

Material Name: SELVOL™ Polyvinyl Alcohol Solutions, general, 5-30% SDS ID: SSC10008

solutions

## Section 1 - PRODUCT AND COMPANY IDENTIFICATION

#### **Material Name**

SELVOL<sup>TM</sup> Polyvinyl Alcohol Solutions, general, 5-30% solutions

#### **Synonyms**

Polyvinyl alcohol solutions

## **Chemical Family**

Ethenol, homopolymer Acetic acid ethenyl ester, polymer with ethanol.

#### **Product Use**

Intermediate, surfactant, adhesives, Food/feedstuff additives. Packaging materials, Auxiliary for leather, Auxiliary for textile.

#### **Restrictions on Use**

None known.

## Details of the supplier of the safety data sheet

Sekisui Specialty Chemicals America, LLC 1501 LBJ Freeway, Suite 530 Dallas, TX 75234

**Emergency Phone Numbers:** 

In USA: CHEMTREC 800-424-9300

Outside USA: CHEMTREC 703-527-3887 (collect calls accepted)

Phone: +1-972-277-2900 www.sekisui-sc.com

## **Section 2 - HAZARDS IDENTIFICATION**

## Classification in accordance with paragraph (d) of 29 CFR 1910.1200.

Skin Sensitization - Category 1A

## **GHS Label Elements**

Symbol(s)



## Signal Word

Warning

## **Hazard Statement(s)**

May cause an allergic skin reaction.

**Precautionary Statement(s)** 

#### **Prevention**

Avoid breathing dust/fume/gas/mist/vapours/spray.

Contaminated work clothing must not be allowed out of the workplace.

Wear protective gloves.

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#### Response

IF ON SKIN: Wash with plenty of soap and water.

If skin irritation or rash occurs: Get medical advice/attention.

Wash contaminated clothing before reuse.

Specific treatment (see label).

#### Storage

None needed according to classification criteria.

## **Disposal**

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

## Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

CAS	Component Name	Percent
7732-18-5	Water	70.0-95.0
25213-24-5	Vinyl acetate-vinyl alcohol copolymer	5.0-30.0
127-09-3	Sodium acetate	0.01-0.1
79-20-9	Methyl acetate	0.001-0.1
67-56-1	Methyl alcohol	0.001-0.1
55965-84-9	5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with 2-methyl-3(2H)-isothiazolone	0.0038

## **Section 4 - FIRST AID MEASURES**

#### **Description of Necessary Measures**

Wash thoroughly after handling.

#### Inhalation

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

#### Skin

Wash with plenty of soap and water. If skin irritation or rash occurs, seek medical advice/attention. Wash contaminated clothing before reuse.

## Eyes

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 attention.

#### **Ingestion**

If a large amount is swallowed, get medical attention.

## **Most Important Symptoms/Effects**

## Acute

May cause an allergic skin reaction.

#### Delayed

May cause an allergic skin reaction.

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#### Indication of any immediate medical attention and special treatment needed

Treat symptomatically and supportively.

## **Note to Physicians**

Treat symptomatically and supportively.

## **Section 5 - FIRE FIGHTING MEASURES**

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#### **Extinguishing Media**

#### Suitable Extinguishing Media

The product itself does not burn. dry polymer: Use dry chemical, carbon dioxide, alcohol-resistant foam or water spray.

#### **Unsuitable Extinguishing Media**

Do not scatter spilled material with high-pressure water streams.

#### **Hazardous Combustion Products**

carbon monoxide, carbon dioxide.

#### Advice for firefighters

Wear full protective fire fighting gear including self contained breathing apparatus (SCBA) for protection against possible exposure.

#### **Fire Fighting Measures**

Keep unnecessary people away, isolate hazard area and deny entry. Do not enter confined spaces unless adequately ventilated. Cool containers with water spray until well after the fire is out. Keep away from heat, sparks and flame.

