

Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Revision date: 05/05/2016

	substance/mixture and of the company/undertaking
1.1. Product identifier	
Product form	: Mixture
Product name	: 420, DURAGLOSS HD CLEANER/DEGREASER
Product code	: 420 32oz, 421 Gal, 425 5Gal, 4230 30Gal, 4255 55Gal
I.2. Relevant identified uses of the	substance or mixture and uses advised against
1.3. Details of the supplier of the sa	fety 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	on and a second se
2.1. Classification of the substance	or mixture
Classification (GHS-US)	
Skin Irrit. 2	H315
Eye Irrit. 2A	H319
Full text of H-phrases: see section 16	
2.2. Label elements	
GHS-US labeling	
Hazard pictograms (GHS-US)	: GHS07
Signal word (GHS-US)	: Warning
Hazard statements (GHS-US)	: H315 - Causes skin irritation
Precautionary statements (GHS-US)	 H319 - Causes serious eye irritation P264 - Wash thoroughly after handling P280 - Wear protective gloves/protective clothing/eye protection/face protection P302+P352 - If on skin: Wash with plenty of water/ P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing P321 - Specific treatment (see on this label) P332+P313 - If skin irritation occurs: Get medical advice/attention P337+P313 - If eye irritation persists: Get medical advice/attention P362 - Take off contaminated clothing and wash before reuse
2.3. Other hazards	
No additional information available	
2.4. Unknown acute toxicity (GHS-U	(S)
Not applicable	
	ation on ingradiants
SECTION 3: Composition/inform	
3.1. Substance	
Not applicable	
3.2. Mixture	

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Name	Product identifier	%	Classification (GHS-US)
sodium hydroxide, 0.5%= <conc<2.0%, aqueous="" solutions<="" td=""><td>(CAS No) 1310-73-2</td><td>0.5 - 1</td><td>Skin Corr. 1A, H314</td></conc<2.0%,>	(CAS No) 1310-73-2	0.5 - 1	Skin Corr. 1A, H314
butyl glycolether	(CAS No) 111-76-2	0 - 0.5	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 person to fresh air and keep comfortable for breathing. Remove the victim into fresh air. If not breathing give artificial respiration. Get medical advice/attention. Allow victim to breathe fresh air. Allow the victim to rest.
First-aid measures after skin contact	Remove clothing while washing. Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Wash skin with plenty of water.
First-aid measures after eye contact	Move victim away from exposure and into fresh air. Get medical advice/attention. Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist. Rinse eyes with water as a precaution.
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. Call a poison center/doctor/physician if you feel unwell.
4.2. Most important symptoms and effe	ects, both acute and delayed
Symptoms/injuries	: Not expected to present a significant hazard under anticipated conditions of normal use.

4.3.	Indication of any in	mediate medica	l attention a	and special	treatment needed
Treat syr	mptomatically.				

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 su	ibstance or mixture
Fire hazard	: Not flammable. Non combustible.
Explosion hazard	: TO BE COMPLETED
Reactivity	: TO BE COMPLETED
5.3. Advice for firefighters	
Firefighting instructions	Water can be used to keep exposed containers cool, to protect;. Wear normal protective equipment (full bunker gear) and possitive-pressure self contained breathing appartus. 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	Do not enter fire area without proper protective equipment, including respiratory protection. Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION	ON 6: Accidental release meas	sures
6.1.	Personal precautions, protective equip	uipment and emergency procedures
General	measures	: Absorb spill on vermiculite floor absorbent or other absorbent material.
6.1.1.	For non-emergency personnel	
Protectiv	e equipment	: Protective clothing. Protective goggles.
Emergen	cy procedures	: If runoff ocurrs, 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.

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6.1.2. For emergency responders	
Protective equipment	: Do not attempt to take action without suitable protective equipment. Equip cleanup crew with proper protection. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures	: Ventilate area.
6.2. Environmental precautions	
Avoid release to the environment. Notify authoritia authorities if liquid enters sewers or public waters	es if product enters sewers or public waters. Prevent entry to sewers and public waters. Notify 3.
6.3. Methods and material for containme	nt and cleaning up
For containment	: Transfer contaminated absorbent, soil and othe material to containers for disposal. Close container tightly and dispose of properly.
Methods for cleaning up	: Take up liquid spill into absorbent material. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.
Other information	: Dispose of materials or solid residues at an authorized site.
6.4. Reference to other sections	
See Heading 8. Exposure controls and personal	protection. For further information refer to section 13.
SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
Precautions for safe handling	: Ensure good ventilation of the work station. Wear personal protective equipment. 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	: Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
7.2. Conditions for safe storage, including	ng 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. Keep only in the original container in a cool, well ventilated place away from : Keep away from heat, sparks, and flames, Keep container tightly closed, Store in a well-ventilated place. Keep container closed when not in use. Keep cool.
Incompatible products	: Strong bases. Strong acids.
Incompatible materials	: Sources of ignition. Direct sunlight.
7.3. Specific end use(s)	
No additional information available	

8.1. Control pa	rameters		
420, DURAGLOSS	HD CLEANER/DEGREASER		
ACGIH	Not applicable		
OSHA	Not applicable		
sodium hydroxide,	, 0.5%= <conc<2.0%, (1310-73-2<="" aqueous="" solutions="" td=""><td></td><td></td></conc<2.0%,>		
ACGIH	ACGIH Ceiling (mg/m ³)	2 mg/m³	
OSHA	Not applicable		
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.	

