

Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 06/25/2015

Reviewed on 06/25/2015

* **1 Identification**

- **Product identifier**
- **Trade name: Vanillin**
- **Product number:** 3700-2200
- **Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Product description** 4-Hydroxy-3-methoxybenzaldehyde
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Pickering Laboratories, Inc.
1280 Space Park Way
Mountain View, CA 94043
Phone: (650) 694-6700
Fax: (650) 968-0749
www.pickeringlabs.com
support@pickeringlabs.com
- **Emergency telephone number:**
Clean Harbors Environmental Services
1-800-645-8265

* **2 Hazard(s) identification**

- **Classification of the substance or mixture**



GHS07

Eye Irrit. 2A H319 Causes serious eye irritation.
 Aquatic Acute 3 H402 Harmful to aquatic life.
 Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

- **Label elements**
- **GHS label elements**
The substance is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS07

- **Signal word** Warning
- **Hazard statements**
Causes serious eye irritation.
Harmful to aquatic life.
Harmful to aquatic life with long lasting effects.
- **Precautionary statements**
Wear eye protection / face protection.
Avoid release to the environment.
Wash thoroughly after handling.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.

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Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



- **HMIS-ratings (scale 0 - 4)**



- **Hazard(s) not otherwise classified (HNOC):** None known

* 3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** Mixture of substances listed below with nonhazardous additions.

· Dangerous Components:		
CAS: 121-33-5	4-Hydroxy-3-methoxybenzaldehyde	100%
RTECS: YW 5775000	⚠ Acute Tox. 4, H302; Eye Irrit. 2A, H319	

* 4 First-aid measures

- **Description of first aid measures**
- **After inhalation:** Remove affected person to fresh air. Seek medical attention if symptoms persist.
- **After skin contact:**
Immediately flush with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Seek medical assistance.
- **After eye contact:**
Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Get medical attention.
- **After swallowing:**
Immediately call a doctor.
If conscious, rinse mouth with water ensuring that the rinse is not swallowed. Seek medical assistance.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed:** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

* 5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
- **Special hazards arising from the substance or mixture**
Carbon Dioxide (CO₂)
Carbon monoxide (CO)
- **Advice for firefighters**
- **Protective equipment:**
As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent), and full protective gear to prevent contact with skin and eyes.

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* 6 Accidental release measures

· **Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

Avoid formation of dust.

Avoid breathing dust.

· **Environmental precautions:**

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/ surface or ground water.

· **Methods and material for containment and cleaning up:**

Ensure adequate ventilation.

Use the appropriate tools to collect the material and dispose of it in an approved waste disposal container.

Dispose contaminated material as waste according to section 13.

· **Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

* 7 Handling and storage

· **Handling:**

· **Precautions for safe handling**

Avoid contact with skin, eyes and clothing

Avoid breathing dust.

Use personal protection equipment as outlined in section 8.

· **Information about protection against explosions and fires:** No special measures required.

· **Conditions for safe storage, including any incompatibilities**

· **Storage:**

· **Requirements to be met by storerooms and receptacles:**

Store in dry conditions at a temperature range of 8°C - 25°C.

Air, light and moisture sensitive

· **Information about storage in one common storage facility:** Not required.

· **Further information about storage conditions:** Keep receptacle tightly sealed.

· **Specific end use(s)** No further relevant information available.

* 8 Exposure controls/personal protection

· **Additional information about design of technical systems:** No further data; see section 7.

· **Control parameters**

· **Components with occupational exposure limits:**

121-33-5 4-Hydroxy-3-methoxybenzaldehyde

TWA	Long-term value: 10 mg/m ³
WEEL	Long-term value: 10 mg/m ³

· **Additional information:** The lists that were valid during the creation of this SDS were used as basis.

· **Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Use adequate exhaust ventilation to prevent inhalation of dust particles.

Do not eat or drink while handling product.

Avoid contact with the eyes and skin.

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Wash hands before breaks and at the end of work.
Immediately remove all soiled and contaminated clothing and wash before reuse.

· **Breathing equipment:**



NIOSH/OSHA or EN approved respiratory protection is recommended for use in airborne concentrations exceeding exposure limits.

· **Protection of hands:**



Protective gloves

· **Material of gloves** Rubber, latex or vinyl.

· **Penetration time of glove material**

The exact break-through time has to be determined and observed by the manufacturer of the protective gloves.

· **Eye protection:**



Tightly sealed goggles

· **Body protection:** Lab coat

* **9 Physical and chemical properties**

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form: Crystalline

Color: White

· **Odor:** Characteristic

· **Odor threshold:** Not determined.

· **pH-value:** Not applicable.

· **Change in condition**

Melting point/Melting range: 81-83 °C (178-181 °F)

Boiling point/Boiling range: 170 °C (338 °F)

· **Flash point:** 153 °C (307 °F)

· **Flammability (solid, gaseous):** Not determined.

· **Ignition temperature:** 400 °C (752 °F)

· **Decomposition temperature:** Not determined.

· **Auto igniting:** Product is not self-igniting.

· **Danger of explosion:** Product does not present an explosion hazard.

· **Explosion limits:**

Lower: Not determined.

Upper: Not determined.

· **Vapor pressure @ 107 °C (225 °F):** 1 hPa (1 mm Hg)

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- **Density @ 20 °C (68 °F):** 1.056 g/cm³ (8.812 lbs/gal)
- **Relative density** Not determined.
- **Vapor density** Not applicable.
- **Evaporation rate** Not applicable.
- **Solubility in / Miscibility with Water @ 20 °C (68 °F):** 10 g/l
- **Partition coefficient (n-octanol/water):** Not determined.
- **Viscosity:**
 - **Dynamic:** Not applicable.
 - **Kinematic:** Not applicable.
- **Other information** No further relevant information available.