#### Section 6 - ACCIDENTAL RELEASE MEASURES

#### Personal Precautions, Protective Equipment and Emergency Procedures

Keep unnecessary people away, isolate hazard area and deny entry. The mixture is slippery when wet. Avoid contact with skin and eyes.

## Methods and Materials for Containment and Cleaning Up

Use approved industrial vacuum cleaner for removal. Absorb spillage to prevent material damage. Collect in closed and suitable containers for disposal.

#### **Environmental Precautions**

Prevent environmental discharge consistent with regulatory requirements.

#### **Section 7 - HANDLING AND STORAGE**

## **Precautions for Safe Handling**

Use only outdoors or in a well-ventilated area. Spilled polymer solution is very slippery. Use care to avoid falls. Wash thoroughly after handling.

#### Conditions for Safe Storage, Including any Incompatibilities

None needed according to classification criteria.

Protect from freezing. Store at room temperature. Store in original container.

#### **Incompatible Materials**

Oxidizing agents, acids, peroxides, perchlorates, nitrates, reactive metals

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## Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

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**Component Exposure Limits** 

Vinyl acetate-vinyl alcohol copolymer	25213-24-5
ACGIH:	10 mg/m3 TWA inhalable particles, recommended; 3 mg/m3 TWA respirable particles, recommended (related to Particulates not otherwise classified (PNOC))
OSHA (US):	15 mg/m3 TWA total dust ; 5 mg/m3 TWA respirable fraction (related to Particulates not otherwise classified (PNOC))
	15 mppcf TWA respirable fraction; 5 mg/m3 TWA respirable fraction; 50 mppcf TWA total dust; 15 mg/m3 TWA total dust (related to Particulates not otherwise classified (PNOC))
Methyl acetate	79-20-9
ACGIH:	200 ppm TWA
	250 ppm STEL
NIOSH:	200 ppm TWA ; 610 mg/m3 TWA
	250 ppm STEL ; 760 mg/m3 STEL
	3100 ppm IDLH (10% LEL )
OSHA (US):	200 ppm TWA ; 610 mg/m3 TWA
Mexico:	200 ppm TWA VLE-PPT ; 610 mg/m3 TWA VLE-PPT
	250 ppm STEL [PPT-CT]; 760 mg/m3 STEL [PPT-CT]
Methyl alcohol	67-56-1
ACGIH:	200 ppm TWA
	250 ppm STEL
	Skin - potential significant contribution to overall exposure by the cutaneous route
NIOSH:	200 ppm TWA ; 260 mg/m3 TWA
	250 ppm STEL ; 325 mg/m3 STEL
	Potential for dermal absorption



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	6000 ppm IDLH
Europe:	200 ppm TWA ; 260 mg/m3 TWA
	Possibility of significant uptake through the skin
OSHA (US):	200 ppm TWA ; 260 mg/m3 TWA
Mexico:	200 ppm TWA VLE-PPT ; 260 mg/m3 TWA VLE-PPT
	250 ppm STEL [PPT-CT]; 310 mg/m3 STEL [PPT-CT]
	Skin - potential for cutaneous absorption

EU - Occupational Exposure (98/24/EC) - Binding Biological Limit Values and Health Surveillance Measures There are no biological limit values for any of this product's components.

## ACGIH - Threshold Limit Values - Biological Exposure Indices (BEI)

#### Methyl alcohol (67-56-1)

15 mg/L Medium: urine Time: end of shift Parameter: Methanol (background, nonspecific )

## **Engineering Controls**

Provide local exhaust or process enclosure ventilation system. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

#### Individual Protection Measures, such as Personal Protective Equipment

#### Eye/face protection

Wear splash resistant safety goggles.

#### **Skin Protection**

Wear appropriate chemical resistant clothing. Recommended material type: neoprene.

#### **Respiratory Protection**

A NIOSH approved air-purifying respirator with an appropriate cartridge or canister may be appropriate under certain circumstances where airborne concentrations are expected to exceed exposure limits.

## **Glove Recommendations**

Wear appropriate chemical resistant gloves.

