

SAFETY DATA SHEET

BREAKTHROUGH

1. Product and Company Identification

Product Code: 4511
Product Name: BREAKTHROUGH
Revision: 04/20/2023
Supersedes Revision: 05/27/2021

Manufacturer Information: PDQ Manufacturing, Inc.
 201 Victory Circle
 Ellijay, GA 30540
Phone Number: (706)636-1848
Web site address: www.pdqonline.com

Emergency Contact: Chemtrec (800)424-9300 / 24 Hr.
 Leak, Spill, Exposure, Fire, Accident

Supplier Name and Address: **Phone Number:**

2. Hazards Identification

Skin Corrosion/Irritation, Category 2
Serious Eye Damage/Eye Irritation, Category 1



GHS Signal Word: **Danger**

GHS Hazard Phrases: H315 - Causes skin irritation.
 H318 - Causes serious eye damage.

GHS Precautionary Phrases: P264 - Wash hands thoroughly after handling.
 P280 - Wear protective gloves and eye protection.

GHS Response Phrases: P302+352 - IF ON SKIN: Wash with plenty of soap and water.
 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 section 4 on this SDS.
 P332+313 - If skin irritation occurs, get medical advice/attention.
 P362 - Take off contaminated clothing and wash before re-use.

GHS Storage and Disposal Phrases: No phrases apply.

Potential Health Effects (Acute and Chronic):

Inhalation: No hazard expected in normal industrial use.

Skin Contact: Causes skin irritation.

Eye Contact: Causes eye irritation. Causes redness and pain. Causes eye burns. May cause chemical conjunctivitis and corneal damage.

Ingestion: Harmful if swallowed. May cause gastrointestinal irritation with nausea, vomiting and diarrhea.

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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 %
1310-73-2	Sodium hydroxide {Caustic soda; Lye solution}	1.0 -3.0 %
25155-30-0	Sodium dodecylbenzene sulfonate {linear alkylbenzene sulfonate}	1.0 -3.0 %
68604-71-7	Imidazolium compounds, 1-[2-(2-carboxyethoxy)ethyl]-1(or 3)-(2-carboxyethyl)-4,5-dihydro-2-norcoco	1.0 -3.0 %

4. First Aid Measures

Emergency and First Aid Procedures:

In Case of Inhalation:	No specific treatment is necessary since this material is not likely to be hazardous by inhalation. If exposed to excessive levels of dusts or fumes, remove to fresh air and get medical attention if cough or other symptoms develop.
In Case of Skin Contact:	Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Take off contaminated clothing and shoes immediately. Consult a physician.
In Case of Eye Contact:	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
In Case of Ingestion:	Get medical aid immediately. Call a poison control center. If victim is fully conscious, give a cupful of water. Never give anything by mouth to an unconscious person.

5. Fire Fighting Measures

Flash Pt:

Explosive Limits: LEL: UEL:

Autoignition Pt:

Suitable Extinguishing Media: Use water spray, dry chemical, carbon dioxide, or chemical foam. Substance is noncombustible; use agent most appropriate to extinguish surrounding fire. 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. Use water spray to keep fire-exposed containers cool. Material will not burn.

Flammable Properties and Hazards:

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: Do not let this chemical enter the environment. Vacuum or sweep up material and place into a suitable disposal container. Avoid runoff into storm sewers and ditches which lead to waterways. Clean up spills immediately, observing precautions in the Protective Equipment section. Do not get water on spilled substances or inside containers. Personal precautions.

Use personal protective equipment. Ensure adequate ventilation. Evacuate personnel to safe areas.

Environmental precautions.

Do not let product enter drains.

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Keep in suitable, closed containers for disposal.

7. Handling and Storage

Precautions To Be Taken in Handling: Do not get in eyes, on skin, or on clothing. Do not ingest or inhale. Wash thoroughly after handling. Keep container tightly closed. Avoid ingestion and inhalation. Discard contaminated shoes. Use only with adequate ventilation.

Precautions To Be Taken in Storing: Store in a cool, dry place.

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	
1310-73-2	Sodium hydroxide {Caustic soda; Lye solution}	PEL: 2 mg/m ³	CEIL: 2 mg/m ³	
25155-30-0	Sodium dodecylbenzene sulfonate {linear alkylbenzene sulfonate}			
68604-71-7	Imidazolium compounds, 1-[2-(2-carboxyethoxy)ethyl]-1(or 3)-(2-carboxyethyl)-4,5-dihydro-2-norco co			

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. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Work/Hygienic/Maintenance Practices: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

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:

Flash Pt:

Explosive Limits: LEL: UEL:

Specific Gravity (Water = 1): ~ 1.08

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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:

10. Stability and Reactivity

Stability: Unstable [] Stable [X]

Conditions To Avoid - Instability: Incompatible materials, Avoid contact with acids, reducing agents, oxidizers, nitrogen oxides, amines, ammonia or other nitrogen containing compounds. contact with water.

Incompatibility - Materials To Avoid: Strong acids. Strong bases, Aluminum, Sulfur oxides. Metals. Acids, Zinc, gelatin, nitromethane, leather, flammable liquids, organic halogens. Lead. Tin/tin oxides.

Hazardous Decomposition or Byproducts: Carbon monoxide, Toxic fumes of sodium oxide, formed under fire conditions. Sodium oxides, silicon oxides.

Possibility of Hazardous Reactions: Will occur [] Will not occur [X]

Conditions To Avoid - Hazardous Reactions:

11. Toxicological Information

Toxicological Information:

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.
1310-73-2	Sodium hydroxide {Caustic soda; Lye solution}	n.a.	n.a.	n.a.	n.a.
25155-30-0	Sodium dodecylbenzene sulfonate {linear alkylbenzene sulfonate}	n.a.	n.a.	n.a.	n.a.
68604-71-7	Imidazolium compounds, 1-[2-(2-carboxyethoxy)ethyl]-1(3)-(2-carboxyethyl)-4,5-dihydro-2-norcoco	n.a.	n.a.	n.a.	n.a.

12. Ecological Information

Persistence and Degradability: No data available.

Bioaccumulative Potential: No data available.

Mobility in Soil: No data available.

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. Product.

Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging.

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Dispose of as unused product.

14. Transport Information

LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: Corrosive liquid, basic, inorganic, n.o.s.

DOT Hazard Class: 8 CORROSIVE

UN/NA Number: UN3266

Packing Group: II



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
1310-73-2	Sodium hydroxide {Caustic soda; Lye solution}	No	Yes NA	No
25155-30-0	Sodium dodecylbenzene sulfonate {linear alkylbenzene sulfonate}	No	Yes NA	No
68604-71-7	Imidazolium compounds, 1-[2-(2-carboxyethoxy)ethyl]-1(or 3)-(2-carboxyethyl)-4,5-dihydro-2-norcoco	No	No	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
1310-73-2	Sodium hydroxide {Caustic soda; Lye solution}	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No
25155-30-0	Sodium dodecylbenzene sulfonate {linear alkylbenzene sulfonate}	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No
68604-71-7	Imidazolium compounds, 1-[2-(2-carboxyethoxy)ethyl]-1(or 3)-(2-carboxyethyl)-4,5-dihydro-2-norcoco	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No

16. Other Information

Revision Date: 04/20/2023

Preparer Name: Regulatory Affairs

Hazard Rating System:

HEALTH	2
FLAMMABILITY	0
REACTIVITY	1
PPE	B

HMIS:

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

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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.