

Material Name: SELVOL™ Polyvinyl Alcohol, tackified

# Section 1 - PRODUCT AND COMPANY IDENTIFICATION

SDS ID: SSC10005

#### **Material Name**

SELVOL<sup>TM</sup> Polyvinyl Alcohol, tackified

**Trade Names** 

Grade: MH82, MM51 and MM81

**Chemical Family** Ethenol, homopolymer

**Product Use** 

Chemical Intermediate, Adhesive, Paper

**Restrictions on Use** 

None known

#### **Manufacturer Information**

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 - Inhalation - Dust/Mist - Category 4

Skin Corrosion/Irritation - Category 2

Serious Eye Damage/Eye Irritation - Category 2A

Reproductive Toxicity - Category 1B

Specific Target Organ Toxicity - Single Exposure - Category 1 (digestive system, nervous system)

Specific Target Organ Toxicity - Repeated Exposure - Category 1 (kidneys)

# **GHS Label Elements**

#### Symbol(s)







SDS ID: SSC10005

Material Name: SELVOL™ Polyvinyl Alcohol, tackified

Signal Word

Danger

### **Hazard Statement(s)**

May form combustible dust concentrations in air

Harmful if inhaled

Causes skin irritation

Causes serious eye irritation

May damage fertility or the unborn child

Causes damage to organs

Causes damage to organs through prolonged or repeated exposure

# **Precautionary Statement(s)**

#### **Prevention**

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Use only outdoors or in a well-ventilated area

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: Call a POISON CENTER or doctor/physician

IF INHALED: Remove person to fresh air and keep comfortable for breathing

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy

to do. Continue rinsing

IF ON SKIN: Wash with plenty of soap and water If skin irritation occurs: Get medical advice/attention 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

# Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

CAS	Component Name	Percent	
9002-89-5	Polyvinyl alcohol	80 - 94	
10043-35-3	Boric acid (H3BO3)	5.5 - 15.5	

Page 2 of 12 Issue date: 2015-05-18 Revision 1.0 Print date: 2015-05-19



# Material Name: SELVOL™ Polyvinyl Alcohol, tackified

6/-56-1 Methyl alcohol 0.1-1
------------------------------

# Section 4 - FIRST AID MEASURES

SDS ID: SSC10005

# **Description of Necessary Measures**

If exposed: Call a POISON CENTER or doctor/physician.

#### Inhalation

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

#### Skin

IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse. Call a POISON CENTER or doctor if you feel unwell. Specific treatment (see label).

#### **Eyes**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

### **Ingestion**

If a large amount is swallowed, get medical attention.

# Indication of any immediate medical attention and special treatment needed

Treat symptomatically and supportively.

#### **Most Important Symptoms/Effects**

#### Acute

Harmful if inhaled. Causes skin irritation. Causes serious eye irritation. Causes damage to organs.

#### Delayed

May damage fertility or the unborn child. Causes damage to organs through prolonged or repeated exposure.

# Section 5 - FIRE FIGHTING MEASURES

# **Extinguishing Media**

# **Suitable Extinguishing Media**

Use carbon dioxide, regular dry chemical, regular foam or water.

# **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.

Page 3 of 12 Issue date: 2015-05-18 Revision 1.0 Print date: 2015-05-19



SDS ID: SSC10005

Material Name: SELVOL™ Polyvinyl Alcohol, tackified

# **Hazardous Combustion Products** Oxides of carbon, oxides of boron

# **Special Protective Equipment and Precautions for Firefighters**

The powder can explode if mixed in air and ignited in a confined space. If unconfined, ignition will give rise to a Class A fire. Care should be taken to prevent the accumulation of dust. Dust is an explosion hazard. However, the explosion hazard is highly dependent on particle size; the finer the particles, the higher the explosion strength. Emptying of bags of powder directly into vessels where flammable vapors exist should be strictly prohibited because static discharges can be generated of sufficient strength to produce an explosion. Wear full protective fire fighting gear including self contained breathing apparatus (SCBA) for protection against possible exposure.

# **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.

# Section 6 - ACCIDENTAL RELEASE MEASURES

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

Avoid contact with skin and eyes. Do not breathe dust. Keep unnecessary people away, isolate hazard area and deny entry.

