

Safety Data Sheet

Material Name: SELVOLT™ Polyvinyl Alcohol, low degree hydrolysis

SDS ID: SSC10009

Section 1 - PRODUCT AND COMPANY IDENTIFICATION

Material Name

SELVOLT™ Polyvinyl Alcohol, low degree hydrolysis

Trade Names

The following specific grades of SELVOLT™ are covered by this SDS: E 603, E 605, E 607, E 705H, E 707

Synonyms

Polyvinyl alcohol, PVA

Chemical Family

Acetic acid ethenyl ester, polymer with ethanol.

Product Use

Intermediate, surfactant, Adhesive, food additives, packaging, 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.

Combustible Dust

Acute Toxicity - Dermal - Category 4

Specific Target Organ Toxicity - Single Exposure - Category 1 (nervous system , optic nerve , body , Central Nervous System , retina , systemic toxicity , eyes , Nervous System)

Specific Target Organ Toxicity - Single Exposure - Category 2

Specific Target Organ Toxicity - Repeated Exposure - Category 1 (optic nerve , eyes , Central Nervous System , retina)

GHS Label Elements

Symbol(s)



Signal Word

Danger



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Hazard Statement(s)

May form combustible dust concentrations in air.
Harmful in contact with skin.
Causes damage to organs.
May cause damage to organs.
Causes damage to organs through prolonged or repeated exposure.

Precautionary Statement(s)

Prevention

Wear protective gloves/protective clothing/eye protection/face protection.
Do not breathe dust/fume/gas/mist/vapours/spray.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.

Response

If exposed or concerned: Call a POISON CENTER or doctor/physician.
IF ON SKIN: Wash with plenty of soap and water.
Take off contaminated clothing and wash before reuse.
Call a POISON CENTER or doctor if you feel unwell.
Specific treatment (see label).

Storage

Store locked up.

Disposal

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

Statement of Unknown Toxicity

87.7% of the mixture consists of ingredient(s) of unknown acute toxicity.

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

CAS	Component Name	Percent
25213-24-5	Acetic acid, ethenyl ester, polymer with ethenol	87.5-98.5
7732-18-5	Water	1.0-5.0
127-09-3	Sodium acetate	0.1-1.5
79-20-9	Methyl acetate	0.2-<3
67-56-1	Methanol	0.2-<3

Section 4 - FIRST AID MEASURES

Description of Necessary Measures

Wash thoroughly after handling. Avoid breathing dust. Use only outdoors or in a well-ventilated area.

Inhalation

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



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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 advice/attention.

Ingestion

If a large amount is swallowed, get medical attention.

Most Important Symptoms/Effects

Acute

Harmful in contact with skin. Causes damage to central nervous system, optic nerve. May cause damage to organs.

Delayed

Causes damage to optic nerve, eyes, retina, central nervous system through prolonged or repeated exposure.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically and supportively.

Section 5 - FIRE FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

carbon dioxide, regular dry chemical, alcohol resistant foam, water spray

Unsuitable Extinguishing Media

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

Special Hazards Arising from the Chemical

Combustible Dust. Dust/air mixtures may ignite or explode. Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

Hazardous Combustion Products

oxides of carbon

Fire Fighting Measures

Avoid inhalation of material or combustion by-products. Move material from fire area if it can be done without risk. Use extinguishing agents appropriate for surrounding fire. Dike for later disposal. Stay upwind and keep out of low areas.

Special Protective Equipment and Precautions for Firefighters

Wear personal protective clothing and equipment such as self-contained breathing apparatus (SCBA) for protection against possible exposure.

Section 6 - ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Avoid contact with eyes and skin. Do not breathe dust. Keep unnecessary people away, isolate hazard area and deny entry. The mixture is slippery when wet.

Methods and Materials for Containment and Cleaning Up

Avoid generation of dusts. Dispose of contents/container in accordance with local/regional/national/international regulation. Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Non-sparking tools should be used when working with dust.

Environmental Precautions

Avoid generation of dusts. Remove all sources of ignition. Ventilate affected area. Discharge into the environment must be avoided.



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Section 7 - HANDLING AND STORAGE

Precautions for Safe Handling

Use methods to minimize dust. Minimize dust generation and accumulation. Use this material with adequate ventilation. Keep container tightly closed. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Do not breathe dust. Do not eat, drink or smoke when using this product. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres.

Conditions for Safe Storage, Including any Incompatibilities

Store locked up.

Store at room temperature. Store in original container. Stacking height must not exceed three pallets.

