

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture
Product name : 761, DURAGLOSS GLASS CLEANER
Product code : Part 761 22oz, 762 Gal

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.3. Details of the supplier of the safety data sheet

Brothers Research Corporation
2245 Airpark Drive
Burlington, NC 27216
T 336-229-6480

1.4. Emergency telephone number

Emergency number : 800-424-9300
Chemtrec

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (GHS-US)

Eye Dam. 1 H318

Full text of H-phrases: see section 16

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US) :



GHS05

Signal word (GHS-US) : Danger
Hazard statements (GHS-US) : H318 - Causes serious eye damage
Precautionary statements (GHS-US) : P280 - Wear protective clothing
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P310 - Immediately call a doctor, a POISON CENTER

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS-US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

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Name	Product identifier	%	Classification (GHS-US)
1-propanol	(CAS No) 71-23-8	1 - 3	Flam. Liq. 2, H225 Eye Dam. 1, H318 STOT SE 3, H336
butyl glycoether	(CAS No) 111-76-2	0.5 - 1	Flam. Liq. 4, H227 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Irrit. 2, H315 Eye Irrit. 2A, H319

Full text of H-phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
- First-aid measures after inhalation : Remove the victim into fresh air. If not breathing give artificial respiration. Get immediate medical advice/attention. Allow victim to breathe fresh air. Allow the victim to rest.
- First-aid measures after skin contact : If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse. Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.
- First-aid measures after eye contact : Move victim away from exposure and into fresh air. Rinse immediately with plenty of water for 15 minutes. If eye irritation persists: Get medical advice/attention. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor/physician.
- First-aid measures after ingestion : Do not induce vomiting. Immediately call a poison center or doctor/physician. Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries after eye contact : Causes serious eye damage.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Carbon dioxide. Dry chemical powder. Foam. Dry powder. Carbon dioxide. Water spray. Sand.
- Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

- Firefighting instructions : Wear normal protective equipment (full bunker gear) and positive-pressure self contained breathing apparatus. Water can be used to keep exposed containers cool, to protect;. Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
- Protection during firefighting : Complete protective clothing. Self-contained breathing apparatus. Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Absorb spill on vermiculite floor absorbent or other absorbent material.

6.1.1. For non-emergency personnel

- Protective equipment : Protective clothing. Protective goggles.
- Emergency procedures : If runoff occurs, notify authorities as required. Pump or vacuum transfer spilled product to clean containers for recovery. Absorb unrecoverable product. Transfer contaminated absorbent, material to containers for disposal. Close container tightly and dispose of properly. Evacuate unnecessary personnel.

6.1.2. For emergency responders

- Protective equipment : Use personal protective equipment as required. Self-contained breathing apparatus. Equip cleanup crew with proper protection.
- Emergency procedures : Stop leak if safe to do so. Ventilate area.

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6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

- For containment : Transfer contaminated absorbent, soil and other material to containers for disposal. Close container tightly and dispose of properly.
- Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Additional hazards when processed : Containers of this material may be hazardous when emptied. All hazard precautions give should be observed.
- Precautions for safe handling : Containers may be hazardous when emptied. Since emptied containers retain product residues, all hazard precautions given in the data sheet should be observed. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor.
- Hygiene measures : Wash ... thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Store in a well-ventilated place. Keep away from heat, sparks, and flames. Keep only in the original container in a cool, well ventilated place away from : Keep container closed when not in use.
- Incompatible products : Strong bases. Strong acids.
- Incompatible materials : Sources of ignition. Direct sunlight.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

761, DURAGLOSS GLASS CLEANER		
ACGIH	Not applicable	
OSHA	Not applicable	
DNEL	DNEL	>=

1-propanol (71-23-8)		
ACGIH	ACGIH TWA (ppm)	100 ppm
ACGIH	ACGIH STEL (ppm)	100 ppm
ACGIH	Remark (ACGIH)	Eye & URT irr
OSHA	OSHA PEL (TWA) (mg/m ³)	500 mg/m ³
OSHA	OSHA PEL (TWA) (ppm)	200 ppm

butyl glycolether (111-76-2)		
ACGIH	ACGIH TWA (ppm)	20 ppm
ACGIH	ACGIH STEL (ppm)	20 ppm
OSHA	Not applicable	

8.2. Exposure controls

- Appropriate engineering controls : Ensure good ventilation of the work station.
- Personal protective equipment : Avoid all unnecessary exposure.
- Hand protection : Gloves. Wear protective gloves.
- Eye protection : Chemical goggles or safety glasses.
- Skin and body protection : Protective clothing.

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Respiratory protection : Respiratory protection not required in normal conditions. Wear appropriate mask.
Other information : Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Appearance : Clear Liquid.
Color : Clear Liquid
Odor : Solvent
Odor threshold : No data available
pH : 3 - 4
Relative evaporation rate (butyl acetate=1) : No data available
Melting point : < 196.6 °F
Freezing point : No data available
Boiling point : 206 °F
Flash point : > 160 °F
Auto-ignition temperature : No data available
Decomposition temperature : No data available
Flammability (solid, gas) : No data available
Vapor pressure : 68 .0 F @19.29 MBAR (14.5 mmHg)
Relative vapor density at 20 °C : No data available
Relative density : 0.99 @ 68.0 F
Solubility : Soluble in water.
Water: Solubility in water of component(s) of the mixture :
•: •:
Log Pow : No data available
Log Kow : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available
Explosive properties : No data available
Oxidizing properties : No data available
Explosive limits : No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable under normal conditions. Not established.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

