Nanoprobes

95 Horse Block Road, Unit 1
Yaphank, NY 11980-9710

Updated: September 24, 2007

Attn: SAFETY DIRECTOR

MATERIAL SAFETY DATA SHEET

CATALOG NUMBERS: 2018
PRODUCT NAME: **NANO-W (METHYLAMINE TUNGSTATE) NEGATIVE STAIN**

SECTION 1: IDENTIFICATION

Nano-W is a 2 % solution of tungstic acid with methylamine in water, at pH 6.8.

SECTION 2: COMPOSITION

Name: Methylamine Tungstate.
Molecular Formula: not defined.
Ingredients: Tungstic acid, H_2WO_4: 2.0 %
Methylamine, CH_3NH_2: approximately 0.4 %

SECTION 3: HAZARDS IDENTIFICATION

Caution: Substance not fully tested.
Toxic
Toxic by inhalation, in contact with skin and if swallowed.
Causes burns.
Lachrymator.
Readily absorbed through skin.
Unpleasant odor.
May cause cancer.
May cause sensitization by skin contact.
Irritating to eyes, respiratory system and skin.
Possible risk of irreversible effects
Target organ (s): Lungs.
In case of accident or if you feel unwell, seek medical advice immediately.
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
In case of contact, immediately wash skin with soap and copious amounts of water.
Wear suitable protective clothing, gloves and eye/face protection.
Do not breathe dust

SECTION 4 FIRST AID MEASURES

In case of contact, immediately flush eyes or skin with copious amounts of water for at least 15 minutes while removing contaminated clothing and shoes.
Assure adequate flushing of the eyes by separating the eyelids with fingers.
In case of contact, immediately wash skin with soap and copious amounts of water.
If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.
If swallowed, wash out mouth with water provided person is conscious.
Call a physician immediately.
Wash contaminated clothing before reuse.

SECTION 5 FIRE FIGHTING MEASURES

Extinguishing media:
Water spray, carbon dioxide, dry powder or appropriate foam.
Special firefighting procedures:
Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.
Unusual fire and explosions hazards:
Emits toxic fumes under fire conditions.
Vapor may travel considerable distance to source of ignition and flash back.
Container explosion may occur under fire conditions.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Evacuate area.
Shut off all sources of ignition.
Wear self-contained breathing apparatus, rubber boots and heavy rubber gloves.
Absorb onto combustible material, place in a bag and hold for waste disposal.
Avoid raising dust.
Ventilate area and wash spill site after material pickup is complete.

SECTION 7 HANDLING AND STORAGE

Refer to section 8.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Chemical safety goggles.
Rubber gloves.
NIOSH/MSHA-approved respirator.
Safety shower and eye bath.
Mechanical exhaust required.
Toxic
Irritant
Do not breathe dust.
Avoid prolonged or repeated exposure
Lachrymator
Unpleasant odor
Do not get in eyes, on skin, on clothing.
Wash thoroughly after handling.

Keep tightly closed.
Store at 2-8°C.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:
Colorless to pale yellow liquid

Stability:
Stable.

Incompatibilities:
Strong acids

Hazardous combustion or decomposition products:
Toxic fumes of:
Carbon monoxide, carbon dioxide
Nitrogen oxides
Ammonia

Hazardous polymerization:
Will not occur.

SECTION 11 TOXICOLOGICAL INFORMATION

Data for Methylamine (present as component):

Acute effects:
Harmful if swallowed, inhaled or absorbed through skin.
Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes and skin.
Inhalation may result in spasm, inflammation and edema of the larynx and bronchi, chemical pneumonitis and pulmonary edema.
Symptoms of exposure may include burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea and vomiting.
May cause blindness.
Exposure to vapor, even in low concentrations, can cause lacrimation, conjunctivitis and corneal edema when vapor is absorbed into the tissue of the eye. The corneal edema may give rise to a perception of a “halo” “blue haze” or “fog” around lights. This effect is usually reversible although it may last a couple of days.

Chronic effects:
Damage to the lungs
Target organ(s): Lungs.

To the best of our knowledge, the chemical physical and toxicological properties have not been thoroughly investigated.

Additional information:

RTECS #: PF6300000

METHYLAMINE

Irritation data:
SKN-GPG 100 MG OPEN SEV CODEDG 6,140,1980

Toxicity data:

ORL-RAT LD50:100 MG/KG	INHTE5 2,29,1990
IHL-RAT LC50:448 PPM/2.5H	JEBIDP 13,273,1992
IHL-MUS LC50:2400 MG/M3/2H	85GMAT -,81,1982
IHL-MAM LC50:2400 MG/M3	TPKVAL 14,80,1975

Target organ data:
Sense organs and special senses (lacrimation).
Lungs, thorax or respiration (dyspnae)
Skin and appendages (after systemic exposure: dermatitis, irritative)

Additional information:
ORL-RAT LD50:100-200 MG/KG
IHL-RAT LC50:5000 PPM/4H

Only selected registry of toxic effects of chemical substances (RTECS) data is presented here. See actual entry in RTECS for complete information.

Data for Tungstic acid (present as component):

Acute effects:
May be harmful by inhalation, ingestion or skin absorbtion.
Causes eye and skin irritation.

To the best of our knowledge, the chemical physical and toxicological properties have not been thoroughly investigated.

RTECS #: YO7840000

TUNGSTIC ACID

Irritation data:

EYE-RBT 500 MG/24H MLD	28ZPAK -,19,1972

Only selected registry of toxic effects of chemical substances (RTECS) data is presented here. See actual entry in RTECS for complete information.

SECTION 12 ECOLOGICAL INFORMATION

Data not available.

SECTION 13 DISPOSAL CONSIDERATIONS

Absorb the material on an inert combustible material, or dissolve or mix with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Observe all Federal, State and Local environmental regulations.

SECTION 14 TRANSPORT INFORMATION

Contact Nanoprobes, Incorporated for transportation information.

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. Nanoprobes, Inc. shall not be held liable for any damage resulting from handling or from contact with the above product.