

SECTION 1: Identification of the substance or mixture and the company or undertaking

1.1 Product identifier

Product type : Mixture

Trade name : HC-BVS100

Label name : HC-BVS100

Chemical name : Soybean oil acids methyl ester

CAS number : 67784-80-9 or 68919-53-9 or 67762-38-3

EC number : 200-313-4

1.2 Recommended and restricted uses of the substance or mixture

Recommended uses : R&D, analytical standard, reference material with COA.

Restricted uses : None known.

1.3 Company identification

Company name : Helix Research Solutions, Inc..

Company address :15 E. Palatine Rd., Suite 118

: Prospect Heights, IL 60070

Company telephone : (847) 777-1335

1.4 Emergency telephone number

Company emergency telephone :847-777-1335 CHEMTREC telephone :800-424-9300

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (29CFR1910.1200 : None.

Appendix A)

GHS physical hazard : None.
GHS health hazard : None.
GHS environmental hazard : None.

2.2 Label warnings of the substance or mixture

Signal word : None.
Hazard statements : None.
Precautionary statements : None.

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Hazard symbol (pictogram) : None.



2.3 Hazards not otherwise classified

Other hazards : No additional information available.

SECTION 3: Composition/information on ingredients

3.1 Substances

| Chemical name | Common name | Percent | CAS number | Health hazard |
|-----------------|-------------|---------|------------|---------------|
| Not applicable. | | | | |

3.2 Mixtures

| Chemical name | Common name | Typical % | CAS number | Health hazard |
|--------------------------|----------------|-----------|------------|---------------|
| Soybean oil acids methyl | Methyl soyate | 98% | 67784-80-9 | None |
| ester | Welliyi Soyale | 90 70 | 07704-00-9 | None |

SECTION 4: First-aid measures

4.1 Description of first-aid measures

| Exposure route | First-aid measure |
|----------------|-----------------------|
| EXPOSUIE IOULE | FII St-aiu III easure |

Inhalation : Remove the victim into fresh air. Observe victim's breathing. If

breathing is labored seek immediate medical attention.

Skin contact : Wash with soap and water. If irritation develops, seek medical

attention. Launder contaminated clothing.

Eye contact : Rinse immediately with plenty of water for 15 minutes. Remove

contact lenses if present and easy to do. If irritation occurs, seek

immediate medical (ophthalmologist) attention.

Ingestion : Rinse mouth with plenty of water. For ingestion of large quantities

seek immediate medical attention. Do not induce vomiting. Contact

poison control center.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms after inhalation : Mild irritation of the nose and throat may occur.

Symptoms after skin contact : Mild irritation of the skin may occur.

Symptoms after eye contact : Mild irritation of the eye tissue may occur.

Symptoms after ingestion : No known significant effects.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment after inhalation : If breathing is labored seek immediate medical attention.

Treatment after skin contact : If skin irritation occurs seek immediate medical attention.

Treatment after eye contact : If eye irritation occurs seek immediate ophthalmologist attention.

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SECTION 5: Firefighting measures

5.1 Extinguishing media

Precautions

Suitable media : Carbon dioxide, alcohol resistant foam and water spray.

Unsuitable media : None known.

5.2 Specific hazards arising from the substance or mixture

Direct fire hazard : Not flammable.

Indirect fire hazard : Exposure to temperature above the flash point (130°C). Explosive hazard : Exposure to temperature above the flash point (130°C).

Reactivity : Reactivity with strong oxidizers.

Combustion products : Carbon dioxide and carbon monoxide.

5.3 Special protective equipment and precautions for fire-fighters

Protective equipment : Full protective clothing.

: Self contained breathing apparatus. : No additional information available.

Emergency response guide : Not a hazardous material.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Mixture is not hazardous. If mixture is a hot mist or dust, stay

upwind.

Protective equipment : Wear rubber gloves, rubber boots, face shield and chemical hazard

suit. If material is a hot mist or dust wear dust mask or self contained

breathing apparatus.

Emergency procedures : Mark the spill area with hazard tape or cones. Contain the hot liquid

spill area with suitable absorbent. Keep away from streams, rivers

and lakes. If mixture is a hot mist or dust, alert immediate

neighborhood to close windows and doors. Contain and dissipate hot

mist or dust via spraying with water.

6.2 Environmental precautions

Precautions : Keep out of streams, rivers and lakes. Mixture is regulated as oil

under the Clean Water Act. Abide by all laws per this regulation.

