

## MATERIAL SAFETY DATASHEET (MSDS)

# SOLANYL<sup>®</sup> C2002

In accordance with NEN-ISO 11014 and  
Annex II of Reach Regulation 1907/2006

### GENERAL

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## 1 IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND IDENTIFICATION OF THE COMPANY

### 1.1 IDENTIFICATION OF THE SUBSTANCE / PREPARATION

**Product name:**

Solanyl<sup>®</sup> C2002

**Description:**

Compound comprising thermoplastic flour and/or vinyl, lactic acid, adipic, terephthalic acid ester homo- and/or copolymers.

**HS code:**

39139000

### 1.2 USE OF THE SUBSTANCE PREPARATION

Solanyl<sup>®</sup> C2002 is a readymade (extruded) granulate and is meant to be used by converters to make bioplastic products from.

See product specification.

Not suitable for human consumption.

### 1.3 COMPANY / UNDERTAKING IDENTIFICATION

**Supplier:**

Rodenburg Biopolymers

Denariusstraat 19

4903 RC Oosterhout, The Netherlands

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E-mail : [info@biopolymers.nl](mailto:info@biopolymers.nl)

### 1.4 EMERGENCY TELEPHONE

+31 (0)6 53 26 97 96 (24 H / 7 D)

## 2 COMPOSITION / INFORMATION ON INGREDIENTS

### 2.1 COMPOSITION

Compound comprising thermoplastic flour and/or vinyl, succinic acid, lactic acid, adipic, phthalic acid ester homo- and/or copolymers.

### 2.2 INGREDIENTS

This material does not contain any known hazardous substances at or above reportable levels.

## 3 HAZARDS IDENTIFICATION

### 3.1 CLASSIFICATION OF PREPARATION

This product is not a dangerous product within the meaning of Directive 1999/45/EC.

### 3.2 PHYSICAL-CHEMICAL HAZARDS

Explosion

### 3.3 HUMAN HEALTH HAZARDS

**Inhalation:**

Inhalation of dust may cause shortness of breath, tightness of the chest, a sore throat and cough. Low hazard for usual industrial or commercial handling.

**Skin contact:**

Skin contact may cause slight irritation. There were no target organ effects noted following dermal exposure in animal studies.

**Carcinogenic:**

Significant effects or critical hazards are unknown.

**Reproductive toxic:**

Significant effects or critical hazards are unknown.

**Mutagenic:**

Significant effects or critical hazards are unknown.

**Eye contact:**

Direct contact with eyes may cause slight irritation. No acute toxic effects are expected.

**Ingestion:**

No significant adverse effects are expected in industrial use or upon ingestion of small amounts of this product. Large amounts though may cause gastrointestinal irritation, nausea, vomiting and diarrhea. There were no target organ effects noted following ingestion or dermal exposure in animal studies.

### 3.4 ENVIRONMENTAL HAZARDS

This product is not harmful for the environment (based on available product knowledge).

## 4 FIRST AID MEASURES

**Ingestion:**

Rinse mouth and throat thoroughly with water. Should symptoms occur, seek medical advice.

**Eye contact:**

Flush with water for 15 minutes, while holding the eyelids wide open. Seek medical attention if irritation develops.

**Skin contact:**

Immediately take off all contaminated clothing. Cool skin rapidly with cold water after contact with hot plastic and seek medical attention. **Do not attempt to peel off the plastic.** Do not use solvents to remove product residues from skin. If irritation persists, seek medical attention.

**Inhalation:**

Remove person from exposure to non-contaminated air. If symptoms of irritation occur (shortness of breath, wheezing of labored coughing), seek medical advice.

**General:**

Protection of first aider → wear relevant personal protection, as mentioned in chapter 8. Remove person from exposure to non-contaminated air. Take off contaminated clothing and shoes.

**First aid facilities:**

Eye wash fountain and emergency showers are recommended.

**5 FIRE-FIGHTING MEASURES**

**5.1 RISKS**

**Explosion:**

Auto ignition temperature → above 446F (230° C)

**Flammability limits in air - lower (%):**

Not applicable

**Flammability limits in air (upper (%):**

Not applicable

**5.2 PREVENTATIVE MEASURES**

**Fire, hazardous decomposition products:**

Burning produces obnoxious and toxic fumes Aldehydes Carbon monoxide (CO) carbon dioxide (CO<sub>2</sub>).

**Special protective equipment for fire fighters:**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**Under fire conditions:**

Cool containers/tanks with spray water. Water mist may be used to cool closed containers.

**Other information:**

Fine dust in air may ignite. Avoid dust formation. Risks of ignition followed by flame propagation or secondary explosions shall be prevented by avoiding accumulation of dust, e.g. on floors and ledges.

**5.3 EXTINGUISHING MEDIA**

**Fire water:**

Carbon dioxide, chemical powder (SCBA equipment).

