

1 Identification

- **Product identifier**
- **Product Name:** Custom SVOA
- **Part Number:** POR-2914-B
- **Application of the substance / the mixture** Certified Reference Material
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
SPEX CertiPrep, LLC.
203 Norcross Ave, Metuchen,
NJ 08840 USA
- **Information department:** product safety department
- **Emergency telephone number:**
Emergency Phone Number (24 hours)
CHEMTREC (800-424-9300)
Outside US: 703-527-3887

2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS02 Flame

Flam. Liq. 2 H225 Highly flammable liquid and vapor.



GHS08 Health hazard

Carc. 1B H350 May cause cancer.



GHS07

Acute Tox. 4 H302 Harmful if swallowed.

Eye Irrit. 2A H319 Causes serious eye irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

STOT SE 3 H336 May cause drowsiness or dizziness.

Lact. H362 May cause harm to breast-fed children.

- **Label elements**

- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms**



GHS02



GHS07



GHS08

- **Signal word** Danger

- **Hazard-determining components of labeling:**

acetone

dieldrin (ISO)

Endosulfan sulfate

(1alpha,2beta,3alpha,4beta,5alpha,6beta)-1,2,3,4,5,6-hexachlorocyclohexane

- **Hazard statements**

Highly flammable liquid and vapor.

Harmful if swallowed.

Causes serious eye irritation.

May cause an allergic skin reaction.

May cause cancer.

May cause harm to breast-fed children.

May cause drowsiness or dizziness.

- **Precautionary statements**

Avoid contact during pregnancy/while nursing.

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Keep away from heat/sparks/open flames/hot surfaces. No smoking.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Store locked up.

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

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



· **HMIS-ratings (scale 0 - 4)**

HEALTH	2	Health = 2
FIRE	3	Fire = 3
REACTIVITY	0	Reactivity = 0

· **Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

3 Composition/information on ingredients

· **Chemical characterization: Mixtures**

· **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

67-64-1	acetone	98.4%
15972-60-8	alachlor (ISO)	0.1%
309-00-2	aldrin (ISO)	0.1%
319-84-6	(1alpha,2alpha,3beta,4alpha,5beta,6beta)-1,2,3,4,5,6-hexachlorocyclohexane	0.1%
319-85-7	(1alpha,2beta,3alpha,4beta,5alpha,6beta)-1,2,3,4,5,6-hexachlorocyclohexane	0.1%
319-86-8	(1alpha,2alpha,3alpha,4beta,5alpha,6beta)-1,2,3,4,5,6-hexachlorocyclohexane	0.1%
60-57-1	dieldrin (ISO)	0.1%
58-89-9	gamma-HCH or gamma-BHC	0.1%
5103-74-2	gamma-Chlordane	0.1%
50-29-3	1,1,1-trichloro-2,2-bis(4-chlorophenyl)ethane	0.1%

· **Chemical identification of the substance/preparation**

5103-71-9	alpha-Chlordane	0.1%
959-98-8	Endosulfan I	0.1%
33213-65-9	Endosulfan II	0.1%
1031-07-8	Endosulfan sulfate	0.1%
72-20-8	endrin (ISO)	0.1%
72-54-8	TDE	0.1%
72-55-9	2,2-bis(p-chlorophenyl)-1,1-dichloroethylene	0.1%

4 First-aid measures

· **Description of first aid measures**

· **General information:** Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

· **After inhalation:** Supply fresh air; consult doctor in case of complaints.

· **After skin contact:** Generally the product does not irritate the skin.

· **After eye contact:** Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· **After swallowing:** Immediately call a doctor.

· **Information for Doctor:**

· **Most important symptoms and effects, both acute and delayed** No further relevant information available.

· **Indication of any immediate medical attention and special treatment needed** No further relevant information available.

