

WTW GmbH
Dr. Karl Slevogt Str. 1, D-82362 Weilheim, Germany
Tel: 49(0)881/183-0

WTW Inc.
6E Gill St., Woburn, MA 01801 USA
Phone: 781-569-0095

Creation Date: 06/13/05 (2938F-1)
Revision Date:

FOR CHEMICAL EMERGENCY
Spill Leak Fire Exposure or Accident
Call CHEMTREC Day or Night
DOMESTIC NORTH AMERICA: 800-424-9300
INTERNATIONAL: 703-527-3887 (collect calls accepted)

MATERIAL SAFETY DATA SHEET

I. CHEMICAL IDENTIFICATION

TRADE NAMES: AMMONIUM / AMMONIA Ampoules and Activator Solutions

MODEL NO.: NH4-5 CV

DESCRIPTION: Reagent ampoules and accessory solutions for the determination of ammonium in water. Each ampoule contains approximately 2 mL of reagent sealed under vacuum. The smaller bottle of activator solution contains approximately 10 mL of accessory solution. The larger bottle of activator solution contains approximately 70 mL of accessory solution.

In the Ampoules:

NFPA RATINGS: HEALTH: 2 FLAMMABILITY: 0 REACTIVITY: 0

In the Activator Solutions:

NFPA RATINGS: HEALTH: 1 FLAMMABILITY: 0 REACTIVITY: 0

II. COMPOSITION/INFORMATION ON INGREDIENTS

In the Ampoules:

COMPONENT: Potassium Iodide
 CAS NO.: 7681-11-0 PERCENT: < 1.5

COMPONENT: Mercuric (II) Iodide
 CAS NO.: 7774-29-0 PERCENT: < 2.5

COMPONENT: Sodium Borate, Decahydrate
 CAS NO.: 1303-96-4 PERCENT: < 2.5

COMPONENT: Sodium Hydroxide
 CAS NO.: 1310-73-2 PERCENT: < 3.5

COMPONENT: Deionized Water
 CAS NO.: 7732-18-5 PERCENT: >90.0

In the Activator Solutions:

COMPONENT: Potassium Hydroxide
 CAS NO.: 1310-58-3 PERCENT: 0.1

COMPONENT: Diethylene Glycol
 CAS NO.: 111-46-6 PERCENT: 5.0

COMPONENT: Sodium Potassium Tartrate, Tetrahydrate
 CAS NO.: 6381-59-5 PERCENT: 30.0

COMPONENT: Deionized Water
 CAS NO.: 7732-18-5 PERCENT: 65.0

III. HAZARDS IDENTIFICATION

Danger! Toxic. Harmful if swallowed or inhaled. Risk of serious damage to eyes.

ACUTE TOXICITY: headache, coughing, dizziness, difficulty breathing
 CHRONIC TOXICITY: CNS, kidney, liver, and eye damage. May cause rise in blood pressure; effects may be delayed. Prolonged or repeated exposure may cause adverse reproductive or fetal effects.

TARGET ORGANS: Kidneys, Liver, G.I. System, Central Nervous System
 MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Eye, skin and respiratory disorders

IV. FIRST AID MEASURES

EYE AND SKIN CONTACT: Immediately flush eyes and skin with water for 15 minutes.

INGESTION: Seek medical attention. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. DO NOT induce vomiting.

INHALATION: Remove individual to fresh air. If not breathing give artificial respiration but not by mouth. If breathing is difficult, administer oxygen. Seek medical attention.

V. FIRE FIGHTING MEASURES

FLASH POINT: N/A AUTOIGNITION POINT: N/A

FLAMMABILITY LIMITS: UPPER: N/A LOWER: N/A

EXTINGUISHING MEDIA: Dry chemical, carbon dioxide, or foam

VI. ACCIDENTAL RELEASE MEASURES

Take up with absorbent material. Place in small containers for disposal.

VII. HANDLING AND STORAGE

Always wear eye protection when working with these ampoules.

WARNING: Do not break the tip of the ampoule unless it is completely immersed in your sample. Breaking the tip in the air may cause the glass ampoule to shatter.

If this product is used as directed, the user will not come in contact with or be exposed to any of its chemical components.

Wash thoroughly after handling. Avoid contact with eyes.

Fragile. Liquid in glass. Handle with care.

