The following list contains the Material Safety Data Sheets you requested. Please scoll down to view the requested MSDS(s).

Product	MSDS	Distributor	Format	Language	Quantity
1455099	N/A	Hach Company	ROWGHS	English	1

Total Enclosures: 1

World Headquarters
Hach Company
P.O.Box 389
Loveland, CO USA 80539
(970) 669-3050

MSDS No: M00073

SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Bromphenol Blue Indicator Powder
Catalog Number: 1455099

Hach Company
P.O.Box 389
Loveland, CO USA 80539
(970) 669-3050

Emergency Telephone Numbers:
(Medical and Transportation)
(303) 623-5716 24 Hour Service
(515)232-2533 8am - 4pm CST

MSDS Number: M00073
Chemical Name: Not applicable
CAS Number: Not applicable
Additional CAS No. (for hydrated forms): Not applicable
Chemical Formula: Not applicable
Chemical Family: Not applicable
Intended Use: Laboratory Reagent Indicator for pH

2. HAZARDS IDENTIFICATION

GHS Classification:
Hazard categories: . . Serious Eye Damage/Eye Irritation:Eye Irrit. 2 Hazardous to the Aquatic Environment: Aquatic Chronic 2
GHS Label Elements:
WARNING

Hazard statements: . . Causes serious eye irritation. Toxic to aquatic life with long lasting effects.
Precautionary statements: . Wear protective gloves / protective clothing / eye protection / face protection. . . Wear eye protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
HMIS:
Health: 1
Flammability: 0
Reactivity: 0
Protective Equipment: X - See protective equipment, Section 8.
NFPA:
Health: 1
Flammability: 0
Reactivity: 0
Symbol: Not applicable
WHMIS Hazard Classification: Not applicable
WHMIS Symbols: Not applicable

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Components according to GHS:
Potassium Chloride

CAS Number: 7447-40-7
Chemical Formula: KCl
GHS Classification: Acute Tox. 5 -Orl, H303; Skin Irrit. 3, H316; Eye Irrit. 2, H319; Aquatic Acute 3, H402
Percent Range (Trade Secret): >98
Percent Range Units: weight / weight
PEL: 15 mg/m^3 as inhalable dust; 5 mg/m^3 as respirable dust
TLV: 10 mg/m^3 as inhalable dust; 3 mg/m^3 as respirable dust

WHMIS Symbols: Not applicable
Hazardous Components according to GHS: No

Bromphenol Blue

CAS Number: 115-39-9
Chemical Formula: $C_{19}H_{10}Br_4O_5S$
GHS Classification: Not hazardous per GHS
Percent Range (Trade Secret): < 1.0
Percent Range Units: weight / weight
PEL: 15 mg/m^3 as inhalable dust; 5 mg/m^3 as respirable dust
TLV: 10 mg/m^3 as inhalable dust; 3 mg/m^3 as respirable dust

WHMIS Symbols: Not applicable

4. FIRST AID MEASURES

General Information: In the event of exposure, show this Material Safety Data Sheet and label (where possible) to a doctor.
Advice to doctor: Treat symptomatically.
Eye Contact: Immediately flush eyes with water for 15 minutes. Call physician.
Skin Contact (First Aid): Wash skin with soap and plenty of water.
Inhalation: Remove to fresh air.
Ingestion (First Aid): Give large quantities of water. Call physician immediately.

5. FIRE FIGHTING MEASURES

Flammable Properties: Material is not classified as flammable according to GHS criteria. Does not burn, but may melt in a fire, releasing toxic fumes.
Fire Fighting Instruction: As in any fire, wear self-contained breathing apparatus pressure-demand and full protective gear.
Extinguishing Media: Water. Carbon dioxide Dry chemical.
Extinguishing Media NOT To Be Used: Not applicable
Fire / Explosion Hazards: May react violently with: bromine trifluoride
Hazardous Combustion Products: This material will not burn.

