Conference of Governmental Industrial Hygienists

American Indust. Hygiene Assoc : American Industrial Hygiene Association

Chemical Manufacturer Rec Guid : Chemical Manufacturer's Recommended Guidelines

US Dept of Labor - OSHA : United States Department of Labor - Occupational Safety and Health Administration

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/vapors/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**

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

**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 vapors and particulates

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

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

|  |                                       |
|--|---------------------------------------|
| <b>General Physical Form:</b>                  | Liquid                                |
| <b>Odor, Color, Grade:</b>                     | Aqueous solution, slightly sweet odor |
| <b>Odor threshold</b>                          | <i>No Data Available</i>              |
| <b>pH</b>                                      | 7.5                                   |
| <b>Melting point</b>                           | <i>Not Applicable</i>                 |
| <b>Boiling Point</b>                           | 210 - 225 °F                          |
| <b>Flash Point</b>                             |                                       |
| <b>Flash Point</b>                             | No flash point                        |
| <b>Evaporation rate</b>                        | <=1 [ <i>Ref Std: BUOAC=1</i> ]       |
| <b>Flammability (solid, gas)</b>               | Not Applicable                        |
| <b>Flammable Limits(LEL)</b>                   | <i>No Data Available</i>              |
| <b>Flammable Limits(UEL)</b>                   | <i>No Data Available</i>              |
| <b>Vapor Pressure</b>                          | 16 mmHg [@ 68 °F]                     |
| <b>Vapor Density</b>                           | <i>No Data Available</i>              |
| <b>Density</b>                                 | 1 g/ml                                |
| <b>Specific Gravity</b>                        | 1 [ <i>Ref Std: WATER=1</i> ]         |
| <b>Solubility in Water</b>                     | Complete                              |
| <b>Solubility- non-water</b>                   | <i>No Data Available</i>              |
| <b>Partition coefficient: n-octanol/ water</b> | <i>No Data Available</i>              |
| <b>Autoignition temperature</b>                | <i>Not Applicable</i>                 |
| <b>Decomposition temperature</b>               | <i>No Data Available</i>              |
| <b>Viscosity</b>                               | 1.1 centipoise                        |

## 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 polymerization will not occur.

### 10.4. Conditions to avoid

Not determined

### 10.5. Incompatible materials

Strong oxidizing agents

### 10.6. Hazardous decomposition products

| <u>Substance</u> | <u>Condition</u> |
|------------------|------------------|
| 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 labeling, 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 target organ effects after inhalation.

#### Skin Contact:

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

#### Eye Contact:

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

#### Ingestion:

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

May cause target organ effects after ingestion.

#### Target Organ Effects:

#### Single exposure may cause:

Blood Effects: Signs/symptoms may include generalized weakness and fatigue, skin pallor, changes in blood clotting time, internal bleeding, and/or hemoglobinemia.

#### Prolonged or repeated exposure may cause:

Blood Effects: Signs/symptoms may include generalized weakness and fatigue, skin pallor, changes in blood clotting time, internal bleeding, and/or hemoglobinemia.

#### 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 | Inhalation-Vapor(4 hr)     |         | No data available; calculated ATE > 50 mg/l     |
| Overall product | Ingestion                  |         | No data available; calculated ATE > 5,000 mg/kg |
| 2-BUTOXYETHANOL | Dermal                     | Rabbit  | LD50 400 mg/kg                                  |
| 2-BUTOXYETHANOL | Inhalation-Vapor (4 hours) | Rat     | LC50 2.2 mg/l                                   |
| 2-BUTOXYETHANOL | Ingestion                  | Rat     | LD50 560 mg/kg                                  |

|                |                                |     |                    |
|----------------|--------------------------------|-----|--------------------|
| BENZYL ALCOHOL | Inhalation-Dust/Mist (4 hours) | Rat | LC50 8.8 mg/l      |
| BENZYL ALCOHOL | Ingestion                      | Rat | LD50 1,230 mg/kg   |
| SODIUM CITRATE | Ingestion                      | Rat | LD50 > 8,000 mg/kg |

ATE = acute toxicity estimate

#### Skin Corrosion/Irritation

| Name            | Species                 | Value         |
|-----------------|-------------------------|---------------|
| 2-BUTOXYETHANOL | Rabbit                  | Irritant      |
| BENZYL ALCOHOL  | Multiple animal species | Mild irritant |

#### Serious Eye Damage/Irritation

| Name            | Species | Value           |
|-----------------|---------|-----------------|
| 2-BUTOXYETHANOL | Rabbit  | Severe irritant |
| BENZYL ALCOHOL  | Rabbit  | Severe irritant |

#### Skin Sensitization

| Name            | Species          | Value  |
|-----------------|------------------|--|
| 2-BUTOXYETHANOL | Guinea pig       | Not sensitizing  |
| BENZYL ALCOHOL  | Human and animal | Some positive data exist, but the data are not sufficient for classification |