**6 ACCIDENTAL RELEASE MEASURES**

**6.1 PERSONAL PRECAUTIONS**

Wear relevant personal protection, as mentioned in chapter 8.

**6.2 ENVIRONMENTAL PRECAUTIONS**

No special measures required.

**6.3 CLEANING MEASURES**

Spilled preparation should be removed immediately. Take up by mechanical means preferably by a vacuum cleaner equipped with a high efficiency filter. Flush remainder carefully to drain using copious amounts of water. Avoid splashing and high-pressure washing (avoid formation of aerosols). Ensure sufficient ventilation. Wash contaminated clothing. Dispose of the cleaner bag according to chapter 13. If cleaner has no bag, dispose of contents using full protection, see chapter 8 and according to chapter 13.

**7 HANDLING AND STORAGE**

**7.1 HANDLING**

Avoid splashing and high-pressure washing. Ensure good ventilation of the room when handling this preparation.

**7.2 STORAGE**

Store in a cool and dry place in closed/sealed packaging.

**8 EXPOSURE CONTROLS / PERSONAL PROTECTION**

**8.1 EXPOSURE LIMIT VALUES**

Not applicable.

**8.2 EXPOSURE CONTROLS**

**Personal protective equipment:**



**Engineering controls:**

Not applicable.

**Respiratory protection:**

Not applicable.

**Hand/skin protection:**

Wear appropriate protecting clothing. Wear impermeable gloves, such as latex gloves. Recommended material → 8 hours breakthrough Nitril rubber, butyl rubber, neoprene, Viton, PVC. Replace damaged gloves.

**Eye protection:**

Protecting glasses, eye shield or full face mask.

**Other protection:**

Not applicable.

**Hygienic measures:**

Do not eat, drink or smoke during handling. Wash hands after using this product and before eating, drinking, smoking, using the toilet and at the end of the day.

**9 PHYSICAL AND CHEMICAL PROPERTIES**

**9.1 GENERAL INFORMATION**

Appearance : granulate  
 Odour : neutral  
 Colour : off white  
 Solubility : insoluble in water  
 Solubility in other solvents : none known

## 9.2 IMPORTANT HEALTH, SAFETY AND ENVIRONMENTAL INFORMATION

See product specification.

## 10 STABILITY AND REACTIVITY

### General:

If stored and handled in accordance with standard industrial practices this material is stable under normal conditions of use and no hazardous reactions are known.

### Conditions to avoid:

Temperatures above 446F (230°C).

Hazardous decomposition products → burning produces obnoxious and toxic fumes Aldehydes Carbon monoxide (CO) carbon dioxide (CO<sub>2</sub>).

### Materials to avoid:

Oxidizing agents, strong bases, polymerisation → not applicable.

## 11 TOXICOLOGICAL INFORMATION

### General information:

Acute oral toxicity, LD50 oral rats → 5.000 mg/kg

### Inhalation:

Not applicable

### Ingestion:

No significant adverse effects are expected upon ingestion of small amounts of this product.

### Skin contact:

Skin contact may cause an irritation.

### Eye contact:

Direct contact with eyes may cause irritation.

## 12 ECOLOGICAL INFORMATION

### General information:

Prevent material from entering surface waters. No environmental problems expected, if handled and treated in accordance with standard industrial practices and local regulations, where applicable.

### Ecotoxicity:

This product is not expected to produce significant ecotoxicity upon exposure to aquatic organisms and aquatic systems.

### Mobility:

The product is not solvable in water, but binding and it is easily separable from water by filtration.

### Possible bioaccumulation:

The product does not contain substances of which can be assumed that they are bio-accumulative.

## 13 DISPOSAL CONSIDERATIONS

No special disposal method required, except that in accordance with current local authority regulations. In case of spillage, carefully collect and dissolve in water before disposal. See chapter 6.

## 14 TRANSPORT INFORMATION

### International/EU transportations regulations:

Not classified as hazardous material under IMDG, ICAO/IATA, ADR/RID

## 15 REGULATORY INFORMATION

### 15.1 EC WARNING LABEL

This product is not a dangerous product within the meaning of Directive 1999/45/EC. The preparation does not contain ingredients listed as dangerous substances in Annex I of EEC Directive 67/548.

### 15.2 NATIONAL REGULATIONS

*National and local regulations must be observed:*

- TSCA, USA
- EINECS, Europe
- DSL, Canada
- AICS, Australia

## 16 STABILITY AND REACTIVITY

### Data based on:

MSDS in accordance with REACH-Regulation 1907/2006 Annex II.

## 17 MORE INFORMATION / PRODUCT SPECIFICATIONS

*For more information and product specifications, please contact:*

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Rodenburg Biopolymers is a trade name of RB Biobased Institute B.V.

## DISCLAIMER

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