



# PE Red Clover

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations  
Issue date: 3/7/2025

### SECTION 1: Identification

#### 1.1. Identification

Product form : Mixture  
Product name : PE Red Clover  
Product code : 4544

#### 1.2. Recommended use and restrictions on use

No additional information available

#### 1.3. Supplier

Bio-Botanica, Inc.  
75 Commerce Drive  
Hauppauge, NY, 11788  
US  
T (631) 231-5522 - F (631) 231 - 7332  
[sds@bio-botanica.com](mailto:sds@bio-botanica.com) - [www.bio-botanica.com](http://www.bio-botanica.com)

#### 1.4. Emergency telephone number

Emergency number : +1-800-424-9300 / +1 703-527-3887

### SECTION 2: Hazard(s) identification

#### 2.1. Classification of the substance or mixture

##### GHS US classification

Not classified

#### 2.2. GHS Label elements, including precautionary statements

##### GHS US labelling

No labelling applicable

#### 2.3. Other hazards which do not result in classification

No additional information available

#### 2.4. Unknown acute toxicity (GHS US)

No additional information available

### SECTION 3: Composition/information on ingredients

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

| Name                    | Product identifier  | %       | GHS US classification |
|-------------------------|---------------------|---------|-----------------------|
| Di-Calcium Phosphate    | CAS-No.: 7757-93-9  | 55 – 65 | Not classified        |
| Red Clover Tops Extract | CAS-No.: 85085-25-2 | 35 – 45 | Not classified        |

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Full text of hazard classes and H-statements : see section 16

### SECTION 4: First-aid measures

#### 4.1. Description of first aid measures

|                                       |                                                                  |
|---------------------------------------|------------------------------------------------------------------|
| First-aid measures general            | : If you feel unwell, seek medical advice.                       |
| First-aid measures after inhalation   | : Remove person to fresh air and keep comfortable for breathing. |
| First-aid measures after skin contact | : Wash skin with plenty of water.                                |
| First-aid measures after eye contact  | : Rinse eyes with water as a precaution.                         |
| First-aid measures after ingestion    | : Call a poison center or a doctor if you feel unwell.           |

#### 4.2. Most important symptoms and effects (acute and delayed)

|                                     |                                                                                                                                                                                                                                                   |
|-------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Symptoms/effects after inhalation   | : Dust of the product, if present, may cause respiratory irritation after an excessive inhalation exposure. Although no appropriate human or animal health effects data are known to exist, this material is expected to be an inhalation hazard. |
| Symptoms/effects after skin contact | : None under normal conditions. Dust may cause irritation in skin folds or by contact in combination with tight clothing.                                                                                                                         |
| Symptoms/effects after eye contact  | : None under normal conditions. Dust from this product may cause eye irritation.                                                                                                                                                                  |
| Symptoms/effects after ingestion    | : None under normal conditions.                                                                                                                                                                                                                   |

#### 4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

### SECTION 5: Fire-fighting measures

#### 5.1. Suitable (and unsuitable) extinguishing media

|                                |                                    |
|--------------------------------|------------------------------------|
| Suitable extinguishing media   | : Water spray. Dry powder. Foam.   |
| Unsuitable extinguishing media | : Do not use a heavy water stream. |

#### 5.2. Specific hazards arising from the chemical

|                                                  |                                |
|--------------------------------------------------|--------------------------------|
| Fire hazard                                      | : No fire hazard.              |
| Explosion hazard                                 | : No direct explosion hazard.  |
| Hazardous decomposition products in case of fire | : Toxic fumes may be released. |

#### 5.3. Special protective equipment and precautions for fire-fighters

|                                |                                                                                                                                                       |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| Firefighting instructions      | : Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection. |
| Protection during firefighting | : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.              |

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

|                  |                                                                                                             |
|------------------|-------------------------------------------------------------------------------------------------------------|
| General measures | : Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material damage. |
|------------------|-------------------------------------------------------------------------------------------------------------|

##### 6.1.1. For non-emergency personnel

|                      |                                                   |
|----------------------|---------------------------------------------------|
| Protective equipment | : Wear recommended personal protective equipment. |
| Emergency procedures | : Ventilate spillage area.                        |

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### 6.1.2. For emergency responders

|                      |                                                                                                                                                             |
|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Protective equipment | : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection". |
| Emergency procedures | : Evacuate unnecessary personnel.                                                                                                                           |

### 6.2. Environmental precautions

Avoid release to the environment.