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5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** CO₂, sand, extinguishing powder. Do not use water.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:**
Do not allow product to reach sewage system or any water course.
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
Do not flush with water or aqueous cleansing agents
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store in a cool location.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
Keep receptacle tightly sealed.
Store in cool, dry conditions in well sealed receptacles.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**

· **Components with limit values that require monitoring at the workplace:**

67-64-1 acetone

PEL	Long-term value: 2400 mg/m ³ , 1000 ppm
REL	Long-term value: 590 mg/m ³ , 250 ppm
TLV	Short-term value: 1187 mg/m ³ , 500 ppm
	Long-term value: 594 mg/m ³ , 250 ppm
BEI	

15972-60-8 alachlor (ISO)

TLV	Long-term value: 1* mg/m ³
	DSEN; *inhalable fraction and vapor

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· **Ingredients with biological limit values:****67-64-1 acetone**

BEI	50 mg/L
	Medium: urine
	Time: end of shift
	Parameter: Acetone (nonspecific)

· **Additional information:** The lists that were valid during the creation were used as basis.· **Exposure controls**· **Personal protective equipment:**· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes.
Avoid contact with the eyes and skin.

· **Breathing equipment:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· **Protection of hands:**

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**

Tightly sealed goggles

9 Physical and chemical properties· **Information on basic physical and chemical properties**· **General Information**· **Appearance:**

Form: Liquid
Color: According to product specification

· **Odor:** Characteristic· **Odour Threshold:** Not applicable.· **pH-value:** Not applicable.· **Change in condition**

Melting point/Melting range: Undetermined.
Boiling point/Boiling range: 55 °C (131 °F)

· **Flash point:** -17 °C (1 °F)· **Flammability (solid, gaseous):** Not applicable.· **Ignition temperature:** 465 °C (869 °F)· **Decomposition temperature:** Not applicable.· **Auto igniting:** Product is not selfigniting.· **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapor mixtures are possible.· **Explosion limits:**

Lower: 2.6 Vol %

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Upper:	13.0 Vol %
· Vapor pressure at 20 °C (68 °F):	233 hPa (175 mm Hg)
· Density	Not applicable.
· Relative density	Not applicable.
· Vapor density	Not applicable.
· Evaporation rate	Not applicable.
· Solubility in / Miscibility with Water:	Not miscible or difficult to mix.
· Partition coefficient (n-octanol/water):	Not applicable.
· Viscosity:	
Dynamic:	Not applicable.
Kinematic:	Not applicable.
· Solvent content:	
Organic solvents:	98.4 %
Solids content:	1.6 %
· Other information	No further relevant information available.

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

· LD/LC50 values that are relevant for classification:		
67-64-1 acetone		
Oral	LD50	5800 mg/kg (rat)
Dermal	LD50	20000 mg/kg (rabbit)
15972-60-8 alachlor (ISO)		
Oral	LD50	1200 mg/kg (rat)
60-57-1 dieldrin (ISO)		
Oral	LD50	38 mg/kg (rat)
Dermal	LD50	10 mg/kg (rat)
72-20-8 endrin (ISO)		
Oral	LD50	7 mg/kg (rat)
Dermal	LD50	60 mg/kg (rat)
58-89-9 γ-HCH or γ-BHC		
Oral	LD50	88 mg/kg (rat)
Dermal	LD50	900 mg/kg (rat)

- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** Irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Harmful
Irritant

- **Carcinogenic categories**

· IARC (International Agency for Research on Cancer)		
309-00-2	aldrin (ISO)	3

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319-84-6	(1alpha,2alpha,3beta,4alpha,5beta,6beta)-1,2,3,4,5,6-hexachlorocyclohexane	2B
319-85-7	(1alpha,2beta,3alpha,4beta,5alpha,6beta)-1,2,3,4,5,6-hexachlorocyclohexane	2B
60-57-1	dieldrin (ISO)	3
72-20-8	endrin (ISO)	3
58-89-9	γ-HCH or γ-BHC	2B
50-29-3	1,1,1-trichloro-2,2-bis(4-chlorophenyl)ethane	2B