## **Section 9 - PHYSICAL AND CHEMICAL PROPERTIES**

Appearance	viscous solution	Physical State	liquid	
Odor	odorless	Color	colorless to yellow	
Odor Threshold	Not available	<b>pH</b> 5 - 7.5, conc:		
Melting Point	Not available	<b>Boiling Point</b>	100 °C	
<b>Boiling Point Range</b>	Not available	Freezing point	Not available	
<b>Evaporation Rate</b>	Not available	Flammability (solid, gas)	Not available	
Autoignition Temperature	Not available	Flash Point	Not available	

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Lower Explosive Limit	Not available	Decomposition temperature	Not available
<b>Upper Explosive Limit</b>	Not available	Vapor Pressure Not available	
Vapor Density (air=1)	Not available	Specific Gravity (water=1)	Not available
Water Solubility	Not available	Partition coefficient: n-octanol/water	Not available
Viscosity	Not available	Solubility (Other)	Not available
Density	Not available	Molecular Weight	Not available

## **Section 10 - STABILITY AND REACTIVITY**

#### Reactivity

No hazard expected.

## **Chemical Stability**

Stable under normal conditions of use.

## **Possibility of Hazardous Reactions**

Hazardous polymerization will not occur.

#### **Conditions to Avoid**

Protect from freezing.

#### **Incompatible Materials**

oxidizing agents, peroxides, perchlorates, nitrates, reactive metals.

## **Hazardous decomposition products**

oxides of carbon.

## Section 11 - TOXICOLOGICAL INFORMATION

## Information on Likely Routes of Exposure

#### Inhalation

No information on significant adverse effects.

#### **Skin Contact**

May cause slight irritation. May cause an allergic skin reaction.

## **Eye Contact**

May cause slight irritation. viscous polymer solution.

#### Ingestion

May cause gastrointestinal irritation.

#### **Acute and Chronic Toxicity**

#### Component Analysis - LD50/LC50

The components of this material have been reviewed in various sources and the following selected endpoints are published:

## Water (7732-18-5)

Oral LD50 Rat >90 mL/kg

## Sodium acetate (127-09-3)

Oral LD50 Rat 3530 mg/kg

Dermal LD50 Rabbit >10 g/kg

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Inhalation LC50 Rat >30 g/m3 1 h

Methyl acetate (79-20-9)

Oral LD50 Rat >5 g/kg

Dermal LD50 Rabbit >5 g/kg

Inhalation LC50 Rat 16000 ppm 4 h

Methyl alcohol (67-56-1)

Oral LD50 Rat 6200 mg/kg

Inhalation LC50 Rat 22500 ppm 8 h

5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with 2-methyl-3(2H)-isothiazolone (55965-84-9)

Oral LD50 Rat 53 mg/kg

**Product Toxicity Data** 

**Acute Toxicity Estimate** 

Dermal	> 2000 mg/kg
Inhalation - Vapor	> 20 mg/L
Oral	> 2000 mg/kg

#### **Immediate Effects**

May cause an allergic skin reaction.

#### **Delayed Effects**

May cause an allergic skin reaction.

## Irritation/Corrosivity Data

May cause mechanical irritation.

#### **Respiratory Sensitization**

No data available.

#### **Dermal Sensitization**

May cause an allergic skin reaction.

## **Component Carcinogenicity**

None of this product's components are listed by ACGIH, IARC, NTP, DFG or OSHA

## **Germ Cell Mutagenicity**

Ames test found to be negative. No hazard expected.

## **Tumorigenic Data**

No data available

## **Reproductive Toxicity**

No hazard expected. See information on methanol.

## **Specific Target Organ Toxicity - Single Exposure**

None known.

## **Specific Target Organ Toxicity - Repeated Exposure**

None known.

#### **Aspiration hazard**

No data available.

