

EMERGENCY # FOR NATIONAL RESPONSE CENTER (800) 424-8802

CHEMICAL IDENTIFICATION

Product Name:

Hoechst Stain at 200 ug/mL

Catalog #: 500056, 556, 600039, and 639
Synonyms: Hoechst 33342, trihydrochloride, trihydrate
CAS # of Active Reagent: 23491-52-3
Chemical Name of Active Reagent: Phenol, 4-[5-(4-methyl-1-piperazinyl)][2,5'-bi-1H-benzimidazol]-2'-yl]-trihydrochloride
Molecular Weight of Active Reagent: 615.99
Chemical Formula of Active Reagent: C₂₇H₃₇Cl₃N₆O₄

HAZARDS IDENTIFICATION

Contains Hoechst 33342 stain reagent at 200 ug/ml in DI H₂O. Hoechst 33342 exhibits mutagenic properties as demonstrated by DNA damage to hamster lung cells and mouse fibroblast cells at 1 uM/L and 5 uM/L concentrations respectively. This reagent also effected DNA inhibition in hamster lung cells at 1 uM/L. Hoechst 33342 is not currently listed as a carcinogen by NTP, IARC or OSHA but should be treated as such. Symptoms of exposure are undefined but this staining reagent should always be handled using protective gloves, clothing, and eyewear.

CHARACTERISTICS

Hoechst is a clear light green, odorless solution.

Boiling point °C: 100
Vapor pressure (mm Hg): No data available.
Vapor density: No data available.
Solubility in water: Soluble at room temperature.
Specific gravity: Not applicable.
% Volatile by volume: Not applicable.
Evaporation rate: No data available.
pH: 3.9 – 4.4

STORAGE AND STABILITY

Hoechst 33342 stain, as supplied by ICT, is stable for 18 months at 2–8°C when stored in amber vials and protected from light. Always store protected from light, and keep in a tightly closed vial. Vials may be hazardous when empty since they contain product residues. Do not breathe vapor or mist.

HEALTH HAZARD

Hoechst 33342 may enter the body through inhalation, ingestion, and skin and eye contact.

SAFETY CONTROL MEASURES

Personal protective equipment, such as lab coat, safety glasses with side shields, gloves should be worn at all times while handling this product. Maintain eye wash fountain and safety shower in work area. Safe laboratory practices should be followed. Always wash thoroughly after handling. Never take internally. Do not breathe vapor or mist.

EXPOSURE GUIDELINES

No exposure guidelines are available.

FIRST AID MEASURES

Hoechst 33342 could be a potential carcinogen; avoid any contact with skin, eyes, or take internally. Carefully remove and dispose of protective gloves after use. Remove contaminated clothing and shoes, and wash before reuse.

Skin: Wash thoroughly with plenty of soap and water for at least 15 minutes. Remove contaminated clothing and shoes. Launder contaminated clothing. Throw away contaminated shoes.
Eyes: Immediately flush with plenty of water for at least 15 minutes.
Ingestion: If solution is swallowed, seek medical advice.
Inhalation: Remove to fresh air, seek medical advice.

FIRE/EXPLOSION HAZARD

The 200 ug/ml solution of Hoechst 33342 stain is not a potential fire or explosion hazard.

ACCIDENTAL RELEASE MEASURES

For simple counter top spills, use protective gloves and clothing when promptly cleaning up spills. Spilled solutions may be adsorbed into paper toweling and disposed of according to local waste management ordinances. The water-soluble characteristics of this reagent allow the area to be cleaned up using soap and water. For large spills, evacuate area of all unnecessary employees. Wear appropriate personal protective equipment including: neoprene (or equivalent) gloves, safety glasses with side shields, and lab coat. Contain the spill and dispose of in compliance with federal, state, and local regulations. US regulations (CERCLA) require reporting spills and releases to soil, water, and air in excess of reportable quantities. Toll free number to US coast guard national response center is (800) 424-8802.

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