6.3 Methods and materials for containment and cleanup

Methods : Use chemical absorbent pigs or manually spread absorbent onto hot

liquid spill area. After the mixture is absorbed, dispose in approved

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waste facility. Materials

: Approved materials include dry earth, sand, clay, chemical

absorbent, vermiculite and carbon.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Handling temperature : About 10 - 20°C.

: Rubber hoses or stainless steel (grade 304) lines. Stainless steel Handling equipment

(grade 304) for pumps.

7.2 Conditions for safe storage, including any incompatibilities

Storage area : Store in dry area. Store at room temperature. Store in dyke area to

contain any spills. Protect from heat.

: Polyethylene, stainless steel (grade 304) and rubber lined or epoxy Packaging materials

lined tanks or drums. Graphite or rubber gaskets.

: Kraft or polyethylene bags for flake, bead or powder form.

Incompatibilities : Strong oxidizers.

SECTION 8: Exposure controls/personal protection

8.1 Exposure controls

OSHA PEL : None. **ACGIH TLV** : None. **NIOSH REL** : None.

8.2 Appropriate engineering controls

Engineering controls : If dust exists, install ventilation equipped with carbon canisters.

Ventilation should be 10 air exchanges per hour. Local exhaust

ventilation is recommended.

: Rubber gloves and safety glasses.

8.3 Personal protection equipment

Personal protective equipment

Personal protective equipment

pictograms



SECTION 9: Physical and chemical properties

9.1 Physical and chemical properties

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Appearance : Light yellow.

Odor : Mild.

Odor threshold : No data available.

PH : No data available.

Melting point : No data available.

Boiling point : 200°C.

Flash point : 130°C Closed Cup.
Evaporation rate :>1 (butyl acetate = 1)
Flammability : No data available.
Lower flammability limit : No data available.
Upper flammability limit : No data available.

Vapor pressure :1.0 mm Hg at 180°C (this mixture).

: 4.3x10-8 mm Hg at 25°C (stearic acid). : 3.8x10-7 mm Hg at 25°C (palmitic acid). : 1.4x10-6 mm Hg at 25°C (myristic acid).

Vapor density : No data available.

Relative density : 0.88

Solubility : Complete in ethanol and acetone.

: Insoluble in water. : No data available.

Partition coefficient for

n-octanol/water

Auto-ignition temperature : No data available.
Decomposition temperature : No data available.
Viscosity : No data available.

9.2 Other information

Other information : No additional information available.

SECTION 10: Stability and reactivity

Reactivity : May react violently with oxidizers.
Chemical stability : Stable under storage conditions.

Possibility of hazardous : Hazardous polymerization does not occur.

reactions

Conditions to avoid : None.

Incompatible materials : Oxidizers and strong bases.

Hazardous decomposition : Carbon dioxide and carbon monoxide.

products

SECTION 11: Toxicological information

11.1 Information on the likely routes of exposure

Inhalation exposure : From hot mist.
Skin exposure : From hot mist.

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Ingestion exposure : Not a likely route of exposure.

Eye contact : From hot mist.

11.2 Symptoms related to the physical, chemical and toxicological characteristics

Inhalation : Labored breathing and mild irritation of the lungs may occur.

Skin contact : Mild skin irritation may occur.

Ingestion : Mild irritation of the mouth, tongue, esophagus and stomach may

occur.

Eye contact : Mild eye irritation may occur.

11.3 Delayed and immediate effects and also chronic effects from short and long term exposure

Inhalation: Chronic effects are not known.Skin contact: Chronic effects are not known.Ingestion: Chronic effects are not known.Eye contact: Chronic effects are not known.

11.4 Numerical measures of toxicity

Oral LD50 : Rat 17400 mg/kg.
Skin LD50 : No data available.
Ingestion LD50 : No data available.
Inhalation LD50 : No data available.
Skin primary irritation : No data available.
Eye primary irritation : No data available.

11.5 Carcinogenicity

National Toxicology Program : Not listed. International Agency for : Not listed.

Research on Cancer

OSHA : Not listed. NIOSH : Not listed.

11.6 Other toxicological information

Reproductive toxicity : No data available.
Germ cell mutagenicity : No data available.
Respiratory or skin sensitization : No data available.
Specific target organ toxicity, : No data available.

single exposure

Specific target organ toxicity, : No data available.

repeated exposure

Aspiration hazard : No data available.

SECTION 12: Ecological information

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12.1.1 Ecotoxicity aquatic

Fish LC50 : No data available.

