

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

SECTION 1. CHEMICAL IDENTIFICATION

Product Name: **Neptune Assay Diluent**
Catalog #(s): 522, 626, 627, 628, 673
Synonyms: AD3
CAS #: Not applicable to mixtures
Chemical Formula: Not applicable to mixtures; trade secret formulation

SECTION 2. HAZARDS IDENTIFICATION

AD3 contains 0.01% sodium azide (NaN_3 ; ingredient CAS# 26628-22-8) that when concentrated is considered very toxic and is a potential mutagen that targets the nerves, heart, and brain (LD_{50} oral rat-27mg/kg). However its concentration in this buffer is very low and it may be slightly irritating. Azide forms explosive chemical compounds with lead and copper plumbing; care must be taken to flush waste down drains with copious amounts of water. AD3 also contains phosphate buffered saline (PBS) which is a slight irritant to eyes, skin, and respiratory system.

SECTION 3. CHARACTERISTICS

AD3 is a clear yellow liquid with a characteristic odor.
Boiling point: 100°C / 212°F
Vapor pressure (mm Hg): No data available.
Vapor density: No data available.
Solubility in water: Aqueous.
Specific gravity: Not applicable.
% Volatile by volume: Not applicable.
Evaporation rate: No data available.
pH: 7.2-7.6

SECTION 4. STORAGE, HANDLING, STABILITY

AD3 is stable for over 18 months when stored at 2°C - 8°C. It will not decompose in a hazardous manner. Hazardous polymerization will not occur. Nitrogen oxides may form upon decomposition of NaN_3 . Avoid contact with acids as very irritating hydrazoic gas may be generated with concentrated NaN_3 . Avoid contact with copper, lead, silver, mercury, gold, and carbon disulfide as NaN_3 may form explosive chemical compounds. Flush waste down drains with copious amounts of water. AD3 is considered non-hazardous for transport by DOT.

SECTION 5. SAFETY CONTROL MEASURES

Gloves, eyewear, and standard laboratory protective clothing are recommended. Safe laboratory practices should be followed.

SECTION 6. HEALTH HAZARD DATA

May enter the body through ingestion, eye, and skin contact. The toxicological effects have not been thoroughly investigated.

SECTION 7. FIRST AID MEASURES

Remove contaminated clothing and shoes, and wash before reuse.
Skin: Wash skin thoroughly with soap and water.
Eyes: Flush with water for at least 15 minutes.
Ingestion: If conscious, give large amounts of water and seek medical attention.
Inhalation: Remove to fresh air. If not breathing, administer CPR. If breathing is difficult, give oxygen.

SECTION 8. FIRE/EXPLOSION HAZARD DATA

AD3 is neither a fire hazard nor an explosion hazard. Use any means suitable for extinguishing surrounding fire. It is not necessary to use any special firefighting procedures. Water spray, carbon dioxide, dry chemical powder or appropriate foam can all be used.

SECTION 9. ACCIDENTAL RELEASE MEASURES

Wear protective clothing to guard against eye and skin contact. Wash all affected areas with large volumes of water. Collect liquid and flush down the drain with copious amounts of water, or absorb with dry material appropriate for the surrounding materials and place in a regular waste container. Dispose of all waste in accordance with all national, state, and local regulations.