

**1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING**

*Product Name:* DCL-Biosolv  
*Application:* In-situ bioremediation of contaminated soil and groundwater  
*Supplier:* Telluric Land Remediation Ltd  
*Address:* Unit K1  
South Point Industrial Estate  
Foreshore Road  
Cardiff  
CF10 4SP  
*Telephone:* 029 20453311  
*e-mail:* enquiries@telluric.uk.com  
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**2 COMPOSITION / INFORMATION ON INGREDIENTS**

Ingredient	CAS No.	%
Plant derived oil	8001-22-7	48
Hexose	8029-43-4	9
Glycoprotein	84082-51-9	1
Acetate	64-19-7	1
Stabilisers (proprietary)	-	3
Water	-	38

**3 HAZARDS IDENTIFICATION**

Non-hazardous preparation according to Regulation (EC) No. 1272/2008.

The product comprises food grade ingredients and is considered safe and non-toxic.

**4 FIRST AID MEASURES**

**If inhaled:** If breathed in, move person into fresh air. If not breathing, give artificial respiration.

**In case of skin contact:** Wash off with soap and water.

**In case of eye contact:** Flush eyes thoroughly with water for 15 mins. If symptoms persist, seek medical attention.

**Ingestion:** Do not give anything by mouth to an unconscious person. Rinse mouth with water.

## 5 FIRE-FIGHTING MEASURES

### 5.1 Extinguishing media

Product does not support combustion under normal conditions. Use alcohol-resistant foam, dry chemical or carbon dioxide. Do not use water as this may cause splattering or spreading.

### 5.2 Special hazards arising from substance or mixture

This product is unlikely to support combustion. Nature of decomposition products are unknown.

### 5.3 Advice for fire fighters

Wear self contained breathing apparatus for fire fighting if necessary

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## 6 ACCIDENTAL RELEASE MEASURES

### 6.1 Personnel precautions, protective equipment and emergency procedures

Avoid breathing vapours, mist or gas. Wear protective clothing as described in Section 8.

### 6.2 Environmental Precautions

Product is water dispersible, however should be treated as vegetable oil – isolate spill, do not allow to enter drains, sewers or waterways.

### 6.3 Methods and materials for containment and cleaning up

Keep in suitable closed containers. Spillages should be contained, and can be removed using proprietary general purpose spill kits.

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## 7 HANDLING AND STORAGE

### 7.1 Precautions for safe handling

There are no specific hazards associated with handling the product, however measures should be taken to avoid accidental spillage and repeated contact with skin, or splashes to the eyes. General measures to prevent fire should also be taken.

### 7.2 Conditions for safe storage

Store in a cool, dry and well ventilated place. Containers should be kept tightly closed, and resealed after opening.

### 7.3 Specific end uses

The product is used for remediation of contaminated land and is injected, or gravity fed, into the ground. For high pressure injection, all hoses, joints, and equipment must be sound, fit for use and operated by competent personnel to prevent accidental release during application.

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## 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

### 8.1 Exposure limit values

Contains no substances with occupational exposure limit values.

### 8.2 Occupational exposure controls

#### 8.2.1 Engineering controls

No specific engineering controls required.

#### 8.2.2 Personnel protective equipment

##### Eye Protection

Where splashing is likely, use eye protection which conforms to EN 166.

**Skin Protection**

Avoid skin contact. Wear protective gloves which confirm to BS EN 374:2003. Dispose of contaminated gloves in accordance to current legislation and good practice.

**Body Protection**

Impervious clothing should be worn at all times. Selection of impervious clothing will depend on application method and environmental conditions, but should provide protection to low-hazard chemical spray (conforming to EN 14605 & EN 13034).

**Respiratory Protection**

Respiratory protection is unlikely to be required; however should the production of mist be likely, use FFP1 respirator.

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**9 PHYSICAL AND CHEMICAL PROPERTIES****9.1 General information**

Appearance: White coloured, liquid  
Odour: Vegetable oil odour

**9.2 Important health, safety and environment information**

- a) pH: the concentrated product has a pH of 3 - 4. A neutralising / buffering agent agent (sodium bicarbonate) is added to the diluted product prior to use, giving a final pH of 7.
  - b) Boiling point: >100 °C
  - c) Flash point: Not available
  - d) Flammability: Does not support combustion under normal conditions
  - e) Explosive properties: Not available
  - f) Oxidising properties: Not available
  - g) Vapour pressure: Not available
  - h) Relative density: Approximately 1.0 g/cm<sup>3</sup>
  - i) Solubility:
    - i. water solubility Miscible with water
    - ii. fat solubility Not available
  - j) Partition coefficient Not available
  - k) Viscosity: 600mPas
  - l) Vapour density Not available
  - m) Evaporation rate Not available
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**10 STABILITY AND REACTIVITY****10.1 Reactivity**

The product comprises food grade ingredients and is considered safe and stable.

**10.2 Chemical stability**

Not available

**10.3 Possibility of hazardous reactions**

Not available

**10.4 Conditions to avoid**

None identified

**10.5 Incompatible materials**

Strong oxidising agents

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## 11 TOXICOLOGICAL INFORMATION

### 11.1 Acute toxicity

The product comprises food grade ingredients and is considered safe and non-toxic, however, no data is available for acute toxicity.

### 11.2 Skin corrosion/irritation

Not available

### 11.3 Serious eye damage / eye irritation

Not available

### 11.4 Respiratory or skin sensitisation

Not available

### 11.5 Germ cell mutagenicity

Not available

### 11.6 Carcinogenicity

No components of the product are known human carcinogens.

### 11.7 Reproductive toxicity

Not available

### 11.8 Specific target organ toxicity

Not available

### 11.9 Potential health effects

<b>Inhalation</b>	May cause respiratory tract irritation
<b>Ingestion</b>	May be harmful if swallowed
<b>Skin</b>	May be harmful if absorbed through skin. May cause skin irritation.
<b>Eyes</b>	May cause eye irritation

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## 12 ECOLOGICAL INFORMATION

### 12.1 Toxicity

No data available

### 12.2 Persistence and degradability

The product formulation is non-persistent and fully biodegradable.

### 12.3 Bioaccumulation potential

There is no significant potential for bioaccumulation.

### 12.4 Other adverse effects

Spillages to water courses, rivers, streams and lakes may result in high Biochemical Oxygen Demand resulting in adverse effects on aquatic organisms.

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## 13 DISPOSAL CONSIDERATIONS

### Product

The product comprises food grade ingredients and disposal should be undertaken via a waste management company licensed to accept this type of material.

### Contaminated packaging

Dispose of as unused product

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## **14 TRANSPORT INFORMATION**

The product is considered to be safe and non-toxic. No specific transport requirements are required except to provide precautions for the avoidance of spillages to watercourses.

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## **15 REGULATORY INFORMATION**

No data available.

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## **16 OTHER INFORMATION**

The information provided in this document is believed to be correct but should be used as a guide only. It provides information on appropriate safety precautions with regard to the product but it does not represent a guarantee of the properties of the product.