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1-propanol (71-23-8)	
LD50 oral rat	> 2000 mg/kg (Rat)
LD50 dermal rabbit	4049 mg/kg (Rabbit)
LC50 inhalation rat (mg/l)	9.8 mg/l/4h (Rat)
ATE US (dermal)	4049.000 mg/kg body weight
ATE US (vapors)	9.800 mg/l/4h
ATE US (dust, mist)	9.800 mg/l/4h

butyl glycoether (111-76-2)	
LD50 oral rat	1746 mg/kg body weight (Rat; Equivalent or similar to OECD 401; Experimental value)
LD50 dermal rat	> 2000 mg/kg body weight (Rat; Experimental value; OECD 402: Acute Dermal Toxicity)
LC50 inhalation rat (mg/l)	2.2 mg/l/4h (Rat; Experimental value)
LC50 inhalation rat (ppm)	450 ppm/4h (Rat; Experimental value)
ATE US (oral)	1746.000 mg/kg body weight
ATE US (dermal)	1100.000 mg/kg body weight
ATE US (gases)	450.000 ppmV/4h
ATE US (vapors)	2.200 mg/l/4h
ATE US (dust, mist)	2.200 mg/l/4h

Skin corrosion/irritation	: Not classified pH: 3 - 4
Serious eye damage/irritation	: Causes serious eye damage. pH: 3 - 4
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified

butyl glycoether (111-76-2)	
IARC group	3 - Not classifiable

Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified
Potential Adverse human health effects and symptoms	: Based on available data, the classification criteria are not met.
Symptoms/injuries after eye contact	: Causes serious eye damage.

SECTION 12: Ecological information

12.1. Toxicity

1-propanol (71-23-8)	
LC50 fish 1	3200 mg/l 48 h; Salmo gairdneri (Oncorhynchus mykiss)
EC50 Daphnia 1	4415 mg/l (24 h; Daphnia magna)
EC50 other aquatic organisms 1	4168 mg/l (48 h; Protozoa)
LC50 fish 2	4480 mg/l (96 h; Pimephales promelas)
EC50 Daphnia 2	3644 mg/l (48 h; Daphnia magna)
TLM fish 1	200 - 500, Gobio gobio
TLM other aquatic organisms 1	100 - 1000, 96 h
Threshold limit algae 1	2000 mg/l (Selenastrum capricornutum)
Threshold limit algae 2	3100 mg/l (168 h; Scenedesmus quadricauda)

butyl glycoether (111-76-2)	
LC50 fish 1	1474 ppm (96 h; Oncorhynchus mykiss)
EC50 Daphnia 1	1550 mg/l (48 h; Daphnia magna)
Threshold limit algae 1	911 mg/l (72 h; Pseudokirchneriella subcapitata)

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butyl glycolether (111-76-2)	
Threshold limit algae 2	88 mg/l (72 h; Pseudokirchneriella subcapitata)

12.2. Persistence and degradability

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Persistence and degradability	Not established.

1-propanol (71-23-8)	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. Biodegradable in the soil under anaerobic conditions.
Biochemical oxygen demand (BOD)	0.47 - 1.63 g O ₂ /g substance
Chemical oxygen demand (COD)	2.23 g O ₂ /g substance
ThOD	2.4 g O ₂ /g substance
BOD (% of ThOD)	0.20 - 0.44 % ThOD

butyl glycolether (111-76-2)	
Persistence and degradability	Readily biodegradable in water. Low potential for adsorption in soil. Photooxidation in the air.

12.3. Bioaccumulative potential

761, DURAGLOSS GLASS CLEANER	
Bioaccumulative potential	Not established.

1-propanol (71-23-8)	
Log Pow	0.25 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

butyl glycolether (111-76-2)	
Log Pow	0.81 (Test data; 20 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

12.4. Mobility in soil

1-propanol (71-23-8)	
Surface tension	0.024 N/m (20 °C)

butyl glycolether (111-76-2)	
Surface tension	0.065 N/m (20 °C; 003)

12.5. Other adverse effects

Effect on ozone layer	:
Effect on the global warming	: No known ecological damage caused by this product.
Other information	: Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations	: Remove waste in accordance with local and/or national regulations. Dispose in a safe manner in accordance with local/national regulations.
Ecology - waste materials	: Avoid release to the environment.

SECTION 14: Transport information

In accordance with DOT
Not regulated for transport

Additional information

Other information	: No supplementary information available.
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ADR

No additional information available

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Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

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Not listed on the United States TSCA (Toxic Substances Control Act) inventory

1-propanol (71-23-8)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

butyl glycoether (111-76-2)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA

No additional information available

EU-Regulations

No additional information available

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Not classified

15.2.2. National regulations

:

15.3. US State regulations

1-propanol (71-23-8)

U.S. - New Jersey - Right to Know Hazardous Substance List

butyl glycoether (111-76-2)

U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

Revision date : 05/28/2015

Other information : None.

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Full text of H-phrases:

Acute Tox. 4 (Dermal)	Acute toxicity (dermal) Category 4
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Flam. Liq. 2	Flammable liquids Category 2
Flam. Liq. 4	Flammable liquids Category 4
Skin Irrit. 2	Skin corrosion/irritation Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H225	Highly flammable liquid and vapor
H227	Combustible liquid
H302	Harmful if swallowed
H312	Harmful in contact with skin
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H332	Harmful if inhaled
H336	May cause drowsiness or dizziness

SDS US (GHS HazCom 2012)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product