* 10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability** Stable under normal conditions.
- **Thermal decomposition / conditions to be avoided:** Carbon dioxide and carbon monoxide may form when heated to decomposition
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid**
 - Dust generation.
 - Avoid strong oxidizers.
- **Incompatible materials:** Strong oxidizing agents.
- **Hazardous decomposition products:** No dangerous decomposition products known.
- **Additional information:** Light and air sensitive.

* 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

· LD/LC50 values that are relevant for classification:		
121-33-5 4-Hydroxy-3-methoxybenzaldehyde		
Oral	LD50	3000 mg/kg (rat)
Dermal	LD50	>5010 mg/kg (rabbit)

- **Primary irritant effect:**
 - **on the skin:** No irritating effect.
 - **on the eye:** Causes serious eye irritation.
- **Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:

 - Harmful
 - Irritant
- **Carcinogenic categories**
- **IARC (International Agency for Research on Cancer)**
 - Substance is not listed.

None of the ingredients are listed.

- **NTP (National Toxicology Program)**

None of the ingredients are listed.

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· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients are listed.

***12 Ecological information**

- **Toxicity**
- **Aquatic toxicity:**
 Avoid release into the environment. Runoff from fire control or dilution water may cause pollution.
 Semi Static Test LC50 Pimephales promelas (fat head minnow) 57 mg/l - 96 hr
 Static Test LC50 Pimephales promelas (fat head minnow) 86 mg/l - 96 hr
 Flow through test LC50 Pimephales promelas (fat head minnow) 53-61.3 mg/l - 96 hr
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Harmful to fish
- **Additional ecological information:**
- **General notes:** Harmful to aquatic organisms
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

***13 Disposal considerations**

- **Waste treatment methods**
- **Recommendation:**
 Do not allow product to reach sewage system.
 This product may be mixed with a combustible solvent and burned in a chemical incinerator equipped with an after burner and scrubber. This product can also be sent to an EPA approved waste disposal facility.
 Observe all federal, state and local environmental regulations when disposing of this material.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

***14 Transport information**

- **UN-Number**
- **DOT, ADR, ADN, IMDG, IATA** Non-Regulated Material
- **UN proper shipping name**
- **DOT, ADR, ADN, IMDG, IATA** Non-Regulated Material
- **Transport hazard class(es)**
- **DOT, ADR, ADN, IMDG, IATA**
- **Class** Non-Regulated Material
- **Packing group**
- **DOT, ADR, IMDG, IATA** Non-Regulated Material
- **Environmental hazards:** Not applicable.
- **Special precautions for user** Not applicable.
- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.

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· **UN "Model Regulation":** -

* 15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**
 · **Sara**

· **Section 355 (extremely hazardous substances):**

None of the ingredients are listed.

· **Section 313 (Specific toxic chemical listings):**

None of the ingredients are listed.

· **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

· **California Proposition 65**

· **Chemicals known to cause cancer:**

None of the ingredients are listed.

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients are listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients are listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients are listed.

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

None of the ingredients are listed.

· **TLV (Threshold Limit Value established by ACGIH)**

None of the ingredients are listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients are listed.

· **GHS label elements**

The substance is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms**



GHS07

· **Signal word** Warning

· **Hazard statements**

Causes serious eye irritation.

Harmful to aquatic life.

Harmful to aquatic life with long lasting effects.

· **Precautionary statements**

Wear eye protection / face protection.

Avoid release to the environment.

Wash thoroughly after handling.

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If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 If eye irritation persists: Get medical advice/attention.
 Dispose of contents/container in accordance with local/regional/national/international regulations.

· National regulations:

The product is subject to be classified according with the latest version of the regulations on hazardous substances.

· State Right to Know

CAS: 121-33-5	4-Hydroxy-3-methoxybenzaldehyde	100%
RTECS: YW 5775000	⚠ Acute Tox. 4, H302; Eye Irrit. 2A, H319	
All ingredients are listed.		

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. Nothing herein shall be deemed to create warranty, expressed or implied, and shall not establish a legally valid contractual relationship. It is the responsibility of the user to determine applicability of this information and the suitability of the material or product for any particular purpose.

· Date of preparation / last revision 06/25/2015 / 4

· Abbreviations and acronyms:

- ADR: The European Agreement concerning the International Carriage of Dangerous Goods by Road
- ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
- IMDG: International Maritime Code for Dangerous Goods
- DOT: US Department of Transportation
- IATA: International Air Transport Association
- ACGIH: American Conference of Governmental Industrial Hygienists
- EINECS: European Inventory of Existing Commercial Chemical Substances
- ELINCS: European List of Notified Chemical Substances
- CAS: Chemical Abstracts Service (division of the American Chemical Society)
- NFPA: National Fire Protection Association (USA)
- HMSIS: Hazardous Materials Identification System (USA)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent
- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative
- Acute Tox. 4: Acute toxicity, Hazard Category 4
- Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A
- Aquatic Acute 3: Hazardous to the aquatic environment - AcuteHazard, Category 3
- Aquatic Chronic 3: Hazardous to the aquatic environment - Chronic Hazard, Category 3

· * Data compared to the previous version altered.

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