SAFETY DATA SHEET
Breakthrough

SECTION1: PRODUCT & COMPANY INDENTIFICATION

DATE: 07/08/2015 **/ Supersedes Revision:** 02/06/2015

Manufacturer:
PDQ Manufacturing, Inc.
201 Victory Circle
Ellijay, GA USA 30540
Phone: (706) 636-1848
Website: www.pdqonline.com

EMERGENCY CONTACT: Chemtrec, Reference CCN203605
Phone: (800) 424-9300 (collect calls accepted) / International: (703) 527-3887

Product Name: Breakthrough
ID Code: 4511
Product Category: Alkaline Detergent

SECTION 2: HAZARD(S) IDENTIFCATION

Skin Corrosion/Irritation, Category 1B
Serious Eye Damage/Eye Irritation, Category 2A
Aquatic Toxicity (Acute), Category 3
Aquatic Toxicity (Chronic), Category 3

GHS Signal Word: DANGER
GHS Hazard Phrases:
H314 - Causes severe skin burns and eye damage.
H319 - Causes serious eye irritation.
H402 - Harmful to aquatic life.
H412 - Harmful to aquatic life with long lasting effects.
GHS Precaution Phrases:
P264 - Wash hands thoroughly after handling.
P273 - Avoid release to the environment.
P280 - Wear protective gloves/eye protection.
GHS Response Phrases:
P301+330+331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+361+353 - IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+351+338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a poison control center or physician for treatment advice. Have product container or label with you when calling poison control center or physician.
P310 - Immediately call a POISON CENTER or doctor/physician.
P321 - Specific treatment see appropriate section on the label or SDS.
P337+313 - If eye irritation persists, get medical advice/attention.
P363 - Wash contaminated clothing before reuse.
GHS Storage and Disposal Phrases:
P405 - Store locked up.
P501 - Dispose of contents/container to trash after rinsing container.

Hazard Rating System:
HMIS
Health: 2
Flammability: 0
Physical: 1
PPE: B

Potential Health Effects (Acute and Chronic):
Inhalation: No hazard expected in normal industrial use.
Skin Contact: Causes skin irritation. Causes skin burns.
Eye Contact: Causes eye irritation. Causes redness and pain. Causes eye burns.
Ingestion: Harmful if swallowed. May cause irritation of the digestive tract. May cause gastrointestinal irritation with nausea, vomiting and diarrhea. Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

CAS #	Hazardous Components (Chemical Name)	Concentration
111-76-2	Ethanol, 2-Butoxy- {Ethylene glycol n-butyl ether, Glycol Ether EB}	3.0 -7.0 %
9016-45-9	Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydr {Nonylphenol Ethoxylate}	4.0 -10.0 %
6834-92-0	Silicic acid (H2SiO3), Disodium salt	1.0 -3.0 %
1310-73-2	Sodium hydroxide {Caustic soda; Lye solution}	1.0 -3.0 %

SECTION 4: FIRST-AID MEASURES

Emergency and First Aid Procedures: Consult a physician. Show this safety data sheet to the doctor in attendance.
In Case of Inhalation: Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen.
In Case of Skin Contact: In case of contact, immediately wash skin with soap and copious amounts of water. Take off contaminated clothing and shoes immediately. Consult a physician.
In Case of Eye Contact: In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes. Seek medical attention.
In Case of Ingestion: If swallowed, wash out mouth with water provided person is conscious. Never give anything by mouth to an unconscious person. Consult a physician.
Signs and Symptoms Of Exposure: Exposure can cause: Nausea, headache, and vomiting. Burning sensation, Breathing dusts from the use of this product may be harmful. Wheezing, Laryngitis, Shortness of breath.
Note to Physician: None known.

SECTION 5: FIRE-FIGHTING MEASURES

Flash Point: NP Method Used: Estimate
Explosive Limits: LEL: UEL:
Autoignition Pt: NP
Suitable Extinguishing Media: Use water spray, dry chemical, carbon dioxide, or chemical foam. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Fire Fighting Instructions: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. The product itself does not burn.
Flammable Properties and Hazards:

SECTION 6: ACCIDENTAL RELEASE MEASURES

Steps To Be Taken In Case Material Is Released Or Spilled: Use proper personal protective equipment as indicated in Section 8. Spills/Leaks: Wear a self contained breathing apparatus and appropriate personal protection. (See Exposure Controls, Personal Protection section). Remove all sources of ignition. Do not let this chemical enter the environment. Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.

SECTION 7: HANDLING AND STORAGE

Precautions To Be Taken in Handling: Keep away from heat, sparks and flame. Do not ingest or inhale. User Exposure: Avoid contact with eyes, skin, and clothing.
Precautions To Be Taken in Storing: Store in a cool, dry place.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

CAS #	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
111-76-2	Ethanol, 2-Butoxy- {Ethylene glycol n-butyl ether, Glycol Ether EB}	PEL: 50 ppm	TLV: 20 ppm	
9016-45-9	Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydr {Nonylphenol Ethoxylate}			
6834-92-0	Silicic acid (H2SiO3), Disodium salt			
1310-73-2	Sodium hydroxide {Caustic soda; Lye solution}	PEL: 2 mg/m3	CEIL: 2 mg/m3	

Respiratory Equipment (Specify Type): Respirator protection is not normally required.
Eye Protection: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166. Wear chemical splash goggles.
Protective Gloves: Wear appropriate protective gloves to prevent skin exposure. Handle with gloves.
Other Protective Clothing: Wear appropriate protective clothing to prevent skin exposure.