# Methods and Materials for Containment and Cleaning Up

Avoid generation of dust. Sweep up or gather material and place in appropriate container for disposal. Dispose of contents/container in accordance with local/regional/national/international regulations.

#### **Environmental Precautions**

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

#### Section 7 - HANDLING AND STORAGE

#### **Precautions for Safe Handling**

Use methods to minimize dust. Use this material with adequate ventilation. When not in use, keep containers tightly closed. Avoid breathing dust. Avoid generation of dust. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Avoid contact with clothing. Avoid contact with skin and eyes. Wash thoroughly after handling. Wash/Decontaminate removed clothing before reuse.

# Conditions for Safe Storage, Including any Incompatibilities

Store locked up

Keep container tightly closed and in a well-ventilated place. Keep dry. Stacking height must not exceed three pallets. Sweep up or gather material and place in appropriate container for disposal.



Material Name: SELVOL™ Polyvinyl Alcohol, tackified

**Incompatible Materials** 

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

# Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

**SDS ID: SSC10005** 

# **Component Exposure Limits**

Polyvinyl alcohol	9002-89-5		
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))		
Boric acid (H3BO3)	10043-35-3		
ACGIH:	2 mg/m3 TWA inhalable fraction		
	6 mg/m3 STEL inhalable fraction		
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		
	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		

Page 5 of 12 Issue date: 2015-05-18 Revision 1.0 Print date: 2015-05-19



# Material Name: SELVOL™ Polyvinyl Alcohol, tackified

Mexico:	200 ppm TWA LMPE-PPT; 260 mg/m3 TWA LMPE-PPT	
	250 ppm STEL [LMPE-CT]; 310 mg/m3 STEL [LMPE-CT]	
	Skin - potential for cutaneous absorption	

SDS ID: SSC10005

# Biological limit value

There are no biological limit values for any of this product's components.

# **Engineering Controls**

Provide local exhaust ventilation system. 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 goggles. Do not wear contact lenses.

#### **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 off- white
Odor Threshold	Not available	рН	4 - 5 , conc: 10 %
<b>Melting Point</b>	Not available	<b>Boiling Point</b>	Not available
Freezing point	Not available	<b>Evaporation Rate</b>	Not available
<b>Boiling Point Range</b>	Not available	Flammability (solid, gas)	Not available
Autoignition	Not available	Flash Point	Not available
Lower Explosive Limit	Not available	Decomposition	Not available
Upper Explosive Limit	Not available	Vapor Pressure	Not available

Page 6 of 12 Issue date: 2015-05-18 Revision 1.0 Print date: 2015-05-19



# Material Name: SELVOL™ Polyvinyl Alcohol, tackified

Vapor Density (air=1)	Not available	Specific Gravity (water=1)	Not available
Water Solubility	Soluble in hot water	Partition coefficient: n-octanol/water	Not available
Viscosity	Not available	Solubility (Other)	Not available
Density	Not available		

SDS ID: SSC10005

# Section 10 - STABILITY AND REACTIVITY

# Reactivity

None known.

# **Chemical Stability**

Stable under normal conditions of use.

# **Possibility of Hazardous Reactions**

Not known to occur.

#### **Conditions to Avoid**

Avoid generation of dust. Avoid contact with incompatible materials.

# **Incompatible Materials**

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

# Hazardous decomposition products

oxides of carbon, oxides of boron

# Section 11 - TOXICOLOGICAL INFORMATION

# **Information on Likely Routes of Exposure**

# Inhalation

Harmful if inhaled.

# **Skin Contact**

Causes skin irritation.

# **Eye Contact**

Causes serious eye irritation.

#### **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:

Page 7 of 12 Issue date: 2015-05-18 Revision 1.0 Print date: 2015-05-19



SDS ID: SSC10005

# Material Name: SELVOL™ Polyvinyl Alcohol, tackified

Polyvinyl alcohol (9002-89-5) Oral LD50 Rat 23854 mg/kg Boric acid (H3BO3) (10043-35-3) Oral LD50 Rat 2660 mg/kg Dermal LD50 Rabbit >2000 mg/kg Inhalation LC50 Rat >0.16 mg/L 4 h Methyl alcohol (67-56-1) Oral LD50 Rat 6200 mg/kg Inhalation LC50 Rat 22500 ppm 8 h

#### **Immediate Effects**

Harmful if inhaled. Causes skin irritation. Causes serious eye irritation. Causes damage to organs.

