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# BACTOFORCE

# 1 SECTION. IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTALKING

# **1.1 Product identifiers.**

Product name: Bactoforce

## **1.2** Relevant identified uses of the substance or mixture and uses advised against:

| Use | Agriculture use. |
|-----|------------------|
|-----|------------------|

**Restrictions on use** See product label for restrictions.

# **1.3** Details of the supplier of the safety data sheet.

Supplier: Bioenergy LT Staniunu str. 83-1, Panevezys 36151, Lithuania +370 674 46174 (working hours: I–V 8:00 – 17:00 h.) info@bioenergy.lt

# **1.4** Emergency telephone number:

| 1.4.1 | Emergency Phone | +44 1235 239670 - Europe - Multi lingual response                     |
|-------|-----------------|---|
|       | Austria         | Poison Information Centre (AT): +43-(0)1-406 43 43                    |
|       | Belgium         | Poison Centre (BE): +32 70 245 245                                    |
|       | Croatia         | Poison Control (CR): +385 1 2348 342                                  |
|       | Czech Republic  | Poison Control (CS): +420 224 919 293, +420 224 915 402               |
|       | Denmark         | Poison Control Hotline (DK): +45 82 12 12 12                          |
|       | Estonia         | Poison Control (ET): 16662, (+372) 626 93 90                          |
|       | Finland         | Poison Information Centre (FI): +358 9 471 977                        |
|       | France          | ORFILA (FR): + 01 45 42 59 59   |
|       | Germany         | Poison Centre Berlin (DE): +49 030 30686 790 (24 h service, Advice in |
|       |                 | German and English)   |
|       | Greece          | Poison Information Center (EL): (0030) 2107793777                     |
|       | Hungary         | Poison Information Service (HU): (+ 36-80) 201-199                    |
|       | Iceland         | Poison Information Center: 543 2222                                   |
|       | Italy           | Poison Centre, Milan (IT): +39 02 6610 1029                           |
|       | Latvia          | Poison Information Center (LV): +371 67042473                         |
|       | Lithuania       | Poison Information Office (LT): +370 5236 20 52 or +370 687 53 378    |
|       | Luxembourg      | Belgian Poison Center: (+352) 8002-5500                               |
|       | Netherlands     | National Poisons Information Center (NVIC): 030-274 8888              |
|       | Norway          | Poison Center: 22 59 13 00  |
|       | Portugal        | Poison Information Centre (PT): +351 21 330 3284                      |
|       | Spain           | Poison Information Service (ES): +34 91 562 04 20                     |
|       | Sweden          | 112 – ask for Poisons Information                                     |
|       |                 |   |



# BACTOFORCE

# 2 SECTION. HAZARDS IDENTIFICATION

# 2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008

## 2.2 Label elements

Labeling (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008.

Hazardous components which must be listed on the label:

Bacillus mojavensis MVY-007 > 1.2 × 10<sup>12</sup> CFU/I.

Signal word: Warning

## **Precautionary statements**

| P280        | Wear protective gloves/protective clothing/eye protection/face protection. |
|-------------|--|
| P302 + P352 | IF ON SKIN: Wash with plenty of water/ soap.                               |
| P333 + P313 | If skin irritation or rash occurs: Get medical advice/ attention.          |
| P304 + P340 | IF INHALED: Remove person to fresh air and keep comfortable for            |
|             | breathing.   |
| P312        | Call a POISON CENTER/doctor/physician if you feel unwell.                  |
| P362 + P364 | Take off contaminated clothing and wash it before reuse.                   |
| P501        | Dispose of contents/container in accordance with local regulation.         |

#### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher. Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

## **3** SECTION. COM POSITION/INFORMATION ON INGREDIENTS

#### 3.1 Mixtures

**Mixture containing** 

Bacillus mojavensis MVY-007 >  $1.2 \times 10^{12}$  CFU/I.

| Chemical name               | CAS-No.    | Concentration [%]   |
|-----------------------------|------------|---------------------|
| Bacillus mojavensis MVY-007 | -          | >= 5.00 - <= 15.00  |
| Molasses                    | 68476-78-8 | >= 1.00 - <= 15.00  |
| Water                       | -          | >= 60.00 - <= 90.00 |

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# 4 SECTION. FIRST AID MEASURES

4.1 Description of first aid measures

| General advice                         | Move out of dangerous area. Place and transport victim in stable position  |  |
|--|--|--|
|  | (lying sideways). Remove contaminated clothing immediately and dispose of safely.  |  |
| Inhalation                             | Move to fresh air. Keep patient warm and at rest. Call a physician or poison control center immediately.                     |  |
| Skin contact                           | Wash off thoroughly with plenty of soap and water, if available with polyethylene glycol 400, subsequently rinse with water. |  |
| Eye contact                            | Rinse immediately with plenty of water, also under the eyelids, for at least   |  |
|  | 15 minutes. Remove contact lenses, if present, after the first 5 minutes,  |  |
|  | then continue rinsing eye. Get medical attention if irritation develops and persists.  |  |
| Ingestion                              | Rinse mouth. Do NOT induce vomiting. Call a physician or poison control  |  |
|  | center immediately.  |  |
|  | nd effects, both acute and delayed   |  |
| Symptoms                               | To date no symptoms are known.   |  |
| <b>4.3 Indication of any immediate</b> | .3 Indication of any immediate medical attention and special treatment needed  |  |
| Treatment                              | Treat symptomatically. In case of ingestion gastric lavage should be   |  |
|  | considered in cases of significant ingestions only within the first 2 hours.   |  |
|  | However, the application of activated charcoal and sodium sulphate is  |  |
|  | always advisable. There is no specific antidote.   |  |