Engineering Controls (Ventilation etc.): There are no special ventilation requirements. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.
Work/Hygienic/Maintenance Practices: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical States: [ ] Gas [X] Liquid [ ] Solid
Appearance and Odor: Clear purple liquid Solvent odor.
Melting Point:
Boiling Point:
Autoignition Pt: NP
Flash Pt: NP Method Used: Estimate
Explosive Limits: LEL: UEL:
Specific Gravity (Water = 1): ~ 1.08
Vapor Pressure (vs. Air or mm Hg):
Vapor Density (vs. Air = 1):
Evaporation Rate:
Solubility in Water: Complete
Viscosity: Thin
pH: > 11.5
Percent Volatile:

SECTION 10: STABILITY AND REACTIVITY

Stability: Unstable [ ] Stable [X]
Conditions To Avoid - Instability: Incompatible materials.
Incompatibility – Materials To Avoid: Strong acids. Aluminum, Lead. Tin/tin oxides, Zinc.
Hazardous Decomposition Or Byproducts: Carbon monoxide, formed under fire conditions. Sodium oxides, silicon oxides.
Possibility of Hazardous Reactions: Will occur [ ] Will not occur [X]
Conditions To Avoid -Hazardous Reactions:

SECTION 11: TOXICOLOGICAL INFORMATION

Toxicological Information:
Irritation or Corrosion: Skin - rabbit - Severe skin irritation - -24 h.
Carcinogenicity/Other Information: CAS# 7732-18-5: Not listed by ACGIH, IARC, NTP, or CA Prop 65. CAS# 111-76-2: ACGIH: A3 - Confirmed animal carcin CAS# 7732-18-5: Not listed by ACGIH, IARC, NTP, or CA Prop 65. California: Not listed. NTP: Not listed. IARC: Not listed. Carcinogenicity. IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH. NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

CAS #	Hazardous Components (Chemical Name)	NTP	IARC	ACGIH	OSHA
111-76-2	Ethanol, 2-Butoxy- {Ethylene glycol n-butyl ether, Glycol Ether EB}	n.a.	3	A3	n.a.
9016-45-9	Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydr {Nonylphenol Ethoxylate}	n.a.	n.a.	n.a.	n.a.
6834-92-0	Silicic acid (H2SiO3), Disodium salt	n.a.	n.a.	n.a.	n.a.
1310-73-2	Sodium hydroxide {Caustic soda; Lye solution}	n.a.	n.a.	n.a.	n.a.

SECTION 12: ECOLOGICAL INFORMATION

General Ecological Information: Environmental: TERRESTRIAL FATE: Based on a recommended classification scheme, an estimated Koc value of 67,, determined from an experimental log Kow and a recommended regression-derived equation, indicates that ethylene glycol mono-n-butyl ether is expected to have high mobility in soil. An estimated BCF value of 2.5 was calculated for ethylene glycol mono-n-butyl ether, using an experimental log Kow of 0.83 and a recommended regression-derived equation. According to a recommended classification scheme, this BCF value suggests that bioconcentration in aquatic organisms is low. Physical: No information found. Other: An estimated BCF value of 2.5,, from an experimental log Kow, suggests that ethylene glycol mono-n-butyl ether bioconcentration in aquatic organisms will be low, according to a recommended classification scheme. ELIMINATION.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Method: Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification. RCRA P-Series: None listed. RCRA U-Series: None listed. Observe all federal, state, and local environmental regulations.

SECTION 14: TRANSPORTATION INFORMATION (DOT/UN CLASSIFICATION)

LAND TRANSPORT (US DOT):
DOT Proper Shipping Name: Corrosive liquid, basic, inorganic, n.o.s. (contains sodium hydroxide)
DOT Hazard Class: 8 CORROSIVE
UN/NA Number: UN3266
Packing Group: II

SECTION 15: REGULATORY INFORMATION

EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists

CAS #	Hazardous Components (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
111-76-2	Ethanol, 2-Butoxy- {Ethylene glycol n-butyl ether, Glycol Ether EB}	No	No	Yes-Cat. N230
9016-45-9	Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydr {Nonylphenol Ethoxylate}	No	No	No
6834-92-0	Silicic acid (H2SiO3), Disodium salt	No	No	No
1310-73-2	Sodium hydroxide {Caustic soda; Lye solution}	No	Yes 1000 LB	No

CAS #	Hazardous Components (Chemical Name)	Other US EPA or State Lists
111-76-2	Ethanol, 2-Butoxy- {Ethylene glycol n-butyl ether, Glycol Ether EB}	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No
9016-45-9	Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydr {Nonylphenol Ethoxylate}	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory, 8A PAIR; CA PROP.65: No
6834-92-0	Silicic acid (H2SiO3), Disodium salt	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No
1310-73-2	Sodium hydroxide {Caustic soda; Lye solution}	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No

SECTION 16: OTHER INFORMATION

Revision Date:07/08/2015
Preparer Name: Regulatory Affairs

Additional Information About This Product:

Company Policy or Disclaimer: The information contained in this Safety Data Sheet is provided pursuant to current OSHA regulations to convey information concerning the hazardous nature of the named product. The information supplied was compiled from the most reliable sources available at the time of preparation and in light of the most reasonable foreseeable exposure situations expected from the intended use of this product. The material(s) may present greater or lesser hazard exposure under other circumstances that are beyond the control of the manufacturer. Therefore it is imperative that all directions and warnings on the product label be read and closely followed.