

## **Safety Data Sheet**

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## **SECTION 1: Identification**

#### 1.1. Product identifier

3M<sup>TM</sup> Glass Cleaner, P.N. 08888, 39888, 46600

#### **Product Identification Numbers**

60-4550-3014-2, 60-4550-4507-4, 60-4550-6504-9, 60-4550-7145-0

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

### Recommended use

Automotive, Automotive Glass Cleaner

### 1.3. Supplier's details

MANUFACTURER: 3M

**DIVISION:** Automotive Aftermarket

ADDRESS: 3M Center, St. Paul, MN 55144-1000, USA

**Telephone:** 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**

The label elements below were prepared in accordance with OSHA Hazard Communication Standard, 29 CFR 1910.1200. This information may be different from the actual product label information for labels regulated by other agencies.

#### 2.1. Hazard classification

Flammable Aerosol: Category 2. Gas Under Pressure: Liquefied gas.

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

#### 2.2. Label elements

#### Signal word

Danger

## Symbols

Flame | Gas cylinder | Health Hazard |

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#### **Hazard Statements**

Flammable aerosol.

Contains gas under pressure; may explode if heated.

Causes damage to organs: cardiovascular system

## **Precautionary Statements**

#### General:

Keep out of reach of children.

#### **Prevention:**

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Do not spray on an open flame or other ignition source.

Pressurized container: Do not pierce or burn, even after use.

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.

Specific treatment (see Notes to Physician on this label).

#### Storage:

Protect from sunlight. Do not expose to temperatures exceeding 50C/122F.

Store in a well-ventilated place.

Store locked up.

## Disposal:

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

#### **Notes to Physician:**

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

5% of the mixture consists of ingredients of unknown acute dermal toxicity.

5% 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	60 - 100 Trade Secret *
2-Butoxyethanol	111-76-2	3 - 7 Trade Secret *
Isobutane	75-28-5	3 - 7 Trade Secret *

<sup>\*</sup>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. Get medical attention.

#### **Skin Contact:**

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

#### **Eve 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

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.

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

No special protective actions for fire-fighters are anticipated.

## **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 vapors 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

For larger spills, cover drains and build dikes 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. 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 in accordance with

applicable local/regional/national/international regulations.

## **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

Do not use in a confined area with minimal air exchange. Keep out of reach of children. 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/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.

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

Protect from sunlight. Do not expose to temperatures exceeding 50C/122F. Protect from sunlight. Store in a well-ventilated place.

## **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.

or the component.						
Ingredient	C.A.S. No.	Agency	Limit type	Additional Comments		
2-Butoxyethanol	111-76-2	ACGIH	TWA:20 ppm	A3: Confirmed animal		
				carcin.		
2-Butoxyethanol	111-76-2	OSHA	TWA:240 mg/m3(50 ppm)	SKIN		
Isobutane	75-28-5	ACGIH	STEL:1000 ppm			
Natural gas	75-28-5	ACGIH	Limit value not established:	simple asphyxiant		

ACGIH: American Conference of Governmental Industrial Hygienists

AIHA: American Industrial Hygiene Association

CMRG: Chemical Manufacturer's Recommended Guidelines

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

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:

Safety Glasses with side shields

### 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

T 4 a 1

## 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

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

**General Physical Form:** Liquid **Specific Physical Form:** Aerosol

Odor, Color, Grade: clear solvent odor. **Odor threshold** No Data Available

pН

**Melting point** No Data Available **Boiling Point** No Data Available Flash Point No flash point

**Evaporation rate** Approximately 45 Units not avail. or not appl. [Ref

> Std:ETHER=1] Not Applicable

Flammability (solid, gas) Flammable Limits(LEL) No Data Available Flammable Limits(UEL) No Data Available Vapor Pressure No Data Available **Vapor Density** 4.07 [*Ref Std*:AIR=1]

**Density** 0.96 g/ml

**Specific Gravity** 0.96 [Ref Std:WATER=1] [Details:CONDITIONS: @ 70F]

Solubility in Water Complete

No Data Available Solubility- non-water Partition coefficient: n-octanol/ water No Data Available **Autoignition temperature** No Data Available **Decomposition temperature** No Data Available Viscosity Not Applicable

**Hazardous Air Pollutants** 0 % weight [Test Method: Calculated]

No Data Available Molecular weight

**Volatile Organic Compounds** 94 g/l [Test Method:calculated SCAQMD rule 443.1] **Volatile Organic Compounds** 9.9 % weight [Test Method:calculated per CARB title 2] **VOC Less H2O & Exempt Solvents** 947 g/l [Test Method:calculated SCAQMD rule 443.1]

## **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 polymerization will not occur.

#### 10.4. Conditions to avoid

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None known.

## 10.5. Incompatible materials

None known.

#### 10.6. Hazardous decomposition products

SubstanceConditionCarbon monoxideNot SpecifiedCarbon dioxideNot SpecifiedToxic Vapor, Gas, ParticulateNot Specified

## **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 additional health effects (see below).

#### **Skin Contact:**

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

#### **Eve Contact:**

Sprayed material may cause 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 diarrhea.

May cause additional health effects (see below).