6. ACCIDENTAL RELEASE MEASURES

Spill Response Notice:
Only persons properly qualified to respond to an emergency involving hazardous substances may respond to a spill according to federal regulations (OSHA 29 CFR 1910.120(a)(v)) and per your company's emergency response plan and guidelines/procedures. See Section 13, Special Instructions for disposal assistance. Outside of the US, only persons properly qualified according to state or local regulations should respond to a spill involving chemicals.
Containment Technique: Stop spilled material from being released to the environment. Releases of this material may contaminate the environment.
Clean-up Technique: Scoop up spilled material into a large beaker and dissolve with water. Adjust to a pH between 6 and 9 with an alkali, such as soda ash or sodium bicarbonate. Decontaminate the area of the spill with a soap solution. If permitted by regulation, Flush reacted material to the drain with a large excess of water. Otherwise, Dispose of in accordance with local, state and federal regulations or laws.
Evacuation Procedure: Evacuate as needed to perform spill clean-up. If conditions warrant, increase the size of the evacuation.
DOT Emergency Response Guide Number: Not applicable

7. HANDLING AND STORAGE

Handling: Avoid contact with eyes skin clothing Wash thoroughly after handling. Use with adequate ventilation. Do not breathe dust. Maintain general industrial hygiene practices when using this product.
Storage: Keep material dry. Keep container tightly closed when not in use. Keep this product in its original container when not in use. Store in a cool, dry, well-ventilated place. Protect from: moisture heat extreme temperatures
Flammability Class: Not applicable

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls: Have an eyewash station nearby. Use general ventilation to minimize exposure to mist, vapor or dust. Maintain general industrial hygiene practices when using this product.
Personal Protective Equipment:
Eye Protection: safety glasses with top and side shields
Skin Protection: nitrile gloves In the EU, the selected gloves must satisfy the specifications of EU Directive 89/686/EEC and standard EN 374 derived from it. lab coat
Inhalation Protection: adequate ventilation
Precautionary Measures: Avoid contact with: eyes skin clothing Wash thoroughly after handling. Use with adequate ventilation. Do not breathe: dust Protect from: moisture heat Keep away from: oxidizers acids/acid fumes bases
TLV: 10 mg/m^3 as inhalable dust; 3 mg/m^3 as respirable dust
PEL: 15 mg/m^3 as inhalable dust; 5 mg/m^3 as respirable dust
For Occupational Exposure Limits (OEL) for ingredients, see section 3 - Composition/Information on Ingredients.:

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Reddish-orange powder
Physical State: Solid
Molecular Weight: Not applicable
Odor: Odorless
Odor Threshold: Not applicable
pH: 3.7 (10% solution)
Metal Corrosivity:
Corrosivity Classification: Not classified as corrosive to metals according to GHS criteria.
Steel: Not determined
Aluminum: Not determined
Specific Gravity/ Relative Density (water = 1; air =1): 1.98
Viscosity: Not applicable
Solubility:
Water: Soluble
Acid: Soluble
Other: Slightly soluble in alcohol.
Partition Coefficient (n-octanol / water): Not applicable
Coefficient of Water / Oil: Not applicable
Melting Point: 279 °C (534 °F)
Decomposition Temperature: 279 °C (534 °F)
Boiling Point: Not applicable
Vapor Pressure: Not applicable
Vapor Density (air = 1): Not applicable
Evaporation Rate (water = 1): Not applicable
Volatile Organic Compounds Content: Not applicable
Flammable Properties: Material is not classified as flammable according to GHS criteria. Does not burn, but may melt in a fire, releasing toxic fumes.
Flash Point: Not applicable
Method: Not applicable
Flammability Limits:
Lower Explosion Limits: Not applicable
Upper Explosion Limits: Not applicable
Autoignition Temperature: Not applicable
Explosive Properties:
Not classified according to GHS criteria.
Oxidizing Properties:

Not classified according to GHS criteria.

Reactivity Properties:

Not classifed as self-reactive, pyrophoric, self-heating or emitting flammable gases in contact with water according to GHS criteria.

Gas under Pressure:

Not classified according to GHS criteria.

10. STABILITY AND REACTIVITY

Chemical Stability: Stable when stored under proper conditions.
Mechanical Impact: None reported
Static Discharge: None reported.
Reactivity / Incompatibility: May react violently in contact with: bromine trifluoride oxidizers
Hazardous Decomposition: Heating to decomposition releases: Toxic fumes of: carbon dioxide carbon monoxide sulfur oxides bromides
Conditions to Avoid: Excess moisture Excessive heat Extreme temperatures Heating to decomposition. Contact with acid or acid fumes Contact with oxidizers Incompatibles Poor Ventilation Avoid creating dust.