### **Delayed Effects**

Causes damage to organs through prolonged or repeated exposure.

# **Irritation/Corrosivity Data**

Causes skin irritation. Causes serious eye irritation.

#### **Respiratory Sensitization**

No data available.

#### **Dermal Sensitization**

No data available.

# **Component Carcinogenicity**

Polyvinyl alcohol	9002-89-5	
IARC:	Supplement 7 [1987]; Monograph 19 [1979] (Group 3 (not classifiable))	
Boric acid (H3BO3)	10043-35-3	
ACGIH:	A4 - Not Classifiable as a Human Carcinogen	

#### **Germ Cell Mutagenicity**

No data available.

#### **Reproductive Toxicity**

See information on methanol.

# Specific Target Organ Toxicity - Single Exposure

digestive system. nervous system. respiratory tract.

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

kidneys.

# **Aspiration hazard**

No data available.

# **Medical Conditions Aggravated by Exposure**

Page 8 of 12 Issue date: 2015-05-18 Revision 1.0 Print date: 2015-05-19



# Material Name: SELVOL™ Polyvinyl Alcohol, tackified

eye disorders, respiratory disorders, gastrointestinal disorders, skin disorders, central nervous system disorders

**SDS ID: SSC10005** 

# Section 12 - ECOLOGICAL INFORMATION

# **Component Analysis - Aquatic Toxicity**

Polyvinyl alcohol	9002-89-5
Fish:	LC50 96 hours Danio rerio (Zebra fish) >5000 mg/L; LC50 96 hours Pimephales promelas (Fathead minnow) 40 g/L
Invertebrate:	EC50 48 hours Daphnia magna 8300 mg/L
Boric acid (H3BO3)	10043-35-3
Invertebrate:	EC50 48 h Daphnia magna 115 - 153 mg/L EPA
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]

# Section 13 - DISPOSAL CONSIDERATIONS

# **Disposal Methods**

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

# Section 14 - TRANSPORT INFORMATION

US DOT Information: UN/NA #: Not Regulated

TDG Information: UN#: Not Regulated

# Section 15 - REGULATORY INFORMATION

Page 9 of 12 Issue date: 2015-05-18 Revision 1.0 Print date: 2015-05-19



# Material Name: SELVOL™ Polyvinyl Alcohol, tackified

# **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.

SDS ID: SSC10005

(-),	
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: 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 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

#### 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.

Boric acid (H3BO3)	10043-35-3	
	1 %	
Methyl alcohol	67-56-1	
	1 %	

# WHMIS Classification

D<sub>2</sub>B

# **Component Analysis - Inventory**

Polyvinyl alcohol (9002-89-5)

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



Material Name: SELVOL™ Polyvinyl Alcohol, tackified

Boric acid (H3BO3) (10043-35-3)

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

SDS ID: SSC10005

# Methyl alcohol (67-56-1)

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

#### Section 16 - OTHER INFORMATION

# **HMIS Rating**

Health: 4\* Fire: 1 Reactivity: Not available

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

### **NFPA Ratings**

Health: 4 Fire: 1 Reactivity: Not available

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

# **Summary of Changes** New SDS: 5/18/15

# Key / Legend

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CAS - Chemical Abstracts Service; 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; EEC - European Economic Community; EINECS - European Inventory of Existing Commercial Chemical Substances; 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; JP - Japan; Kow - Octanol/water partition coefficient; KR - Korea; 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; NFPA - National Fire Protection Agency; NIOSH - National Institute



# Material Name: SELVOL™ Polyvinyl Alcohol, tackified

for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; 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; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; UEL - Upper Explosive Limit; US - United States.

SDS ID: SSC10005

# **Other Information**

Reasonable care has been taken in the preparation of this information; however, the manufacturer makes no warranty whatsoever including the warranty of merchantability, expressed or implied, with respect to this information. The manufacturer makes no representations and assumes no liability for any direct, incidental, consequential, or other such damages resulting from its use or misuse.

#### **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.