#### **Medical Conditions Aggravated by Exposure**

eye disorders, gastrointestinal disorders

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## **Section 12 - ECOLOGICAL INFORMATION**

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**Component Analysis - Aquatic Toxicity** 

Vinyl acetate- vinyl alcohol copolymer	25213-24-5
Fish:	LC50 96 hr Lepomis macrochirus (Bluegill sunfish) 10 g/L; LC50 96 hr Pimephales promelas (Fathead minnow) 40 g/L
Algae:	EC50 48 hr Daphnia magna 8300 mg/L
Sodium acetate	127-09-3
Invertebrate:	EC50 48 h Daphnia magna >1000 mg/L IUCLID
Methyl acetate	79-20-9
Fish:	LC50 96 h Pimephales promelas 295 - 348 mg/L [flow-through]; LC50 96 h Brachydanio rerio 250 - 350 mg/L [static]
Algae:	EC50 72 h Desmodesmus subspicatus >120 mg/L IUCLID
Invertebrate:	EC50 48 h Daphnia magna 1026.7 mg/L IUCLID
Methyl alcohol	67-56-1
Fish:	LC50 96 h Pimephales promelas 28200 mg/L [flow-through]; LC50 96 h Pimephales promelas >100 mg/L [static]; LC50 96 h Oncorhynchus mykiss 19500 - 20700 mg/L [flow-through]; LC50 96 h Oncorhynchus mykiss 18 - 20 mL/L [static]; LC50 96 h Lepomis macrochirus 13500 - 17600 mg/L [flow-through]

## **Bioaccumulative Potential**

Low.

## **Biodegradation**

90%

## Chemical Oxygen Demand (COD)

1700 mgO2/g (Ca)

## **Section 13 - DISPOSAL CONSIDERATIONS**

## **Disposal Methods**

Dispose of contents/container in accordance with local/regional/national/international regulations. Product is not an EPA hazardous waste.

#### **Component Waste Numbers**

The U.S. EPA has not published waste numbers for this product's components



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## Section 14 - TRANSPORT INFORMATION

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#### **US DOT Information:**

UN/NA #: Not Regulated

## **TDG Information:**

UN#: Not Regulated

## **Section 15 - REGULATORY INFORMATION**

## **U.S. Federal Regulations**

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), and/or require an OSHA process safety plan.

Methyl alcohol	67-56-1	
SARA 313:	1 % de minimis concentration	
CERCLA:	5000 lb final RQ; 2270 kg final RQ	

## SARA Section 311/312 (40 CFR 370 Subparts B and C)

Acute Health: Yes Chronic Health: No Fire: No Pressure: No Reactivity: No

## **U.S. State Regulations**

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA
Methyl acetate	79-20-9	Yes	Yes	Yes	Yes	Yes
Methyl alcohol	67-56-1	Yes	Yes	Yes	Yes	Yes

# The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):

WARNING! This product contains a chemical known to the state of California to cause reproductive/developmental effects

Methyl alcohol	67-56-1
Repro/Dev. Tox	developmental toxicity, 3/16/2012

## **Canada Regulations**

#### **Canadian WHMIS Ingredient Disclosure List (IDL)**

Components of this material have been checked against the Canadian WHMIS Ingredients Disclosure List. The List is composed of chemicals which must be identified on MSDSs if they are included in products which meet WHMIS criteria specified in the Controlled Products Regulations and are present above the threshold limits listed on the IDL

Methyl acetate	79-20-9	
	1 %	

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Methyl alcohol	67-56-1	
	1 %	

## **Component Analysis - Inventory**

## Water (7732-18-5)

US	CA	EU	AU	РН	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2	KR - REACH CCA	CN	NZ	MX	TW
Yes	DSL	EIN	Yes	Yes	No	No	Yes	No	No	Yes	Yes	Yes	Yes

## Vinyl acetate-vinyl alcohol copolymer (25213-24-5)

US	CA	EU	AU	РН	JP - ENCS	JP -	KR KECI - Annex 1	KECI -	KR - REACH CCA	CN	NZ	MX	TW
Yes	DSL	No	Yes	Yes	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes

