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## INDICATOR 2, BROMOCRESOL GREEN

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### *Company Information*

*Company's Name:* REAGENTS, INC.

*Company's P. O. Box:* 240746

*Company's City:* CHARLOTTE

*Company's State:* NC

*Company's Country:* US

*Company's Zip Code:* 28224

*Company's Info Ph #:* 704/554-7474, 800/732-8484

*Emergencies, call CHEMTREC:* 800-424-9300

*Date MSDS Prepared:* April 23, 2015

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### *1. Product Identification*

*Synonyms:* IND2.

*CAS No.:* See Section 2.

*Molecular Weight:* Not applicable to mixtures.

*Chemical Formula:*  $C_{21}H_{14}O_5Br_4S / NaOH / H_2O$

*Product Codes:* I-1610; IND2

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### *2. Composition/Information on Ingredients*

<i>Ingredient</i>	<i>CAS No</i>	<i>Percent</i>	<i>Hazardous</i>
Bromocresol Green	76-60-8	< 1 %	Yes
Sodium Hydroxide	1310-73-2	< 1 %	No
Water	7732-18-5	> 99%	No

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### *3. Hazards Identification*

#### *Emergency Overview*

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**CAUTION! MAY BE HARMFUL IF SWALLOWED OR INHALED. MAY CAUSE IRRITATION TO SKIN, EYES, AND RESPIRATORY TRACT.**

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*Health Rating:* 1 - Slight

*Flammability Rating:* 1 - Slight

*Reactivity Rating:* 0 - None

*Contact Rating:* 2 - Moderate

*Lab Protective Equip:* GOGGLES; LAB COAT; PROPER GLOVES

*Storage Color Code:* Green (General Storage)

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#### *Potential Health Effects*

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**Inhalation:** May cause irritation to the respiratory tract. Symptoms may include coughing and shortness of breath.

**Ingestion:** Large oral doses may cause irritation to the gastrointestinal tract.

**Skin Contact:** May cause irritation with redness and pain.

**Eye Contact:** May cause irritation, redness and pain.

**Chronic Exposure:** No information found.

**Aggravation of Pre-existing Conditions:** No information found.

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## 4. First Aid Measures

**Inhalation:** Remove to fresh air. Get medical attention for any breathing difficulty.

**Ingestion:** Induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention.

**Skin Contact:** Immediately flush skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention if irritation develops.

**Eye Contact:** Immediately flush eyes with plenty of water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get medical attention if irritation persists.

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## 5. Fire Fighting Measures

**Fire:** Not considered to be a fire hazard.

**Explosion:** Not considered to be an explosion hazard.

**Fire Extinguishing Media:** Use any means suitable for extinguishing surrounding fire.

**Special Information:** Use protective clothing and breathing equipment appropriate for the surrounding fire.

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## 6. Accidental Release Measures

Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Spills: Sweep up and containerize for reclamation or disposal. Vacuuming or wet sweeping may be used to avoid dust dispersal.

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## 7. Handling and Storage

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage.

Containers of this material may be hazardous when empty since they retain product residues (vapors/liquids); observe all warnings and precautions listed for the product.

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## 8. Exposure Controls/Personal Protection

**Airborne Exposure Limits:** None established.

**Ventilation System:** A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, a Manual of Recommended Practices*, most recent edition, for details.

**Personal Respirators (NIOSH-Approved):** For conditions of use where exposure to dust or mist is apparent and engineering controls are not feasible, a particulate respirator (NIOSH type N95 or better filters) may be

worn. If oil particles (e.g. lubricants, cutting fluids, glycerine, etc.) are present, use a NIOSH type R or P filter. For emergencies or instances where the exposure levels are not known, use a full-face positive-pressure, air-supplied respirator. **WARNING:** Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