#### **Additional Health Effects:**

#### Single exposure may cause target organ effects:

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

## **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
--	------	-------	---------	-------

2NITH C	Tare Classes	. DAI	00000	20000	4//00
3M G	lass Cleanei	r. r.n.	voooo.	27000	400VV

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
Isobutane	Inhalation- Gas (4 hours)	Rat	LC50 276,000 ppm
2-Butoxyethanol	Dermal	Guinea pig	LD50 > 2,000 mg/kg
2-Butoxyethanol	Inhalation- Vapor (4 hours)	Guinea pig	LC50 > 2.6 mg/l
2-Butoxyethanol	Ingestion	Guinea pig	LD50 1,414 mg/kg

 $\overline{ATE}$  = acute toxicity estimate

## Skin Corrosion/Irritation

SMII COIT OSION/III TERRETOII						
Name	Species	Value				
Isobutane	Professio	No significant irritation				
	nal					
	judgeme					
	nt					
2-Butoxyethanol	Rabbit	Irritant				

**Serious Eye Damage/Irritation** 

crious Lyc Dumage, Il reaction						
Name	Species	Value				
Isobutane	Professio nal judgeme nt	No significant irritation				
2-Butoxyethanol	Rabbit	Severe irritant				

## **Skin Sensitization**

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Name	Species	Value				
2-Butoxyethanol	Guinea	Not classified				
	nio					

## **Respiratory Sensitization**

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

Germ Cell Mutagenicity

Name	Route	Value
Isobutane	In Vitro	Not mutagenic
2-Butoxyethanol	In Vitro	Some positive data exist, but the data are not sufficient for classification

Carcinogenicity

Name	Route	Species	Value
2-Butoxyethanol	Inhalation	Multiple animal	Some positive data exist, but the data are not sufficient for classification
		species	

## **Reproductive Toxicity**

Reproductive and/or Developmental Effects

 productive and/or Developmental Effects							
Name	Route	Value	Species	Test Result	Exposure Duration		
2-Butoxyethanol	Dermal	Not classified for development	Rat	NOAEL 1,760	during		

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3M <sup>TM</sup> Glas	s Cleaner	. P.N.	08888.	39888.	46600

				mg/kg/day	gestation
2-Butoxyethanol	Ingestion	Not classified for development	Rat	NOAEL 100	during
				mg/kg/day	organogenesi
					S
2-Butoxyethanol	Inhalation	Not classified for development	Multiple	NOAEL 0.48	during
		_	animal	mg/l	organogenesi
			species		S

# Target Organ(s)

**Specific Target Organ Toxicity - single exposure** 

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Isobutane	Inhalation	cardiac sensitization	Causes damage to organs	Multiple animal species	NOAEL Not available	
Isobutane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available	
Isobutane	Inhalation	respiratory irritation	Not classified	Mouse	NOAEL Not available	
2-Butoxyethanol	Dermal	endocrine system	Not classified	Rabbit	NOAEL 902 mg/kg	6 hours
2-Butoxyethanol	Dermal	liver	Not classified	Rabbit	LOAEL 72 mg/kg	not available
2-Butoxyethanol	Dermal	kidney and/or bladder	Not classified	Rabbit	LOAEL 451 mg/kg	6 hours
2-Butoxyethanol	Dermal	blood	Not classified	Multiple animal species	NOAEL 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	Inhalation	blood	Not classified	Multiple animal species	NOAEL Not available	
2-Butoxyethanol	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professio nal judgeme nt	NOAEL Not available	
2-Butoxyethanol	Ingestion	blood	Not classified	Multiple animal species	NOAEL Not available	
2-Butoxyethanol	Ingestion	kidney and/or bladder	Not classified	Human	NOAEL Not available	poisoning and/or abuse

**Specific Target Organ Toxicity - repeated exposure** 

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Isobutane	Inhalation	kidney and/or bladder	Not classified	Rat	NOAEL 4,500 ppm	13 weeks
2-Butoxyethanol	Dermal	blood	Not classified	Multiple animal species	NOAEL Not available	not available
2-Butoxyethanol	Dermal	endocrine system	Not classified	Rabbit	NOAEL 150 mg/kg/day	90 days
2-Butoxyethanol	Inhalation	liver	Not classified	Rat	NOAEL 2.4 mg/l	14 weeks
2-Butoxyethanol	Inhalation	kidney and/or bladder	Not classified	Rat	NOAEL 0.15 mg/l	14 weeks
2-Butoxyethanol	Inhalation	blood	Not classified	Rat	LOAEL 0.15 mg/l	6 months
2-Butoxyethanol	Inhalation	endocrine system	Not classified	Dog	LOAEL 1.9 mg/l	8 days

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2-Butoxyethanol	Ingestion	blood	Not classified	Rat	LOAEL 69	13 weeks
					mg/kg/day	
2-Butoxyethanol	Ingestion	kidney and/or bladder	Not classified	Multiple animal	NOAEL Not available	not available
				species		

#### **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**

## **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. Facility must be capable of handling aerosol cans. 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.

## **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.

### **EPCRA 311/312 Hazard Classifications:**

## Physical Hazards

Flammable (gases, aerosols, liquids, or solids)

Gas under pressure

## **Health Hazards**

Specific target organ toxicity (single or repeated exposure)

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

IngredientC.A.S. No% by Western Street2-Butoxyethanol (GLYCOL ETHERS)111-76-23 - 7

#### 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. All required components of this product are listed on the active portion of the TSCA Inventory.

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: 1 Flammability: 2 Instability: 0 Special Hazards: None

Aerosol Storage Code: 1

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: \*1 Flammability: 2 Physical Hazard: 0 Personal Protection: G

Hazardous Material Identification System (HMIS® IV) 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® IV ratings are to be used with a fully implemented HMIS® IV program. HMIS® is a registered mark of the American Coatings Association (ACA).

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