11. TOXICOLOGICAL INFORMATION

Toxicokinetics, Metabolism and Distribution: No information available for mixture.
Toxicologically Synergistic Products: None reported
Acute Toxicity: Acute Toxicity Estimate (ATE) - Calculated from Ingredient Toxicity Data Route Data Given Below Based on classification principles, the classification criteria are not met.
ATE Oral Rat LD50 = 2616 mg/kg
Specific Target Organ Toxicity - Single Exposure (STOT-SE): Based on classification principles, the classification criteria are not met.
Specific Target Organ Toxicity - Repeat Exposure (STOT-RE): Based on classification principles, the classification criteria are not met.
Skin Corrosion/Irritation: Mildly irritating to skin.
Eye Damage: Irritating to eyes.
Sensitization: Based on classification principles, the classification criteria are not met.
CMR Effects/Properties (carcinogenic, mutagenic or toxic to reproduction): Based on classification principles, the classification criteria are not met.

This product does NOT contain any NTP listed chemicals.

This product does NOT contain any OSHA listed carcinogens.

Symptoms/Effects:

Ingestion: May cause: anorexia blood pressure problems cardiac depression fever gastroenteritis
Inhalation: No effects anticipated
Skin Absorption: No effects anticipated
Chronic Effects: Chronic overexposure may cause allergic skin reactions

Medical Conditions Aggravated: Pre-existing: Kidney conditions Cardiovascular diseases Skin conditions Eye conditions

12. ECOLOGICAL INFORMATION

Product Ecological Information: --

No ecological data available for this product. Do not place in landfil. Recycle appropriately. Do not release into the environment.

Method Used for Estimation of Aquatic Toxicity of Mixture Summation Method M-factor (Multiplier) for highly toxic ingredients: 10

Ingredient Ecological Information: Potassium Chloride: 96 hr Gambusia affinis LC50 = 920 mg/L; 48 hr Daphnia magna EC50 = 83 mg/L; 96 hr Pimephales promelas LC50 = 880 mg/L; 7 days Pimephales promelas NOEC = 500 mg/L; 7 days Pimephales promelas LOEC = 1000 mg/L

Ecological structure-activity relationship (SAR) Estimation (ECOSAR U.S. EPA 2009)

Bromophenol Blue: SARS Class: Phenols, Poly: 96 hr Fish LC50 = 0.052 mg/L; 48 hr Daphnid LC50 = 0.061 mg/L; 96 hr Green algae EC50 = 0.343 mg/L

CEPA Statments: Bromphenol Blue: Persistent, bioaccumulative and inherently toxic to aquatic organisms (PBiT); Potassium Chloride: Persistent, not bioaccumulative or inherently toxic to aquatic organisms.

13. DISPOSAL CONSIDERATIONS

EPA Waste ID Number: Not applicable
Special Instructions (Disposal): Dilute material with excess water making a weaker than 5% solution. Adjust to a pH between 6 and 9 with an alkali, such as soda ash or sodium bicarbonate. If permitted by regulation, Open cold water tap completely, slowly pour the reacted material to the drain. Otherwise, Check with local municipal and state authorities and waste contractors for pertinent local information regarding the proper disposal of chemicals.
Empty Containers: Working in a well-ventilated area, Rinse three times with an appropriate solvent. Collect rinsate and dispose of according to local, state or federal regulations. In the US, rinsate from empty containers is classified as hazardous waste and should be disposed of at an E.P. A. approved facility. Rinsate from empty containers may contain sufficient product to require disposal as hazardous waste. Dispose of empty container as normal trash.
NOTICE (Disposal): These disposal guidelines are based on federal regulations and may be superseded by more stringent state or local requirements. Please consult your local environmental regulators for more information. In Europe: Chemical and analysis solutions must be disposed of in compliance with the respective national regulations. Product packaging must be disposed of in compliance with the country-specific regulations or must be passed to a packaging return system.

14. TRANSPORT INFORMATION

D.O.T.:
D.O.T. Proper Shipping Name: Environmentally hazardous substances, solid, n.o.s.
Potassium Chloride / Bromophenol Blue Mixture
Hazard Class: 9
Subsidiary Risk: NA
ID Number: UN3077
Packing Group: III
T.D.G.:
Proper Shipping Name: Environmentally hazardous substance, solid, n.o.s.
Potassium Chloride / Bromophenol Blue Mixture
Hazard Class: 9
Subsidiary Risk: NA
UN Number/PIN: 3077
Packing Group: III
I.C.A.O.:
I.C.A.O. Proper Shipping Name: Environmentally Hazardous Substance, Solid, nos
Potassium Chloride / Bromophenol Blue Mixture
Hazard Class: 9
Subsidiary Risk: NA
ID Number: UN3077
Packing Group: III
I.M.O.:
Proper Shipping Name: Environmentally Hazardous Substance, Solid, nos
Potassium Chloride / Bromophenol Blue Mixture
Hazard Class: 9
Subsidiary Risk: NA
ID Number: UN3077
Packing Group: III
Additional Information: There is a possibility that this product could be contained in a reagent set or kit composed of various compatible dangerous goods. If the item is NOT in a set or kit, the classification given above applies. If the item IS part of a set or kit, the classification would change to the following: UN3316 Chemical Kit, Class 9, PG II or III. If the item is not regulated, the Chemical Kit classification does not apply.