**Skin Protection:** Wear protective gloves and clean body-covering clothing.

**Eye Protection:** Use chemical safety goggles. Maintain eye wash fountain and quick-drench facilities in work area.

## 9. Physical and Chemical Properties

**Appearance:** Dark green liquid.

**Odor:** Odorless or faint medicinal odor.

**Solubility:** Infinitely Soluble.

**Specific Gravity:** No information found.

**pH @ 20°C:** 4.50 +/- 0.05

**% Volatiles by volume @ 21C (70F):** >99

**Boiling Point:** No information found.

**Melting Point:** No information found.

**Vapor Density (Air=1):** No information found.

**Vapor Pressure (mm Hg):** No information found.

**Evaporation Rate (BuAc=1):** No information found.

## 10. Stability and Reactivity

**Stability:** Stable under ordinary conditions of use and storage.

**Hazardous Decomposition Products:** Burning may produce bromines, sulfur oxides, carbon dioxide, and carbon monoxide.

**Hazardous Polymerization:** Has not been reported.

**Incompatibilities:** Strong oxidizers.

**Conditions to Avoid:** No information found.

## 11. Toxicological Information

**Bromocresol Green:** No LD50/LC50 information found relating to normal routes of occupational exposure.

**Investigated as a mutagen. Sodium hydroxide:** irritation data: skin, rabbit: 500 mg/24H severe; eye rabbit: 50 ug/24H severe. Investigated as a mutagen.

Ingredient	---NTP Carcinogen---		IARC Category
	Known	Anticipated	
Bromocresol Green (76-60-8)	No	No	None
Sodium Hydroxide (1310-73-2)	No	No	None
Water (7732-18-5)	No	No	None

## 12. Ecological Information

**Environmental Fate:** No information found.

**Environmental Toxicity:** No information found.

### 13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

### 14. Transport Information

Not regulated.

### 15. Regulatory Information

-----\Chemical Inventory Status - Part 1\-----

Ingredient	TSCA	EC	Japan	Australia
Bromocresol Green (76-60-8)	Yes	Yes	No	Yes
Sodium Hydroxide (1310-73-2)	Yes	Yes	Yes	Yes
Water (7732-18-5)	Yes	Yes	Yes	Yes

-----\Chemical Inventory Status - Part 2\-----

Ingredient	Korea	--Canada--		
		DSL	NDSL	Phil.
Bromocresol Green (76-60-8)	Yes	Yes	No	Yes
Sodium Hydroxide (1310-73-2)	Yes	Yes	No	Yes
Water (7732-18-5)	Yes	Yes	No	Yes

-----\Federal, State & International Regulations - Part 1\-----

Ingredient	-SARA 302-		-----SARA 313-----	
	RQ	TPQ	List	Chemical Catg.
Bromocresol Green (76-60-8)	No	No	No	No
Sodium Hydroxide (1310-73-2)	No	No	No	No
Water (7732-18-5)	No	No	No	No

-----\Federal, State & International Regulations - Part 2\-----

Ingredient	CERCLA	-RCRA-	-TSCA-
		261.33	8 (d)
Bromocresol Green (76-60-8)	No	No	No
Sodium Hydroxide (1310-73-2)	1000	No	No
Water (7732-18-5)	No	No	No

Chemical Weapons Convention: No      TSCA 12 (b) : No      CDTA: No  
 SARA 311/312:                      Acute: Yes                      Chronic: No                      Fire: No                      Pressure: No  
 Reactivity: No                      (Pure / Solid)

**WHMIS:** This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

### 16. Other Information

**NFPA Ratings:** Health: 1 Flammability: 0 Reactivity: 0

**Label Hazard Warning:** CAUTION! MAY BE HARMFUL IF SWALLOWED OR INHALED. MAY CAUSE IRRITATION TO SKIN, EYES, AND RESPIRATORY TRACT.

**Label Precautions:** Avoid contact with eyes, skin and clothing.

Wash thoroughly after handling.

Avoid breathing dust.

*Keep container closed.*

*Use with adequate ventilation.*

***Label First Aid:*** *If inhaled, remove to fresh air. Get medical attention for any breathing difficulty. In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes. Get medical attention if irritation develops or persists. If swallowed, induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person.*

***Product Use:*** *Laboratory Reagent.*

***Disclaimer:***

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