Daphnia EC50 : No data available.

Rotifer EC50 : No data available.

Algae EC50 : No data available.

Solution: No data available.

12.1.2 Ecotoxicity terrestrial

Ecotoxicity terrestrial : No data available.

12.2 Persistence and degradability

Water : No data available.
Soil : No data available.
Air : No data available.

12.3 Bio-accumulative potential

Log Kow : No data available.

12.4 Mobility in soil

Surface tension : No data available.
Soil mobility : No data available.

12.5 Results of PBT and vPvB assessment

PBT and vPvB assessment : No data available.

12.6 Other adverse effects

Air : Not dangerous to the ozone layer. Water : Mild pollutant to surface of water.

SECTION 13: Disposal considerations

13.1 Description of waste residues

Storage tank residues : Hot liquid residue from tank cleaning.

Empty package residues : Liquid residue remaining in emptied container.

Transport trailer residues : Hot liquid residue from transport trailer cleaning.

Absorbent material : Solid absorbent containing mixture from a spill.

13.2 Safe handling of waste residues

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Storage tank residues
Empty package residues
Transport trailer residues
Absorbent material

: Refer to section 7 for safe handling.: Refer to section 7 for safe handling.: Refer to section 7 for safe handling.: Refer to section 7 for safe handling.

13.3 Methods of disposal

Storage tank residues : Dispose via an approved incineration facility.

: Dispose via an approved land fill facility.

: Dispose only in accordance with local, state and federal regulations.

Empty package residues : Remove package to an approved package cleaning and recycling

facility.

: Dispose only in accordance with local, state and federal regulations.

Transport trailer residues : Clean transport trailer at an approved cleaning facility.

: Disposal of cleaning residues must be in accordance with local, state

and federal regulations.

Absorbent material : Dispose via an approved incineration facility.

: Dispose via an approved land fill facility.

: Dispose only in accordance with local, state and federal regulations.

13.4 Hazardous waste classification (RCRA)

| Classification | Regulation | Listed | Hazardous waste number |
|----------------|-------------|--------|------------------------|
| Ignitability | 40CFR261.21 | No | |
| Corrosivity | 40CFR261.22 | No | |
| Reactivity | 40CFR261.23 | No | |
| Toxicity | 40CFR261.24 | No | |

SECTION 14: Transport information

14.1 UN number

UN number : None.

14.2 UN proper shipping name

Proper shipping name : None.

14.3 Transport hazard class

Hazard class : None. Hazard label : None. Hazard pictogram : None.

14.4 Packing group

Packing group : None.

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14.5 Environmental hazards

Marine pollutant : Not listed.

14.6 Transport in bulk

US DOT : Not regulated.

IMDG : Not regulated.

IATA : Not regulated.

MARPOL 73/78 : Not regulated.

IBC code : Not regulated.

14.7 Special precautions for user

Special precautions : No additional information available.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the substance or mixture

15.1.1 US regulations

 SARA 302 (40CFR355)
 : Not listed.

 SARA 311/312 (40CFR370.66)
 : Not listed.

 SARA 313 (40CFR372.65)
 : Not listed.

 CERCLA (40CFR302.4)
 : Not listed.

 California proposition 65
 : Not listed.

German WGK class : 0 (no hazard to waters).

15.1.2 Chemical inventories

TSCA USA : Listed. AICS Australia : Listed. **DSL** Canada : Listed. **EC** Europe : Listed. **ECL Korea** : Listed. IECSC China : Listed. **ENCS Japan** : Listed. NzloC New Zealand : Listed. **PICCS** Philippines : Listed. SWISS Switzerland : Listed.

15.2 Chemical safety assessment

Safety assessment : No additional information available.

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SECTION 16: Other information

| 16.1 | Hazard | ratings |
|------|--------|---------|
|------|--------|---------|

| | Health | Flammability | Physical hazards | Instability |
|------------|--------|--------------|------------------|-------------|
| HMIS (USA) | 1 | 1 | 0 | |
| NFPA (USA) | 1 | 1 | | 0 |

16.2 Safety Data Sheet information

Introduction date (MM/DD/YY) : 01/06/2019

16.3 Notice to reader

The information presented herein is believed to be factual as it has been derived from the works and opinions of persons believed to be qualified experts; however, nothing contained in this information is to be taken as a warranty or representation for which Helix Chromatography bears responsibility. The user should review any recommendations in the specific context of the intended use to determine whether they are appropriate.

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