## **Sodium acetate (127-09-3)**

US	CA	EU	AU	РН	-	JP - ISHL			KR - REACH CCA	CN	NZ	MX	TW
Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes

#### Methyl acetate (79-20-9)

US	CA	EU	AU	РН		JP - ISHL		KR KECI - Annex 2	KR - REACH CCA	CN	NZ	MX	TW
Yes	DSL	EIN	Yes	Yes	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes

## Methyl alcohol (67-56-1)

US	CA	EU	AU	РН		JP - ISHL		KR KECI - Annex 2	KR - REACH CCA	CN	NZ	MX	TW
Yes	DSL	EIN	Yes	Yes	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes

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#### 5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with 2-methyl-3(2H)-isothiazolone (55965-84-9)

US	CA	EU	AU	РН	JP - ENCS	JP - ISHL	KR KECI - Annex 1	- Annex		CN	NZ	MX	TW
No	DSL	No	No	Yes	Yes	No	Yes	No	No	Yes	Yes	No	Yes

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## **Section 16 - OTHER INFORMATION**

#### **HMIS Rating**

Health: 1 Fire: 1 Reactivity: Not available

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe \* = Chronic hazard

NFPA Ratings

Health: 1 Fire: 1 Reactivity: Not available

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

**Summary of Changes** Updated SDS: 12/13/2016

#### Key / Legend

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU -Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CA/MA/MN/NJ/PA -California/Massachusetts/Minnesota/New Jersey/Pennsylvania\*; CAS - Chemical Abstracts Service; CFR - Code of Federal Regulations (US); CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CLP - Classification, Labelling, and Packaging; CN - China; CPR - Controlled Products Regulations; DFG -Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSD - Dangerous Substance Directive; DSL - Domestic Substances List; EC - European Commission; EEC - European Economic Community; EIN -European Inventory of (Existing Commercial Chemical Substances); EINECS - European Inventory of Existing Commercial Chemical Substances; ENCS - Japan Existing and New Chemical Substance Inventory; EPA -Environmental Protection Agency; EU - European Union; F - Fahrenheit; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL -Ingredient Disclosure List; IDLH - Immediately Dangerous to Life and Health; IMDG - International Maritime Dangerous Goods; ISHL - Japan Industrial Safety and Health Law; IUCLID - International Uniform Chemical Information Database; JP - Japan; Kow - Octanol/water partition coefficient; KECI - Korea Existing Chemicals Inventory; KECL - Korea Existing Chemicals List; KR - Korea; LD50/LC50 - Lethal Dose/ Lethal Concentration; LEL - Lower Explosive Limit; LLV - Level Limit Value; LOLI - List Of LIsts™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; MX -Mexico; NDSL - Non-Domestic Substance List (Canada); NFPA - National Fire Protection Agency; NIOSH -National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PEL-Permissible Exposure Limit; PH - Philippines; RCRA - Resource Conservation and Recovery Act; REACH-Registration, Evaluation, Authorisation, and restriction of Chemicals; RID - European Rail Transport; SARA -Superfund Amendments and Reauthorization Act; STEL - Short-term Exposure Limit; TCCA - Korea Toxic Chemicals Control Act; TDG - Transportation of Dangerous Goods; TLV - Threshold Limit Value; TSCA - Toxic Substances Control Act; TW - Taiwan; TWA - Time Weighted Average; UEL - Upper Explosive Limit; UN/NA -United Nations /North American; US - United States; VLE - Exposure Limit Value (Mexico); WHMIS - Workplace Hazardous Materials Information System (Canada).



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## **Other Information**

#### Disclaimer:

Supplier gives no warranty whatsoever, including the warranties of merchantability or of fitness for a particular purpose. Any product purchased is sold on the assumption the purchaser shall determine the quality and suitability of the product. Supplier expressly disclaims any and all liability for incidental, consequential or any other damages arising out of the use or misuse of this product. No information provided shall be deemed to be a recommendation to use any product in conflict with any existing patent rights