· **NTP (National Toxicology Program)**

319-84-6	(1alpha,2alpha,3beta,4alpha,5beta,6beta)-1,2,3,4,5,6-hexachlorocyclohexane	R
319-85-7	(1alpha,2beta,3alpha,4beta,5alpha,6beta)-1,2,3,4,5,6-hexachlorocyclohexane	R
319-86-8	(1alpha,2alpha,3alpha,4beta,5alpha,6beta)-1,2,3,4,5,6-hexachlorocyclohexane	R
58-89-9	γ-HCH or γ-BHC	R
50-29-3	1,1,1-trichloro-2,2-bis(4-chlorophenyl)ethane	R

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Toxic for fish
- **Additional ecological information:**
- **General notes:**
Water hazard class 2 (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.
Also poisonous for fish and plankton in water bodies.
Toxic for aquatic organisms
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:** Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

· UN-Number	
· DOT, ADR, IMDG, IATA	UN1090
· UN proper shipping name	
· DOT, IATA	Acetone
· ADR	1090 Acetone, ENVIRONMENTALLY HAZARDOUS
· IMDG	ACETONE, MARINE POLLUTANT

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<ul style="list-style-type: none"> · Transport hazard class(es) · DOT 	
	
<ul style="list-style-type: none"> · Class · Label 	3 Flammable liquids 3
<ul style="list-style-type: none"> · ADR, IMDG 	
	
<ul style="list-style-type: none"> · Class · Label 	3 Flammable liquids 3
<ul style="list-style-type: none"> · IATA 	
	
<ul style="list-style-type: none"> · Class · Label 	3 Flammable liquids 3
<ul style="list-style-type: none"> · Packing group · DOT, ADR, IMDG, IATA 	II
<ul style="list-style-type: none"> · Environmental hazards: · Marine pollutant: · Special marking (ADR): 	Product contains environmentally hazardous substances: alachlor (ISO) Symbol (fish and tree) Symbol (fish and tree)
<ul style="list-style-type: none"> · Special precautions for user · Danger code (Kemler): · EMS Number: · Stowage Category 	Warning: Flammable liquids 33 F-E,S-D E
<ul style="list-style-type: none"> · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code 	Not applicable.
<ul style="list-style-type: none"> · Transport/Additional information: 	
<ul style="list-style-type: none"> · ADR · Excepted quantities (EQ) 	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
<ul style="list-style-type: none"> · IMDG · Limited quantities (LQ) · Excepted quantities (EQ) 	1L Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
<ul style="list-style-type: none"> · UN "Model Regulation": 	UN 1090 ACETONE, 3, II, ENVIRONMENTALLY HAZARDOUS

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Sara**

· Section 355 (extremely hazardous substances):	
309-00-2	aldrin (ISO)
72-20-8	endrin (ISO)
58-89-9	γ-HCH or γ-BHC
· Section 313 (Specific toxic chemical listings):	
15972-60-8	alachlor (ISO)
309-00-2	aldrin (ISO)

