

MATERIAL SAFETY DATA SHEET

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Version 1.5

Section 1 - Product and Company Information

Product Name POLY(VINYL ALCOHOL), 98-99%
HYDROLYZED, TYPICAL AVERAGE MW
146,000-186,000

Product Number 363162

Brand ALDRICH

Company Sigma-Aldrich

Street Address 3050 Spruce Street

City, State, Zip, Country SAINT LOUIS MO 63103 US

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Section 2 - Composition/Information on Ingredient

Substance Name	CAS #	SARA 313 No
POLYVINYL ALCOHOL	9002-89-5	No

Synonyms Alcotex 88/05 * Alcotex 88/10 * Alkotex * Alvyl *
Aracet APV * Cipoviol W 72 * Covol * Covol 971 *
Elvanol * Elvanol 50-42 * Elvanol 52-22 * Elvanol
70-05 * Elvanol 71-30 * Elvanol 90-50 * Elvanol
522-22 * Elvanol 73125G * EP 160 * Ethenol
homopolymer (9CI) * Galvatol 1-60 * Gelvatol *
Gelvatol 1-30 * Gelvatol 1-90 * Gelvatol 3-91 *
Gelvatol 20-30 * Gelvatol 2090 * GH 20 * GL 02 *
GL 03 * GLO 5 * GM 14 * Gohsenol * Gohsenol AH 22
* Gohsenol GH * Gohsenol GH 17 * Gohsenol GH 20 *
Gohsenol GH 23 * Gohsenol GL 03 * Gohsenol GL 05
* Gohsenol GL 08 * Gohsenol GM 14 * Gohsenol GM
94 * Gohsenol GM 14L * Gohsenol KH 17 * Gohsenol
NH 05 * Gohsenol NH 17 * Gohsenol NH 18 *
Gohsenol NH 20 * Gohsenol NH 26 * Gohsenol NK 114
* Gohsenol NL 05 * Gohsenol NM 14 * Ivalon *
Kuralon VP * Kurare poval 1700 * Kurare PVA 205 *
Kurate poval 120 * Lemol * Lemol 5-88 * Lemol
5-98 * Lemol 12-88 * Lemol 16-98 * Lemol 24-98 *
Lemol 30-98 * Lemol 51-98 * Lemol 60-98 * Lemol
75-98 * Lemol GF-60 * M 13/20 * Mowiol *

RTECS Number: TR8100000

Section 3 - Hazards Identification

HMIS RATING

HEALTH: 0

FLAMMABILITY: 1

REACTIVITY: 0

NFPA RATING

HEALTH: 0

FLAMMABILITY: 1

REACTIVITY: 0

For additional information on toxicity, please refer to Section 11.

Section 4 - First Aid Measures

ORAL EXPOSURE

If swallowed, wash out mouth with water provided person is conscious. Call a physician.

INHALATION EXPOSURE

If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.

DERMAL EXPOSURE

In case of contact, immediately wash skin with soap and copious amounts of water.

EYE EXPOSURE

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

Section 5 - Fire Fighting Measures

CONDITIONS OF FLAMMABILITY

Under fire conditions, material may decompose to form flammable and/or explosive mixtures in air.

FLASH POINT

235 °F 113 °C Method: closed cup

AUTOIGNITION TEMP

N/A

FLAMMABILITY

N/A

EXTINGUISHING MEDIA

Suitable: Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

FIREFIGHTING

Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.
Specific Hazard(s): Emits toxic fumes under fire conditions.

Section 6 - Accidental Release Measures

PROCEDURE(S) OF PERSONAL PRECAUTION(S)

Exercise appropriate precautions to minimize direct contact with skin or eyes and prevent inhalation of dust.

METHODS FOR CLEANING UP

Sweep up, 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

HANDLING

User Exposure: Avoid inhalation. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

STORAGE

Suitable: Keep tightly closed.