#### Respiratory Sensitization

| Name | Species | Value |
|------|---------|-------|
|------|---------|-------|

#### Germ Cell Mutagenicity

| Name            | Route    | Value  |
|-----------------|----------|--|
| 2-BUTOXYETHANOL | In Vitro | Some positive data exist, but the data are not sufficient for classification |
| BENZYL ALCOHOL  | In vivo  | Not mutagenic  |
| BENZYL ALCOHOL  | In Vitro | Some positive data exist, but the data are not sufficient for classification |

#### Carcinogenicity

| Name            | Route      | Species                 | Value  |
|-----------------|------------|-------------------------|--|
| 2-BUTOXYETHANOL | Inhalation | Multiple animal species | Some positive data exist, but the data are not sufficient for classification |
| BENZYL ALCOHOL  | Ingestion  | Multiple animal species | Not carcinogenic   |

#### 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 |
| BENZYL ALCOHOL  | Ingestion  | Not toxic to development   | Mouse                   | NOAEL 550 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      |
|-----------------|------------|-----------------------------------|--|-------------------------|---------------------|------------------------|
| 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 data are not sufficient for classification | Multiple animal species | NOAEL Not available | not available          |
| 2-BUTOXYETHANOL | Inhalation | blood                             | May cause damage to organs   | Multiple animal species | NOAEL Not available | not available          |
| 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 | Ingestion  | blood                             | Causes damage to organs  | Human                   | NOAEL Not available | poisoning and/or abuse |
| 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 |
| BENZYL ALCOHOL  | Inhalation | central nervous system depression | May cause drowsiness or dizziness  |                         | NOAEL Not available |                        |
| BENZYL ALCOHOL  | Inhalation | respiratory irritation            | Some positive data exist, but the data are not sufficient for classification |                         | NOAEL Not available |                        |
| BENZYL ALCOHOL  | Ingestion  | central nervous system depression | May cause drowsiness or dizziness  |                         | 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 | blood                               | May cause damage to organs though prolonged or repeated exposure             | Rat                     | NOAEL 0.12 mg/l     | 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          |
| 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 | 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                               | Causes damage to organs through prolonged or repeated exposure               | Multiple animal species | NOAEL Not available | not available     |
| 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     |
| BENZYL ALCOHOL  | Ingestion  | endocrine system   muscles   kidney | Some positive data exist, but the data are not sufficient for                | Rat                     | NOAEL 400 mg/kg/day | 13 weeks          |



|                |           |  |  |       |                        |        |
|----------------|-----------|--|--|-------|------------------------|--------|
|                |           | and/or bladder                         | classification   |       |                        |        |
| BENZYL ALCOHOL | Ingestion | nervous system  <br>respiratory system | Some positive data exist, but the<br>data are not sufficient for<br>classification | Mouse | NOAEL 645<br>mg/kg/day | 8 days |

**Aspiration Hazard**

| Name | Value |
|------|-------|
|------|-------|

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****Ecotoxicological information**

Please contact the address or phone number listed on the first page of the SDS for additional ecotoxicological information on this material and/or its components.

**Chemical fate information**

Please contact the address or phone number listed on the first page of the SDS for additional chemical fate information on this material and/or its components.

**SECTION 13: Disposal considerations****13.1. Disposal methods**

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

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.

**EPA Hazardous Waste Number (RCRA):** Not regulated

**SECTION 14: Transport Information**

For Transport Information, please visit <http://3M.com/Transportinfo> or call 1-800-364-3577 or 651-737-6501.

**SECTION 15: Regulatory information****15.1. US Federal Regulations**

Contact 3M for more information.

**311/312 Hazard Categories:**

Fire Hazard - No    Pressure Hazard - No    Reactivity Hazard - No    Immediate Hazard - Yes    Delayed Hazard - Yes

**Section 313 Toxic Chemicals subject to the reporting requirements of that section and 40 CFR part 372 (EPCRA):**

| <u>Ingredient</u>               | <u>C.A.S. No</u> | <u>% by Wt</u> |
|---------------------------------|------------------|----------------|
| 2-BUTOXYETHANOL (GLYCOL ETHERS) | 111-76-2         | 1 - 5          |

## 15.2. State Regulations

Contact 3M for more information.

## 15.3. Chemical Inventories

The components of this product are in compliance with the chemical notification requirements of TSCA.

Contact 3M for more information.

## 15.4. International Regulations

Contact 3M for more information.

**This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.**

## SECTION 16: Other information

### NFPA Hazard Classification

**Health:** 2 **Flammability:** 0 **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.

### HMIS Hazard Classification

**Health:** \*3 **Flammability:** 0 **Physical Hazard:** 0 **Personal Protection:** X - See PPE section.

Hazardous Material Identification System (HMIS® III) hazard ratings are designed to inform employees of chemical hazards in the workplace. These ratings are based on the inherent properties of the material under expected conditions of normal use and are not intended for use in emergency situations. HMIS® III ratings are to be used with a fully implemented HMIS® III program. HMIS® is a registered mark of the American Coatings Association (ACA).

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