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Hand protection	: Wear protective gloves.
Eye protection	: Chemical goggles or safety glasses. Safety glasses.
Skin and body protection	: Wear suitable protective clothing.
Respiratory protection	: Wear appropriate mask.
Environmental exposure controls	: Avoid release to the environment.
Other information	: Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and c	hemical properties
Physical state	: Liquid
Appearance	: Yellow Liquid.
Color	: Yellow
Odor	: Lime
Odor threshold	: No data available
рН	: 11 - 12
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	: H20= <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
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	

10.1. Reactivity
TO BE COMPLETED
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.

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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

: Not classified

butyl glycolether (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	: Causes skin irritation.
	pH: 11 - 12
Serious eye damage/irritation	: Causes serious eye irritation.
, 0	pH: 11 - 12
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
butyl glycolether (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	: Not classified
exposure)	
Aspiration hazard	: Not classified
Potential Adverse human health effects and	: Based on available data, the classification criteria are not met.
symptoms	
SECTION 12: Ecological information	
12.1. Toxicity	
Ecology - general	: The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.
sodium hydroxide, 0.5%= <conc<2.0%, aque<="" td=""><td>ous solutions (1310-73-2)</td></conc<2.0%,>	ous solutions (1310-73-2)
LC50 fish 1	189 mg/l (Leuciscus idus; Pure substance)
LC50 other aquatic organisms 1	100 mg/l (48 h; Daphnia magna; Pure substance)
	······································

TLM fish 1	125 ppm (96 h; Gambusia affinis; Pure substance)	
Threshold limit other aquatic organisms 1	100 mg/l (48 h; Daphnia magna; Pure substance)	
butyl glycolether (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)	
Threshold limit algae 2	88 mg/l (72 h; Pseudokirchneriella subcapitata)	

12.2.	Persistence and degradability	
420, DURAGLOSS HD CLEANER/DEGREASER		
Persist	ence and degradability	Not established.

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sodium hydroxide, 0.5%= <conc<2.0%, aque<br="">Persistence and degradability Biochemical oxygen demand (BOD)</conc<2.0%,>	
Biochemical oxygen demand (BOD)	Biodegradability: not applicable. No (test)data on mobility of the components available.
	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable
butyl glycolether (111-76-2)	
Persistence and degradability	Readily biodegradable in water. Low potential for adsorption in soil. Photooxidation in the air.
2.3. Bioaccumulative potential	
420, DURAGLOSS HD CLEANER/DEGREAS	SER
Bioaccumulative potential	Not established.
sodium hydroxide, 0.5%= <conc<2.0%, aqu<="" td=""><td>eous solutions (1310-73-2)</td></conc<2.0%,>	eous solutions (1310-73-2)
Bioaccumulative potential	Not bioaccumulative.
butyl glycolether (111-76-2)	
Log Pow	0.81 (Test data; 20 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
2.4. Mobility in soil	
hutul alveolethes (444,70,0)	
butyl glycolether (111-76-2) Surface tension	0.065 N/m (20 °C; 003)
	0.000 NATH (20-0, 000)
2.5. Other adverse effects	
ffect on ozone layer	
ffect on the global warming	: No known ecological damage caused by this product.
Other information	: Avoid release to the environment.
SECTION 13: Disposal consideratio	ons
3.1. Waste treatment methods	
Vaste disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations.
cology - waste materials	: Avoid release to the environment.
SECTION 14: Transport information	
n accordance with DOT	
lot regulated for transport	
Additional information	
Other information	: No supplementary information available.
ADR	
lo additional information available	
ransport by sea	
lo additional information available	
ir transport	
Air transport	
Io additional information available SECTION 15: Regulatory informatio	n
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 additional information available ECTION 15: Regulatory information 5.1. US Federal regulations 420, DURAGLOSS HD CLEANER/DEGREAS Not listed on the United States TSCA (Toxic States TSCA) 	SUBStances Control Act) inventory

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15.2. International regulations

CANADA

No additional information available

EU-Regulations

No additional information available

Classification according to Regulation (EC) No. 1272/2008 [CLP] Not classified

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

15.2.2. National regulations

15.3. US State regulations

butyl glycolether (111-76-2)	
U.S New Jersey - Right to Know Hazardous Substance List U.S Pennsylvania - RTK (Right to Know) List	
CECTION 40: Other information	

SECTION 16: Other information	SECTION 16: Other information	
Revision date	: 05/05/2016	
Other information	: None.	

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 Irrit. 2A	Serious eye damage/eye irritation Category 2A
Flam. Liq. 4	Flammable liquids Category 4
Skin Corr. 1A	Skin corrosion/irritation Category 1A
Skin Irrit. 2	Skin corrosion/irritation Category 2
H227	Combustible liquid
H302	Harmful if swallowed
H312	Harmful in contact with skin
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H319	Causes serious eye irritation
H332	Harmful if inhaled

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