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319-84-6	(1alpha,2alpha,3beta,4alpha,5beta,6beta)-1,2,3,4,5,6-hexachlorocyclohexane	
58-89-9	gamma-HCH or gamma-BHC	
· TSCA (Toxic Substances Control Act):		
67-64-1	acetone	
319-84-6	(1alpha,2alpha,3beta,4alpha,5beta,6beta)-1,2,3,4,5,6-hexachlorocyclohexane	
319-85-7	(1alpha,2beta,3alpha,4beta,5alpha,6beta)-1,2,3,4,5,6-hexachlorocyclohexane	
319-86-8	(1alpha,2alpha,3alpha,4beta,5alpha,6beta)-1,2,3,4,5,6-hexachlorocyclohexane	
58-89-9	gamma-HCH or gamma-BHC	
50-29-3	1,1,1-trichloro-2,2-bis(4-chlorophenyl)ethane	
· Proposition 65		
· Chemicals known to cause cancer:		
15972-60-8	alachlor (ISO)	
309-00-2	aldrin (ISO)	
319-84-6	(1alpha,2alpha,3beta,4alpha,5beta,6beta)-1,2,3,4,5,6-hexachlorocyclohexane	
319-85-7	(1alpha,2beta,3alpha,4beta,5alpha,6beta)-1,2,3,4,5,6-hexachlorocyclohexane	
319-86-8	(1alpha,2alpha,3alpha,4beta,5alpha,6beta)-1,2,3,4,5,6-hexachlorocyclohexane	
60-57-1	dieldrin (ISO)	
58-89-9	gamma-HCH or gamma-BHC	
72-54-8	TDE	
72-55-9	2,2-bis(p-chlorophenyl)-1,1-dichloroethylene	
50-29-3	1,1,1-trichloro-2,2-bis(4-chlorophenyl)ethane	
· Chemicals known to cause reproductive toxicity for females:		
50-29-3	1,1,1-trichloro-2,2-bis(4-chlorophenyl)ethane	
· Chemicals known to cause reproductive toxicity for males:		
72-55-9	2,2-bis(p-chlorophenyl)-1,1-dichloroethylene	
50-29-3	1,1,1-trichloro-2,2-bis(4-chlorophenyl)ethane	
· Chemicals known to cause developmental toxicity:		
72-20-8	endrin (ISO)	
72-55-9	2,2-bis(p-chlorophenyl)-1,1-dichloroethylene	
50-29-3	1,1,1-trichloro-2,2-bis(4-chlorophenyl)ethane	
· Carcinogenic categories		
· EPA (Environmental Protection Agency)		
67-64-1	acetone	I
309-00-2	aldrin (ISO)	B2
319-84-6	(1alpha,2alpha,3beta,4alpha,5beta,6beta)-1,2,3,4,5,6-hexachlorocyclohexane	B2
319-85-7	(1alpha,2beta,3alpha,4beta,5alpha,6beta)-1,2,3,4,5,6-hexachlorocyclohexane	C
319-86-8	(1alpha,2alpha,3alpha,4beta,5alpha,6beta)-1,2,3,4,5,6-hexachlorocyclohexane	D
60-57-1	dieldrin (ISO)	B2
72-20-8	endrin (ISO)	D
72-54-8	TDE	B2
72-55-9	2,2-bis(p-chlorophenyl)-1,1-dichloroethylene	B2
50-29-3	1,1,1-trichloro-2,2-bis(4-chlorophenyl)ethane	B2
· TLV (Threshold Limit Value established by ACGIH)		
67-64-1	acetone	A4
15972-60-8	alachlor (ISO)	A3
309-00-2	aldrin (ISO)	A3
60-57-1	dieldrin (ISO)	(A4)
72-20-8	endrin (ISO)	A4
58-89-9	gamma-HCH or gamma-BHC	A3
50-29-3	1,1,1-trichloro-2,2-bis(4-chlorophenyl)ethane	A3
· NIOSH-Ca (National Institute for Occupational Safety and Health)		
309-00-2	aldrin (ISO)	
60-57-1	dieldrin (ISO)	
50-29-3	1,1,1-trichloro-2,2-bis(4-chlorophenyl)ethane	

· GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).

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· Hazard pictograms



GHS02

GHS07

GHS08

· Signal word Danger

· Hazard-determining components of labeling:

acetone

dieldrin (ISO)

Endosulfan sulfate

(1 α ,2 β ,3 α ,4 β ,5 α ,6 β)-1,2,3,4,5,6-hexachlorocyclohexane

· Hazard statements

Highly flammable liquid and vapor.

Harmful if swallowed.

Causes serious eye irritation.

May cause an allergic skin reaction.

May cause cancer.

May cause harm to breast-fed children.

May cause drowsiness or dizziness.

· Precautionary statements

Avoid contact during pregnancy/while nursing.

Keep away from heat/sparks/open flames/hot surfaces. No smoking.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Store locked up.

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

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Department issuing SDS: product safety department

· Contact:

SPEX CertiPrep, LLC.

1-732-549-7144

· Date of preparation / last revision 02/16/2016 / -

· Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

BEI: Biological Exposure Limit

Flam. Liq. 2: Flammable liquids, Hazard Category 2

Acute Tox. 4: Acute toxicity, Hazard Category 4

Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A

Skin Sens. 1: Sensitisation - Skin, Hazard Category 1

Carc. 1B: Carcinogenicity, Hazard Category 1B

Lact.: Reproductive toxicity, Additional category, Effects on or via lactation

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3