### 6.3. Methods and material for containment and cleaning up

|                         |                                                                                               |
|-------------------------|-----------------------------------------------------------------------------------------------|
| For containment         | : Using a clean shovel, put the material in a dry container and cover without compressing it. |
| Methods for cleaning up | : Mechanically recover the product.                                                           |
| Other information       | : Dispose of materials or solid residues at an authorized site.                               |

### 6.4. Reference to other sections

For further information refer to section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

|                                   |                                                                                                     |
|-----------------------------------|-----------------------------------------------------------------------------------------------------|
| Additional hazards when processed | : Not expected to present a significant hazard under anticipated conditions of normal use.          |
| Precautions for safe handling     | : Ensure good ventilation of the work station. Wear personal protective equipment.                  |
| Hygiene measures                  | : Do not eat, drink or smoke when using this product. Always wash hands after handling the product. |

### 7.2. Conditions for safe storage, including any incompatibilities

|                     |                                                                             |
|---------------------|-----------------------------------------------------------------------------|
| Technical measures  | : Keep in a cool, well-ventilated place away from heat.                     |
| Storage conditions  | : Keep cool. Protect from sunlight.                                         |
| Packaging materials | : Store always product in container of same material as original container. |

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

No additional information available

### 8.2. Appropriate engineering controls

|                                  |                                                |
|----------------------------------|------------------------------------------------|
| Appropriate engineering controls | : Ensure good ventilation of the work station. |
| Environmental exposure controls  | : Avoid release to the environment.            |

### 8.3. Individual protection measures/Personal protective equipment

#### Personal protective equipment:

Wear recommended personal protective equipment.

|                                   |
|-----------------------------------|
| <b>Hand protection:</b>           |
| Protective gloves                 |
| <b>Eye protection:</b>            |
| Safety glasses                    |
| <b>Skin and body protection:</b>  |
| Wear suitable protective clothing |

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### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

### Personal protective equipment symbol(s):



## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

|                                                 |                          |
|-------------------------------------------------|--------------------------|
| Physical state                                  | : Solid                  |
| Appearance                                      | : Free Flowing Powder.   |
| Colour                                          | : Light to medium brown  |
| Odour                                           | : Characteristic, herbal |
| Odour threshold                                 | : No data available      |
| pH                                              | : No data available      |
| Melting point                                   | : No data available      |
| Freezing point                                  | : Not applicable         |
| Boiling point                                   | : No data available      |
| Flash point                                     | : Not applicable         |
| Relative evaporation rate (butylacetate=1)      | : No data available      |
| Flammability (solid, gas)                       | : No data available      |
| Vapour pressure                                 | : No data available      |
| Relative vapour density at 20 °C                | : No data available      |
| Relative density                                | : No data available      |
| Solubility                                      | : No data available      |
| Partition coefficient n-octanol/water (Log Pow) | : No data available      |
| Auto-ignition temperature                       | : Not applicable         |
| Decomposition temperature                       | : No data available      |
| Viscosity, kinematic                            | : Not applicable         |
| Viscosity, dynamic                              | : No data available      |
| Explosive limits                                | : Not applicable         |
| Explosive properties                            | : No data available      |
| Oxidising properties                            | : No data available      |

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

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### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified  
Acute toxicity (dermal) : Not classified  
Acute toxicity (inhalation) : Not classified

#### Di-Calcium Phosphate (7757-93-9)

|                 |                                            |
|-----------------|--------------------------------------------|
| LD50 oral rat   | 10000 mg/kg (Rat, Literature study, Oral)  |
| LD50 dermal rat | 7940 mg/kg (Rat, Literature study, Dermal) |
| ATE US (oral)   | 10000 mg/kg bodyweight                     |
| ATE US (dermal) | 7940 mg/kg bodyweight                      |

Skin corrosion/irritation : Not classified

#### Di-Calcium Phosphate (7757-93-9)

|    |           |
|----|-----------|
| pH | 7.8 (1 %) |
|----|-----------|

Serious eye damage/irritation : Not classified

#### Di-Calcium Phosphate (7757-93-9)

|    |           |
|----|-----------|
| pH | 7.8 (1 %) |
|----|-----------|

Respiratory or skin sensitisation : Not classified  
Germ cell mutagenicity : Not classified  
Carcinogenicity : Not classified  
Reproductive toxicity : Not classified  
STOT-single exposure : Not classified  
STOT-repeated exposure : Not classified  
Aspiration hazard : Not classified  
Viscosity, kinematic : Not applicable  
Symptoms/effects after inhalation : Dust of the product, if present, may cause respiratory irritation after an excessive inhalation exposure. Although no appropriate human or animal health effects data are known to exist, this material is expected to be an inhalation hazard.  
Symptoms/effects after skin contact : None under normal conditions. Dust may cause irritation in skin folds or by contact in combination with tight clothing.  
Symptoms/effects after eye contact : None under normal conditions. Dust from this product may cause eye irritation.  
Symptoms/effects after ingestion : None under normal conditions.

