



851, ALUMINUM WHEEL CLEANER

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date: 05/28/2015

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

1.1. Product identifier

Product form : Mixture
Product name : 851, ALUMINUM WHEEL CLEANER
Product code : Part# 851 22oz, 852 8oz, 853 Gal, 85333 55 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)

Not classified

2.2. Label elements

GHS-US labeling

No labeling applicable

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

Name	Product identifier	%	Classification (GHS-US)
phosphoric acid, conc>=25%, aqueous solutions	(CAS No) 7664-38-2	12 - 16	Skin Corr. 1B, H314
2-(2-butoxyethoxy)ethanol	(CAS No) 112-34-5	1 - 2	Eye Irrit. 2A, H319
ammonium hydrogen difluoride, 0.1%<=conc<1%, aqueous solutions	(CAS No) 1341-49-7	1 - 2	Acute Tox. 3 (Oral), H301 Skin Corr. 1B, H314

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 : Take off contaminated clothing. Wash with plenty of soap and water. Rinse skin with water/shower. Get medical advice/attention. 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. Get medical advice/attention. Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.

First-aid measures after ingestion : Do not induce vomiting. Call a physician or poison control center immediately. Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

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

Symptoms/injuries : Not expected to present a significant hazard under anticipated conditions of normal use.

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 : Foam. Carbon dioxide. Dry chemical powder. 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 : 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 : Stop spill at source, prevent from spreading. 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 : Protective gloves. Safety glasses. Self-contained breathing apparatus. Use personal protective equipment as required. Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area.

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

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

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.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep away from heat, sparks, and flames. Emptied containers may retain product residues. Precautions apply to emptied containers.

Incompatible products : Strong bases. Strong acids.

Incompatible materials : Sources of ignition. Direct sunlight.

7.3. Specific end use(s)

No additional information available

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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ACGIH	Not applicable	
OSHA	Not applicable	
DNEL	DNEL	≈

2-(2-butoxyethoxy)ethanol (112-34-5)		
ACGIH	ACGIH TWA (ppm)	10 ppm
ACGIH	ACGIH STEL (ppm)	10 ppm
OSHA	Not applicable	

phosphoric acid, conc>=25%, aqueous solutions (7664-38-2)		
ACGIH	Not applicable	
OSHA	Not applicable	

ammonium hydrogen difluoride, 0.1%<=conc<1%, aqueous solutions (1341-49-7)		
ACGIH	ACGIH TWA (mg/m³)	2.5 mg/m³
OSHA	Not applicable	

8.2. Exposure controls

Personal protective equipment	: Avoid all unnecessary exposure.
Hand protection	: Wear protective gloves.
Eye protection	: Chemical goggles or safety glasses.
Respiratory protection	: 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	: Liquid.
Color	: Clear Liquid
Odor	: Butyl
Odor threshold	: No data available
pH	: 1 - 2
Relative evaporation rate (butyl acetate=1)	: No data available
Melting point	: No Data
Freezing point	: No data available
Boiling point	: 212 °F
Flash point	: > 200 °F
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: 140 @ 130.0 F
Relative vapor density at 20 °C	: No data available
Relative density	: 1 H2O= >1
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

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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

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

2-(2-butoxyethoxy)ethanol (112-34-5)

LD50 dermal rabbit	2764 mg/kg body weight (Rabbit; Experimental value; Equivalent or similar to OECD 402)
ATE US (dermal)	2764.000 mg/kg body weight

ammonium hydrogen difluoride, 0.1%<=conc<1%, aqueous solutions (1341-49-7)

ATE US (oral)	100.000 mg/kg body weight
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Skin corrosion/irritation : Not classified
pH: 1 - 2

Serious eye damage/irritation : Not classified
pH: 1 - 2

Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

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.

SECTION 12: Ecological information

12.1. Toxicity

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2-(2-butoxyethoxy)ethanol (112-34-5)	
LC50 fish 1	1300 mg/l (96 h; Lepomis macrochirus)
EC50 Daphnia 1	4950 mg/l (48 h; Daphnia magna)
Threshold limit algae 1	> 100 mg/l (96 h; Desmodesmus subspicatus)

ammonium hydrogen difluoride, 0.1%<=conc<1%, aqueous solutions (1341-49-7)	
LC50 fish 1	> 2.3 mg/l (Pisces)

12.2. Persistence and degradability

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Persistence and degradability	Not established.

2-(2-butoxyethoxy)ethanol (112-34-5)	
Persistence and degradability	Readily biodegradable in water. Low potential for adsorption in soil. Photooxidation in the air.

phosphoric acid, conc>=25%, aqueous solutions (7664-38-2)	
Persistence and degradability	Biodegradability: not applicable. No (test)data on mobility of the components available.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

ammonium hydrogen difluoride, 0.1%<=conc<1%, aqueous solutions (1341-49-7)	
Persistence and degradability	Biodegradability in soil: no data available.

12.3. Bioaccumulative potential

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Bioaccumulative potential	Not established.

2-(2-butoxyethoxy)ethanol (112-34-5)	
Log Pow	1 (Test data; Equivalent or similar to OECD 107; 20 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

phosphoric acid, conc>=25%, aqueous solutions (7664-38-2)	
Bioaccumulative potential	Not bioaccumulative.

ammonium hydrogen difluoride, 0.1%<=conc<1%, aqueous solutions (1341-49-7)	
Bioaccumulative potential	No bioaccumulation data available.

12.4. Mobility in soil

2-(2-butoxyethoxy)ethanol (112-34-5)	
Surface tension	0.0069 N/m (20 °C)

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	: 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

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Additional information

Other information : No supplementary information available.

ADR

No additional information available

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

2-(2-butoxyethoxy)ethanol (112-34-5)

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

SECTION 16: Other information

Revision date : 05/28/2015

Other information : None.

Full text of H-phrases:

Acute Tox. 3 (Oral)	Acute toxicity (oral) Category 3
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Skin Corr. 1B	Skin corrosion/irritation Category 1B
H301	Toxic if swallowed
H314	Causes severe skin burns and eye damage
H319	Causes serious eye irritation

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