Incompatible Materials

reactive metals, oxidizing agents, peroxides, perchlorates, nitrates

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Component Exposure Limits

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]
Methanol	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

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	Potential for dermal absorption
	6000 ppm IDLH
Europe:	200 ppm TWA ; 260 mg/m ³ TWA
	Possibility of significant uptake through the skin
OSHA (US):	200 ppm TWA ; 260 mg/m ³ TWA
Mexico:	200 ppm TWA VLE-PPT ; 260 mg/m ³ TWA VLE-PPT
	250 ppm STEL [PPT-CT] ; 310 mg/m ³ 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)

Methanol (67-56-1)

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

Engineering Controls

Provide local exhaust ventilation system. It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of these product contain explosion relief vents or an explosion suppression system or an oxygen-deficient environment. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment).

Individual Protection Measures, such as Personal Protective Equipment

Eye/face protection

Wear safety glasses.

Skin Protection

Wear appropriate chemical resistant clothing.

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	granular powder	Physical State	solid
Odor	odorless	Color	white to yellow, yellow to orange
Odor Threshold	Not available	pH	4.5 - 6.4 , conc: 4 %
Melting Point	230 - 240 °C	Boiling Point	Not available

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Boiling Point Range	Not available	Freezing point	Not available
Evaporation Rate	Not available	Flammability (solid, gas)	Minimum Dust Cloud Ignition Temperature: 280°C
Autoignition Temperature	Not available	Flash Point	Not available
Lower Explosive Limit	Not available	Decomposition temperature	Not available
Upper Explosive Limit	Not available	Vapor Pressure	Not available
Vapor Density (air=1)	Not available	Specific Gravity (water=1)	1.27 - 1.31 at 20 °C
Water Solubility	Soluble in hot water	Partition coefficient: n-octanol/water	Not available
Viscosity	Not available	Solubility (Other)	Not available
Bulk Density	0.61 - 0.67 g/cm ³ at 20 °C hPa	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

Avoid generating dust. Avoid contact with incompatible materials.

Incompatible Materials

reactive metals, oxidizing agents, peroxides, perchlorates, nitrates

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

Harmful in contact with skin.

Eye Contact

No information on significant adverse effects.



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Ingestion

No information on significant adverse effects.

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

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

Methanol (67-56-1)

Oral LD50 Rat 6200 mg/kg

Inhalation LC50 Rat 22500 ppm 8 h

Product Toxicity Data

Acute Toxicity Estimate

Dermal	1272.4137 mg/kg
Inhalation - Dust and Mist	> 5 mg/L
Oral	> 2000 mg/kg

Immediate Effects

Harmful in contact with skin. Causes damage to optic nerve, nervous system.

Delayed Effects

Causes damage to optic nerve, eyes, retina, central nervous system through prolonged or repeated exposure.

Irritation/Corrosivity Data

May cause mechanical irritation.

Respiratory Sensitization

No data available.

Dermal Sensitization

No data available.

Component Carcinogenicity

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

Germ Cell Mutagenicity

No data available.

Tumorigenic Data

No data available.

Reproductive Toxicity

No hazard expected. See information on methanol.

Specific Target Organ Toxicity - Single Exposure

nervous system, optic nerve

Specific Target Organ Toxicity - Repeated Exposure

optic nerve, eyes, central nervous system, retina



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Aspiration hazard

No data available.

Medical Conditions Aggravated by Exposure

No data available.

Section 12 - ECOLOGICAL INFORMATION

Component Analysis - Aquatic Toxicity

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



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Section 14 - TRANSPORT INFORMATION

US DOT Information:

UN/NA #: Not Regulated

IATA Information:

UN#: No classification assigned

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.

Methanol	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:** Yes **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
Methanol	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

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



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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 %
Methanol	67-56-1
	1 %

Component Analysis - Inventory

Acetic acid, ethenyl ester, polymer with ethenol (25213-24-5)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX	TW
Yes	DSL	No	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes	Yes

Water (7732-18-5)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX	TW
Yes	DSL	EIN	Yes	Yes	No	No	Yes	No	Yes	Yes	Yes	Yes

Sodium acetate (127-09-3)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX	TW
Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes

Methyl acetate (79-20-9)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX	TW
Yes	DSL	EIN	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes	Yes

Methanol (67-56-1)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX	TW
Yes	DSL	EIN	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes	Yes



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Section 16 - OTHER INFORMATION

HMIS Rating

Health: 1 Fire: 1 Reactivity:

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

NFPA Ratings

Health: 1 Fire: 1 Reactivity:

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

Summary of Changes

Updated SDS: 10/4/2016

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).

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