

MATERIAL SAFETY DATA SHEET

Pickering Laboratories, Inc • 1280 Space Park Way, Mountain View CA 94043 USA • 650 694 6700 • Fax 650 968 0749

PRODUCTS: Vanillin

Cat. No. 3700-2200

Section I – General

CAS #: [121-33-5]
FORMULA: $\text{CH}_3\text{OC}_6\text{H}_4(\text{OH})\text{CHO}$
CHEMICAL NAME: 4-Hydroxy-3-methoxybenzaldehyde
SYNONYMS: m-Anisaldehyde, vanilla, vanillaldehyde, vanillic aldehyde
CHEMICAL FAMILY: Aldehyde and phenol

Section II – Hazardous Ingredients

1: 99.9 + % Vanillin

Section III – Physical Data

MELTING POINT: 81–83°C
BOILING POINT: 170°C @ 15mm Hg
APPEARANCE: White crystalline needle
ODOR: Mild vanilla odor
SOLUBILITY: Soluble in water (1gm/100mL; 1gm/16mL @ 80°C), alcohol, glycerol, chloroform, ether, glacial acetic acid, oils, & aq solns of alkali hydroxides
VAPOR PRESSURE: 1mm Hg @ 107°C
AIR SENSITIVE: Yes
LIGHT SENSITIVE: Yes

Section IV – Toxicity Data

RTECS #: YW5775000
RTECS NAME: Vanillin
TOXICITY DATA: Orl-rat LD50:1580mg/kg; lpr-rat LD50:1160mg/kg; Scu-rat LD50: 1500mg/kg; Orl-mus LD50:4330mg/kg; lpr-mus LD50:475mg/kg; Orl-gpg LD50:1400mg/kg
REVIEWS: Only selected Registry of Toxic Effects of Chemical Substances (RTECS) data are presented here. Refer to actual entry in RTECS for complete information.

Section V – Health Hazards and First Aid

ACUTE EFFECTS: Harmful if swallowed. May be harmful if inhaled or absorbed through the skin. Causes eye irritation. May cause skin irritation
TARGET ORGAN: Sense organs (miosis), behavioral (muscle weakness, coma), vascular (acute arterial occlusion), lungs, thorax, maternal effects (ovaries, fallopian tubes, uterus, cervix, vagina)
EYE CONTACT: Immediately flush with plenty of water for at least 15 minutes; assure adequate flushing by separating eyelids with fingers. Call a physician.

- SKIN CONTACT: Immediately flush with soap and plenty of water for at least 15 minutes. Remove contaminated clothing and shoes.
- INHALATION: Remove to fresh air. If breathing becomes difficult, give oxygen. If not breathing, give artificial respiration.
- INGESTION: If conscious, wash out mouth with water provided person is conscious. Call a physician immediately.

Section VI – Fire and Explosion Hazards

- EXTINGUISHING MEDIA: Water spray; carbon dioxide; dry chemical powder or appropriate foam
- FIREFIGHTING PROCEDURE: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.
- UNUSUAL HAZARDS & EXPLOSIVE PROPERTIES: Not explosive

Section VII – Reactivity

- GENERAL: Slowly oxidizes on exposure to moist air. Affected by light
- INCOMPATIBILITIES: Incompatible with strong oxidizers, strong bases, & strong reducing agents
- HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS: Emits toxic fumes of carbon monoxide & carbon dioxide

Section VIII – Spill or Leak Procedures

- SPILL PROCEDURE: Wear self-contained breathing apparatus, rubber boots, & heavy rubber gloves. Sweep up, place in a bag, and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill-site with soap and water after material pickup is complete.
- WASTE DISPOSAL: This product may be mixed or dissolved in a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

Section IX – Precautions for Handling and Storage

- SAFETY EQUIPMENT: Chemical safety goggles, rubber gloves, NIOSH/MSHA-approved respirator, safety-shower with eye-wash, mechanical exhaust required.
- HANDLING PROCEDURES: Avoid inhalation, eye and skin contact. Do not ingest. Wear safety glasses and gloves. Do not get on clothing.
- STORAGE PROCEDURES: Keep tightly closed (air, light, & moisture sensitive). Store at cool dry place.

This information is believed to accurate and represents the best information currently available to us. It is offered only for your consideration, investigation, and verification. Pickering Laboratories disclaims any liability incurred from the use of this product and shall not in any event be liable for any special, incidental, or consequential damages arising from such use. The information provided herein relates only to the specific product designated and may not be valid where such product may be subject to federal, state, or local laws or regulations.