



Material Safety Data Sheet

Valeraldehyde, 98%

MSDS# 30360

Section 1 - Chemical Product and Company Identification

MSDS Name: Valeraldehyde, 98%

Catalog Numbers: AC149560000, AC149560010, AC149560020, AC149560025, AC149560250, AC149561000
AC149561000, AC149562500, AC149565000

Synonyms: Pentanal; Valeral; Valeric Aldehyde; Amyl Aldehyde; Pentanal..

Company Identification: Acros Organics BVBA
Janssen Pharmaceuticaaan 3a
2440 Geel, Belgium

Company Identification: (USA) Acros Organics
One Reagent Lane
Fair Lawn, NJ 07410

For information in the US, call: 800-ACROS-01

For information in Europe, call: +32 14 57 52 11

Emergency Number, Europe: +32 14 57 52 99

Emergency Number US: 201-796-7100

CHEMTREC Phone Number, US: 800-424-9300

CHEMTREC Phone Number, Europe: 703-527-3887

Section 2 - Composition, Information on Ingredients

CAS#: 110-62-3
Chemical Name: Valeraldehyde, 98%
%: 98%
EINECS#: 203-784-4

Hazard Symbols:

XI F



Risk Phrases:

10 11 20 36/37/38

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Warning! Flammable liquid and vapor. May cause central nervous system depression. May cause cardiac disturbances. May cause liver and kidney damage. Causes eye, skin, and respiratory tract irritation. Target Organs: Kidneys, central nervous system, liver, cardiovascular system.

Potential Health Effects

Eye: Causes eye irritation.

Skin: Causes skin irritation. May cause cyanosis of the extremities.

Ingestion: May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May cause liver and kidney damage. May cause cardiac disturbances. Ingestion of large amounts may cause CNS depression.

Inhalation: Causes respiratory tract irritation. May cause liver and kidney damage. Aspiration may lead to pulmonary edema. Vapors may cause dizziness or suffocation. May cause cardiac abnormalities. Exposure may produce metabolic acidosis. Inhalation at high concentrations may cause CNS depression and asphyxiation. May cause

burning sensation in the chest.

Chronic: May cause liver and kidney damage. Effects may be delayed.

Section 4 - First Aid Measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

Skin: Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

Ingestion: Never give anything by mouth to an unconscious person. Get medical aid. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.

Inhalation: Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. Get medical aid. Do NOT use mouth-to-mouth resuscitation. If breathing has ceased apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask.

Notes to Physician: Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Vapors may form an explosive mixture with air. Vapors can travel to a source of ignition and flash back. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Will burn if involved in a fire. Use water spray to keep fire-exposed containers cool. Containers may explode in the heat of a fire. Flammable liquid and vapor. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas. Runoff from fire control or dilution water may cause pollution. Runoff to sewer may create fire or explosion hazard.

Extinguishing Media: For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam. For large fires, use water spray, fog, or alcohol-resistant foam. Use water spray to cool fire-exposed containers. Water may be ineffective. Do NOT use straight streams of water.

Autoignition Temperature: 220 deg C (428.00 deg F)

Flash Point: 12 deg C (53.60 deg F)

Explosion Limits: Lower: Not available

Explosion Limits: Upper: Not available

NFPA Rating: health: 2; flammability: 3; instability: 0;

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Avoid runoff into storm sewers and ditches which lead to waterways. Clean up spills immediately, observing precautions in the Protective Equipment section. Remove all sources of ignition. Use a spark-proof tool. Provide ventilation. A vapor suppressing foam may be used to reduce vapors.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Ground and bond containers when transferring material. Use spark-proof tools and explosion proof equipment. Avoid contact with eyes, skin, and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep container tightly closed. Keep away from heat, sparks and flame. Avoid ingestion and inhalation. Use with adequate ventilation. Wash clothing before reuse. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.

Storage: Keep away from heat, sparks, and flame. Keep away from sources of ignition. Keep container closed when not in use. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Flammables-area.

Section 8 - Exposure Controls, Personal Protection

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs

Valeraldehyde, 98%	50 ppm	50 ppm TWA; 175 mg/m3 TWA	none listed

OSHA Vacated PELs: Valeraldehyde, 98%: 50 ppm TWA; 175 mg/m3 TWA

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to minimize contact with skin.

Respirators: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties

Physical State: Clear liquid

Color: clear colorless

Odor: none reported

pH: Not available

Vapor Pressure: 35 hPa @ 20 C

Vapor Density: 2.97

Evaporation Rate: Not available

Viscosity: 0.6 MPA 20.00 deg C

Boiling Point: 103 deg C @ 760.00mm Hg (217.40°F)

Freezing/Melting Point: - 92.00 - - 0.00 deg

Decomposition Temperature: Not available

Solubility in water: soluble in alcohol and ether

Specific Gravity/Density: .8100g/cm3

Molecular Formula: C5H10O

Molecular Weight: 86.13

Section 10 - Stability and Reactivity

Chemical Stability: Stable at room temperature in closed containers under normal storage and handling conditions.

Conditions to Avoid: Incompatible materials, ignition sources, excess heat, strong oxidants.

Incompatibilities with Other Materials: Oxidizing agents, reducing agents, bases.

Hazardous Decomposition Products: Carbon monoxide, carbon monoxide, carbon dioxide.

Hazardous Polymerization: Has not been reported.

Section 11 - Toxicological Information

RTECS#: CAS# 110-62-3: YV3600000

RTECS:

CAS# 110-62-3: Dermal, guinea pig: LD50 = 20 gm/kg;

Draize test, rabbit, eye: 100 mg/24H Severe;

Draize test, rabbit, skin: 500 mg/24H Moderate;

LD50/LC50: Inhalation, rat: LC50 = 14000 mg/m3/4H;

Oral, mouse: LD50 = 6.4 mg/kg;

Oral, rat: LD50 = 5660 uL/kg;

Oral, rat: LD50 = 5.66 mg/kg;

Skin, rabbit: LD50 = 5 mL/kg;

Carcinogenicity: Valeraldehyde, 98% - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

Other: See actual entry in RTECS for complete information.

Section 12 - Ecological Information

Ecotoxicity: Fish: Fathead Minnow: 12.4mg/l; 96Hr; Flow-through bioassay

Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - Transport Information

US DOT

Shipping Name: VALERALDEHYDE

Hazard Class: 3

UN Number: UN2058

Packing Group: II

Canada TDG

Shipping Name: Not available

Hazard Class:

UN Number:

Packing Group:

Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: XI F

Risk Phrases:

R 10 Flammable.

R 11 Highly flammable.

R 20 Harmful by inhalation.

R 36/37/38 Irritating to eyes, respiratory system and skin.

Safety Phrases:

S 9 Keep container in a well-ventilated place.

S 16 Keep away from sources of ignition - No smoking.

S 29 Do not empty into drains.

S 33 Take precautionary measures against static discharges.

WGK (Water Danger/Protection)

CAS# 110-62-3: Not available

Canada

CAS# 110-62-3 is listed on Canada's DSL List

Canadian WHMIS Classifications: B2

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

CAS# 110-62-3 is listed on Canada's Ingredient Disclosure List

US Federal

TSCA

CAS# 110-62-3 is listed on the TSCA

Inventory.

Section 16 - Other Information

MSDS Creation Date: 8/24/1997

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.