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

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### 12.2. Persistence and degradability

#### PE Red Clover

|                               |                        |
|-------------------------------|------------------------|
| Persistence and degradability | Not rapidly degradable |
|-------------------------------|------------------------|

#### Di-Calcium Phosphate (7757-93-9)

|                               |                                   |
|-------------------------------|-----------------------------------|
| Persistence and degradability | Biodegradability: not applicable. |
| Chemical oxygen demand (COD)  | Not applicable                    |
| ThOD                          | Not applicable                    |
| BOD (% of ThOD)               | Not applicable                    |

#### Red Clover Tops Extract (85085-25-2)

|                               |                        |
|-------------------------------|------------------------|
| Persistence and degradability | Not rapidly degradable |
|-------------------------------|------------------------|

### 12.3. Bioaccumulative potential

#### Di-Calcium Phosphate (7757-93-9)

|                           |                      |
|---------------------------|----------------------|
| Bioaccumulative potential | Not bioaccumulative. |
|---------------------------|----------------------|

### 12.4. Mobility in soil

No additional information available

### 12.5. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Disposal methods

|                                            |                                                                                                                         |
|--------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| Regional legislation (waste)               | : Disposal must be done according to official regulations.                                                              |
| Waste treatment methods                    | : Dispose of contents/container in accordance with licensed collector's sorting instructions.                           |
| Sewage disposal recommendations            | : Disposal must be done according to official regulations.                                                              |
| Product/Packaging disposal recommendations | : Comply with applicable regulations for solid waste disposal. Disposal must be done according to official regulations. |
| Additional information                     | : Do not re-use empty containers.                                                                                       |

## SECTION 14: Transport information

In accordance with DOT / TDG / IMDG / IATA

### 14.1. UN number

|               |                  |
|---------------|------------------|
| UN-No.(DOT)   | : Not regulated  |
| UN-No. (TDG)  | : Not applicable |
| UN-No. (IMDG) | : Not applicable |
| UN-No. (IATA) | : Not applicable |

### 14.2. UN proper shipping name

|                             |                  |
|-----------------------------|------------------|
| Proper Shipping Name (DOT)  | : Not regulated  |
| Proper Shipping Name (TDG)  | : Not applicable |
| Proper Shipping Name (IMDG) | : Not applicable |
| Proper Shipping Name (IATA) | : Not applicable |

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### 14.3. Transport hazard class(es)

**DOT**  
Transport hazard class(es) (DOT) : Not regulated

**TDG**  
Transport hazard class(es) (TDG) : Not applicable

**IMDG**  
Transport hazard class(es) (IMDG) : Not applicable

**IATA**  
Transport hazard class(es) (IATA) : Not applicable

### 14.4. Packing group

Packing group (DOT) : Not regulated  
Packing group (TDG) : Not applicable  
Packing group (IMDG) : Not applicable  
Packing group (IATA) : Not applicable

### 14.5. Environmental hazards

Other information : No supplementary information available.

### 14.6. Special precautions for user

**DOT**  
Not regulated

**TDG**  
Not applicable

**IMDG**  
Not applicable

**IATA**  
Not applicable

### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

|                                                                                                                                                                                     |                    |          |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|----------|
| All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory except for: |                    |          |
| Red Clover Tops Extract                                                                                                                                                             | CAS-No. 85085-25-2 | 35 – 45% |

This product or mixture is not known to contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

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### 15.2. International regulations

#### CANADA

##### Di-Calcium Phosphate (7757-93-9)

Listed on the Canadian DSL (Domestic Substances List)

##### Red Clover Tops Extract (85085-25-2)

Listed on the Canadian DSL (Domestic Substances List)

#### EU-Regulations

No additional information available

#### National regulations

No additional information available

### 15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

## SECTION 16: Other information

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Safety Data Sheet (SDS), USA

Bio Botanica, Inc. cannot anticipate all conditions under this information and its product or in combination of products of other manufacturers. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product. Bio Botanica will not assume liability for loss, injury, damage, or expense due to improper use. The information stated in this document was written based on the best knowledge and experience currently available. The above data relates only to this product and not its use in combination with any other material or process. This document has been created as a guidance for safe handling, use, processing, storage, transportation, disposal, and should not be considered as a guarantee or quality specification. The above information is based on data provided by and collected from recognized sources such as distributors, manufacturers, and technical groups. To the best of Bio Botanica's knowledge this Safety Data Sheet is considered accurate as of the date of this document.

It is the responsibility of the user to review all safety information about this product and determine its safety and suitability in their own processes and operations. Appropriate warnings and safe handling procedures should be provided to all handlers and users, considering the intended use and the specific conditions and factors relating to such use in accordance with all applicable laws and regulations.