



SIGMA-ALDRICH

Material Safety Data Sheet

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Section 1 - Product and Company Information

Product Name Poly(vinyl alcohol), 80% hydrolyzed
Product Number 360627
Brand Aldrich Chemical

Company Sigma-Aldrich
Street Address 3050 Spruce Street
City, State, Zip, Country SAINT LOUIS, MO 63103 US
Technical Phone: 800-325-5832
Fax: 800-325-5052

Emergency Phone: 314-776-6555

Section 2 - Composition/Information on Ingredient

Substance Name	CAS #	SARA 313	EC no	Annex I Index Number
POLYVINYL ALCOHOL	9002-89-5	No	209-183-3	

Formula Synonyms

Alcotex 88/05, Alcotex 88/10, Alkotex, Alvyi, 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, Ethanol 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, Mowiol N 30-88, Mowiol N 50-98, Mowiol N 70-98, NH 18, NM 11, NM 14, Polydesis, Polysizer 173, Polyvinol, Polyviol, Polyviol M 13/140, Polyviol MO 5/140, Polyviol W 25/140, Polyviol W 40/140, Poval 117, Poval 120, Poval 203, Poval 205, Poval 217, Poval 1700, Poval C 17, PVA 008, PVS 4, Resistoflex, Rhodoviol, Rhodoviol 4/125, Rhodoviol 16/200, Rhodoviol 4-125P, Rhodoviol R 16/20, Solvar, Sumitex H 10, Vibatex S, Vinacol MH, Vinalak, Vinarol, Vinarol DT, Vinarole, Vinarol ST, Vinavilol 2-98, Vinnarol, Vinol, Vinol 125, Vinol 205, Vinol 351, Vinol 523, Vinol unisize, Vinyl alcohol polymer, Vinylon film 2000

Section 3 - Hazards Identification

HMIS Rating
Health: 0* Flammability: 0 Reactivity: 0

NFPA Rating
Health: 0 Flammability: 0 Reactivity: 0

*additional chronic hazards present.

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

Autoignition Temp: 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.

Special Requirements
Light sensitive.

Section 8 - Exposure Controls / PPE

Engineering Controls
Safety shower and eye bath. Mechanical exhaust required.

Personal Protective Equipment

Respiratory

Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks.

Hand

Protective gloves.

Eye

Chemical safety goggles.

General Hygiene Measures
Wash thoroughly after handling.

Section 9 - Physical/Chemical Properties

Appearance	Color	Form
Physical State		
Solid	Colorless	Crystals

Molecular Weight: N/A

pH	N/A
BP/BP Range	N/A
MP/MP Range	200 °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
Partition Coefficient	N/A
Decomposition Temp.	N/A
Flash Point °F	> 235 °F
Flash Point °C	> 113 °C

Method: closed cup
Method: closed cup

Explosion Limits N/A

Flammability N/A
Autoignition Temp N/A
Refractive Index 1.5

Solubility N/A

N/A = not available

Section 10 - Stability and Reactivity

Stability

Stable

Stable

Conditions to Avoid

Exposure to light may affect product quality.

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.

RTECS Number: TR8100000

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.

Rat - Subcutaneous: 2500 MG/KG

Result: Tumorigenic: Carcinogenic by RTECS criteria. Liver: Tumors. Skin and Appendages: Other: Tumors.

Rat - Implant: 10 GM/KG

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

Rat - Implant: 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

No data available.

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 2007 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.