15. REGULATORY INFORMATION

U.S. Federal Regulations:
O.S.H.A.: This product meets the criteria for a hazardous substance as defined in the Hazard Communication Standard. (29 CFR 1910.1200)
E.P.A.:
S.A.R.A. Title III Section 311/312 Categorization (40 CFR 370): Immediate (Acute) Health Hazard
S.A.R.A. Title III Section 313 (40 CFR 372): This product does NOT contain any chemical subject to the reporting requirements of Section 313 of Title III of SARA.
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302 (EHS) TPQ (40 CFR 355): Not applicable
304 CERCLA RQ (40 CFR 302.4): Not applicable
304 EHS RQ (40 CFR 355): Not applicable
Clean Water Act (40 CFR 116.4): Not applicable
RCRA: Contains no RCRA regulated substances.

State Regulations:

California Prop. 65: No Prop. 65 listed chemicals are present in this product.
Identification of Prop. 65 Ingredient(s): None
California Perchlorate Rule CCR Title 22 Chap 33: Not applicable
Trade Secret Registry: Not applicable

National Inventories:

U.S. Inventory Status: All ingredients in this product are listed on the TSCA 8(b) Inventory (40 CFR 710).
CAS Number: Not applicable
Canadian Inventory Status: All ingredients of this product are DSL Listed.
EEC Inventory Status: All ingredients used to make this product are listed on EINECS / ELINCS.
Australian Inventory (AICS) Status: All ingredients are listed.
New Zealand Inventory (NZIoC) Status: All components either listed or exempt.
Korean Inventory (KECI) Status: All components of this product are either listed, listed as the anhydrous compound or exempt.
Japan (ENCS) Inventory Status: All components either listed or exempt.
China (PRC) Inventory (MEP) Status: All components either listed or exempt.

16. OTHER INFORMATION

References: 29 CFR 1900 - 1910 (Code of Federal Regulations - Labor). Air Contaminants, Federal Register, Vol. 54, No. 12. Thursday, January 19, 1989. pp. 2332-2983. TLV's Threshold Limit Values and Biological Exposure Indices for 1992-1993. American Conference of Governmental Industrial Hygienists, 1992. Technical Judgment. In-house information. Fire Protection Guide on Hazardous Materials, 10th Ed. Quincy, MA: National Fire Protection Fire Protection Guide on Hazardous Materials, 10th Ed. Quincy, MA: National Fire Protection Association, 1991.
Complete Text of H phrases referred to in Section 3: Not applicable H316 Causes mild skin irritation. H319 Causes serious eye irritation. . H410 Very toxic to aquatic life with long lasting effects.
Revision Summary: Substantially Revised MSDS Substantial revision to comply with EU Reg 1272/2008, Reg 1907/2006 and UN GHS (ST/SG/AC.10/36/Add.3).
Date of MSDS Preparation:
Day: 23
Month: April
Year: 2014
MSDS Prepared: MSDS prepared by Product Compliance Department extension 3350
CCOHS Evaluation Note: It is offered under exemption from WHMIS labeling as specified in the Controlled Products Regulation (CPR) Section 17. It is offered under the interim policy that was established by Health Canada permitting use of GHS-formatted safety data sheets in Canada prior to revision of CPR to GHS. This product has been classified and labeled in accordance with the requirements of GHS (ST/SG/AC.10/36/Add.3). This SDS has been prepared in accordance with the requirements of GHS (ST/SG/AC.10/36/Add.3).

Legend:

NA - Not Applicable	w/w - weight/weight
ND - Not Determined	w/v - weight/volume
NV - Not Available	v/v - volume/volume

USER RESPONSIBILITY: Each user should read and understand this information and incorporate it in individual site safety programs in accordance with applicable hazard communication standards and regulations.

THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED TO BE ACCURATE. HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THESE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF.