

Material Safety Data Sheet

Diffusion Tubes for PID Calibrator

MANUFACTURER

SemeaTech (Shanghai) Co., Ltd.
1355 Chengbei Road, Bldg 1, Suite #801
Jiading District, Shanghai, China 201807

Email: info_cn@sematech.com · Website: www.semeatech.com · Phone: +86-21-59547013

CHEMICAL IDENTIFICATION

Acetone

HAZARDS IDENTIFICATIONS

Signal Word: Danger.

Emergency Overview: This product is in a sealed container. If the container remains sealed, there will be no exposure to the product. However, if the container is opened, it is important to note that the product may cause irritation to the eyes, skin, or upper respiratory system.

FIRST AID MEASURES

Inhalation:

Remove to fresh air. If not breathing. Call in physician.

Ingestion:

immediately make victim drink water (two glasses at most). Consult a physician.

Skin Contact:

Remove any contaminated clothing. Wash skin with water for at least 15 minutes. Get medical attention if irritation develops or persists.

Eye Contact:

Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.

FIRE FIGHTING MEASURES

Fire Extinguishing Media: Carbon dioxide (CO₂) Foam Dry powder.

Unsuitable extinguishing media: For this substance/mixture no limitations of extinguishing agents are given.

ACCIDENTAL RELEASE MEASURES

Ventilate the area of a leak or spill. Remove all sources of ignition. Soak up the inert absorbent material. Do not use combustible materials, such as sawdust. If a leak or spill has not ignited, use water spray to disperse the vapors, to protect personnel attempting to stop leaks, and to flush spills away from exposures.

HANDLING & STORAGE

Advice for non-emergency personnel: Do not breathe vapors or aerosols. Avoid substance contact. Ensure adequate ventilation. Keep away from heat and sources of ignition.

Evacuate the dangerous area, observe emergency procedures, and consult an expert.

PHYSICAL & CHEMICAL PROPERTIES

Appearance:

colorless clear, liquid

Odor:

pungent, weakly aromatic

<u>pH:</u>	5 - 6 at 395 g/l at 20 °C
<u>Melting point/freezing point/Melting point/range:</u>	-94 °C - lit. 56 °C at 1.013 hPa - lit.
<u>Initial boiling point and boiling range:</u>	56 °C at 1.013 hPa - lit.
<u>Flash point:</u>	-17.0 °C - closed cup
<u>Upper/lower flammability or explosive limits:</u>	Upper explosion limit: 13 %(V) Lower explosion limit: 2 %(V)
<u>Vapor pressure:</u>	245.3 hPa at 20.0 °C
<u>Vapor density:</u>	2 (vs air)
<u>Relative density:</u>	0.791 g/cm ³ at 25 °C
<u>Water solubility:</u>	soluble, in all proportions
<u>Autoignition temperature:</u>	465.0 °C
<u>Explosive properties:</u>	No data available
<u>Oxidizing properties:</u>	No data available

STABILITY & REACTIVITY

Stability: The product is chemically stable under standard ambient conditions.

Incompatibilities: rubber, various plastics.

Conditions to Avoid: Heat, flames, and incompatibles.

TOXICOLOGICAL INFORMATION

Acute toxicity

LD50 Oral - Rat - female - 5.800 mg/kg

Remarks:

(ECHA)

LC50 Inhalation - Rat - 4 h - 76 mg/l Remarks:

Unconsciousness Drowsiness Dizziness (External MSDS)

LD50 Dermal - Rabbit - 20.000 mg/kg Remarks:

(IUCLID)

Skin corrosion/irritation

Skin - Rabbit

Result: Mild skin irritation - 24 h (Draize Test)

Remarks:

(RTECS)

Serious eye damage/eye irritation

Eyes - Rabbit

Result: Eye irritation - 24 h (Draize Test)

Remarks:

(RTECS)

Respiratory or skin sensitization

Remarks:

(ECHA)

Chronic exposure may cause dermatitis.

Germ cell mutagenicity

Mutagenicity (mammal cell test): chromosome aberration. Chinese hamster ovary cells

Result: negative Ames test

Salmonella typhimurium Result: negative

In vitro mammalian cell gene mutation test Mouse lymphoma test

Result: negative

Carcinogenicity

IARC: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

Inhalation - May cause drowsiness or dizziness. - Narcotic effects

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Toxicity

LD50 in rats: 10.7 ml/kg orally (Smyth)

Toxicity to fish

flow-through test LC50 - Pimephales promelas (fathead minnow) -
6.210 mg/l - 96 h
(OECD Test Guideline 203)

Toxicity to daphnia and other aquatic invertebrates

static test LC50 - Daphnia pulex (Water flea) - 8.800 mg/l - 48 h Remarks: (ECHA)

Toxicity to algae

static test NOEC - M.aeruginosa - 530 mg/l - 8 d
(DIN 38412)

Remarks: (maximum permissible toxic concentration) (IUCLID)

Toxicity to bacteria

static test EC50 - activated sludge - 61,15 mg/l - 30 min (OECD Test Guideline 209)

DISPOSAL CONSIDERATIONS

Container and unused contents in accordance with federal, state and local requirements.

TRANSPORT INFORMATION No special requirements for less than 2 ml acetone in each diffusion tube.