Product should be stored in the dark and at room temperature; however, temperatures up to 120 °F or even below freezing will not normally affect reagent performance.

VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

OSHA PEL: 0.1 mg/m³ ceiling Hg, 2mg/m³ ceiling NaOH, 10 mg/m³ TWA sodium borate

ACGIH TLV: 0.1 mg/m³ TWA Hg, 2mg/m³ ceiling NaOH, 5 mg/m³ TWA sodium borate

PROTECTIVE EQUIPMENT: Safety glasses, protective gloves

IX. PHYSICAL AND CHEMICAL PROPERTIES

In the Ampoules:

STATE: Liquid APPEARANCE: Pale Yellow ODOR: None

SOLUBILITY IN WATER: Complete pH: 13.5

BOILING POINT: 100 °C MELTING POINT: 0 °C

VAPOR PRESSURE: N/A SPECIFIC GRAVITY: 1.097

VAPOR DENSITY: N/A

In the Activator Solutions:

STATE: Liquid APPEARANCE: Colorless ODOR: None

SOLUBILITY IN WATER: Miscible pH: 8

BOILING POINT: 104 °C MELTING POINT: 10 °C

VAPOR PRESSURE: N/A SPECIFIC GRAVITY: 1.16

VAPOR DENSITY: N/A

WTW GmbH

Dr. Karl Slevogt Str. 1, D-82362 Weilheim, Germany
Tel: 49(0)881/183-0

WTW Inc.

6E Gill St., Woburn, MA 01801, USA
Phone: 781-569-0095

Creation Date: 06/13/05 (2938F-1)

Revision Date:

FOR CHEMICAL EMERGENCY
Spill Leak Fire Exposure or Accident
Call CHEMTREC Day or Night
DOMESTIC NORTH AMERICA: 800-424-9300
INTERNATIONAL: 703-527-3887 (collect calls accepted)

X. STABILITY AND REACTIVITY

INCOMPATIBILITIES: strong acids and oxidizers

HAZARDOUS DECOMPOSITION PRODUCTS: When heated to decomposition, toxic fumes of mercury and iodide and oxides of potassium, sodium, boron and iodine may be emitted.
Stable under normal conditions.

XI. TOXICOLOGICAL INFORMATION

CARCINOGEN STATUS: None
No other data available at this time.

XII. ECOLOGICAL INFORMATION

Mercuric iodide is expected to bioaccumulate and is expected to be toxic to aquatic organisms.
No other data available at this time.

XIII. DISPOSAL CONSIDERATIONS

Dispose of in a manner consistent with Federal, State and Local Regulations.

XIV. TRANSPORT INFORMATION

US DOT: 49 CFR, 173.4 Exceptions For Small Quantities
IATA: Dangerous Goods In Excepted Quantities
Hazard Class: 8 ID: UN 1760 Group: II

XV. REGULATORY INFORMATION

EUROPEAN INFORMATION:

EU Symbols: T - TOXIC, Xi - IRRITANT

Risk Phrases: Toxic by inhalation, in contact with skin and if swallowed.
Danger of cumulative effects. Risk of serious damage to eyes. Irritating to skin.

Safety Phrases: Avoid contact with skin and eyes. Wear suitable protective gloves and eye protection. When using, do not eat or drink. Do not breathe vapor. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

CANADIAN INFORMATION:

WHMIS Classification: E, D1A, D2B, D2A

All chemical components of this product are listed on Canada's DSL or are exempt.

U.S. INFORMATION:

CALIFORNIA PROPOSITION 65: "WARNING - This product contains a chemical known to the State of California as a reproductive toxicant."

All chemical components of this product are listed on the TSCA Inventory.

XVI. OTHER INFORMATION

THE ABOVE INFORMATION IS BELIEVED TO BE ACCURATE AND REPRESENTS THE BEST INFORMATION CURRENTLY AVAILABLE TO US. ALL PRODUCTS ARE OFFERED IN ACCORDANCE WITH THE MANUFACTURER'S CURRENT PRODUCTION SPECIFICATIONS AND ARE INTENDED SOLELY FOR USE IN ANALYTICAL TESTING. THE MANUFACTURER SHALL IN NO EVENT BE LIABLE FOR ANY INJURY, LOSS OR DAMAGE RESULTING FROM THE HANDLING, USE OR MISUSE OF THESE PRODUCTS.