Section 8 - Exposure Controls / PPE

ENGINEERING CONTROLS

Safety shower and eye bath. Mechanical exhaust required.

PERSONAL PROTECTIVE EQUIPMENT

Respiratory: Wear dust mask.

Hand: Protective gloves.

Eye: Chemical safety goggles.

GENERAL HYGIENE MEASURES

Wash thoroughly after handling.

Section 9 - Physical/Chemical Properties

Appearance	Physical State: Solid Color: Colorless Form: Crystals	
Property	Value	At Temperature or Pressure
Molecular Weight	N/A	
pH	N/A	
BP/BP Range	N/A	
MP/MP Range	300 °C	
Freezing Point	N/A	
Vapor Pressure	N/A	
Vapor Density	N/A	
Saturated Vapor Conc.	N/A	
SG/Density	1.269 g/cm ³	
Bulk Density	N/A	
Odor Threshold	N/A	
Volatile%	N/A	
VOC Content	N/A	
Water Content	N/A	
Solvent Content	N/A	
Evaporation Rate	N/A	
Viscosity	N/A	
Surface Tension	N/A	
Partition Coefficient	N/A	
Decomposition Temp.	N/A	
Flash Point	235 °F 113 °C	Method: closed cup
Explosion Limits	N/A	
Flammability	N/A	
Autoignition Temp	N/A	
Refractive Index	1.5	
Optical Rotation	N/A	
Miscellaneous Data	N/A	
Solubility	N/A	

N/A = not available

Section 10 - Stability and Reactivity

STABILITY

Stable: Stable.

Materials to Avoid: Strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide.

HAZARDOUS POLYMERIZATION

Hazardous Polymerization: Will not occur

Section 11 - Toxicological Information

ROUTE OF EXPOSURE

Skin Contact: May cause skin irritation.

Skin Absorption: May be harmful if absorbed through the skin.

Eye Contact: May cause eye irritation.

Inhalation: May be harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract.

Ingestion: May be harmful if swallowed.

SIGNS AND SYMPTOMS OF EXPOSURE

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

TOXICITY DATA

Oral

Rat

> 20000 mg/kg

LD50

Remarks: Behavioral:Altered sleep time (including change in righting reflex). Behavioral:Somnolence (general depressed activity). Behavioral:Muscle weakness.

Oral

Mouse

14700 mg/kg

LD50

Remarks: Behavioral:Altered sleep time (including change in righting reflex). Behavioral:Somnolence (general depressed activity). Behavioral:Muscle weakness.

CHRONIC EXPOSURE - CARCINOGEN

Result: This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.

Species: Rat

Route of Application: Subcutaneous

Dose: 2500 MG/KG

Result: Tumorigenic:Carcinogenic by RTECS criteria.

Liver:Tumors. Skin and Appendages: Other: Tumors.

Species: Rat

Route of Application: Implant

Dose: 10 GM/KG

Result: Tumorigenic:Equivocal tumorigenic agent by RTECS criteria. Skin and Appendages: Increase in cellular immune response.

Species: Rat

Route of Application: Implant

Dose: 3768 MG/KG

Result: Tumorigenic:Equivocal tumorigenic agent by RTECS

criteria. Tumorigenic:Tumors at site or application.

IARC CARCINOGEN LIST

Rating: Group 3

Section 12 - Ecological Information

Section 13 - Disposal Considerations

APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION

Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material 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

DOT

Proper Shipping Name: None
Non-Hazardous for Transport: This substance is considered to be non-hazardous for transport.

IATA

Non-Hazardous for Air Transport: Non-hazardous for air transport.

Section 15 - Regulatory Information

UNITED STATES REGULATORY INFORMATION

SARA LISTED: No
TSCA INVENTORY ITEM: Yes

CANADA REGULATORY INFORMATION

WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.
DSL: Yes
NDSL: No

Section 16 - Other Information

DISCLAIMER

For R&D use only. Not for drug, household or other uses.

WARRANTY

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2004 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.