# 5 SECTION. FIREFIGHTING MEASURES

| 5.1 | Extinguishing media           |  |
|-----|-------------------------------|--|
|     | Suitable                      | Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. |
|     | Unsuitable                    | High volume water jet.   |
| 5.2 | Special hazards arising       | Harmful vapours can be released at high temperatures.                    |
|     | from the substance or mixture | 2  |
| 5.3 | Advice for firefighters       |  |
|     | Special protective            | Do not inhale explosion gases or combustion gases. Use protective        |
|     | equipment for firefighters    | equipment suitable to the situation.                                     |
|     | Further information           | Contain the spread of the fire-fighting media. Contain runoff to prevent |
|     |                               | entry into water or drainage systems.                                    |

## 6 SECTION. ACCIDENTAL RELEASE MEASURES

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

| Precautions                   | Avoid contact with spilled product or contaminated surfaces. Ensure     |
|-------------------------------|---|
|                               | adequate ventilation. Use personal protective equipment.                |
| 6.2 Environmental precautions | Prevent entry into surface and ground water, sewage. Do not contaminate |
|                               | the surface or groundwater for the treatment of equipment, waste        |
|                               | management, as well as the water with which the equipment was washed.   |
|                               | Use the product as directed on the label.                               |



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## 6.3 Methods and materials for containment and cleaning up

| Methods for cleaning up         | Absorb with inert absorbent material (e.g. sand, silica gel, universal binder, |  |
|---------------------------------|--|--|
|                                 | arbolite). Collect and dispose of the productin a properly labelled, tightly   |  |
|                                 | closed package. Thoroughly clean contaminated floors and objects, comply       |  |
|                                 | with environmental requirements. Clean with disinfectants.                     |  |
| Additional advice               | Use personal protective equipment.   |  |
| 6.4 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 waste disposal information.                                 |  |

# 7 SECTION. HANDLING AND STORAGE

# 7.1 Precautions for safe handling

|                  | Advice on safe handling  | No special precautions are required when handling unopened product          |
|------------------|--|---|
|                  |  | packages, follow the requirements of the instructions for use. No special   |
|                  |  | precautions are required. Store the product according to point 7.2          |
| Hygiene measures |  | Avoid contact with skin, eyes and clothing. Store work clothes              |
|                  |  | separately. Wash hands before breaks and immediately after                  |
|                  |  | use. Wash thoroughly with soap and water after work. Take off               |
|                  |  | immediately all contaminated clothing and clean it for before reuse.        |
|                  |  | Clothes that are not cleaned must be destroyed (burned).                    |
| 7.2              | 7.2 Conditions for safe storage, including any incompatibilities |   |
|                  | Requirements for storage   | Store only in original receptacle. Keep container tightly closed in a cool, |
|                  | areas and containers   | well-ventilated place. Keep away from direct sunlight. Protect from frost.  |
|                  | Advice on common storage   | Keep away from food, drink and animal foodstuff.                            |
|                  | Storage stability  | Storage temperature from +5 °C to +30 °C                                    |
|                  | Suitable materials   | HDPE (high density polyethylene)  |
|                  | Specific end use (s)   | Refer to product label or instructions for use                              |

# 8 SECTION. EXPOSURE CONTROLS / PERSONAL PROTECTION

| Control parameters<br>Ingredients<br>Exposure controls | Bacillus mojavensis MVY-007  |
|--|--|
| Respiratory protection                                 | Not required if used according to its intended purpose. Use suitable respiratory protective device in case of insufficient ventilation or when fumes are formed.   |
| Hand protection  | <ul> <li>Please follow the instructions for degradation and penetration time, which provided by glove supplier. Also take into account the specific local conditions in which the product is used, the risk of cuts, scratches, duration of contact. Wash when contaminated inside, when perforated or when contamination outside cannot be removed. Wash your hands often and always wash before eating, drinking, smoking or using the toilet.</li> <li>Penetration rate &gt; 480 min. Glove thickness &gt; 0.4 mm Material Nitrile rubber Protective gloves in accordance with EN 374.</li> </ul> |
| Eye protection   | Wear goggles (conforming to EN166, Field of Use = 5 or equivalent)   |
| Skin and body protection                               | Protective clothing recommended.   |

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**General protective measures** No hazards are known if the product is used in accordance with the label requirements. Wash hands thoroughly with soap and water after handling the product and before eating, drinking, chewing gum, smoking, using the toilet or cosmetics. Do not allow children to enter the treated area until the solution has dried.

#### 9 SECTION. PHYSICAL AND CHEMICAL PROPERTIES

## 9.1 Information on basic physical and chemical properties

| Physical state                      | Liquid  |
|-------------------------------------|---|
| Colour                              | Dark brown / black                              |
| Odour                               | Sweet, earthy                                   |
| Odour Threshold                     | No data available                               |
| рН                                  | 5-8   |
| Melting point/range                 | No data available                               |
| Boiling Point                       | >100 ° C  |
| Flash point                         | >100 ° C No flash point up to the boiling point |
| Flammability                        | No data available                               |
| Auto-ignition temperature           | 475 ° C   |
| Thermal decomposition               | No data available                               |
| Minimum ignition energy             | No data available                               |
| Self-accelarating decomposition     | No data available                               |
| Temperature (SADT)                  |   |
| Upper explosion limit               | Not applicable                                  |
| Lower explosion limit               | Not applicable                                  |
| Vapour pressure                     | No data available                               |
| Evaporation rate                    | No data available                               |
| Relative vapour density             | No data available                               |
| Relative density                    | No data available                               |
| Density                             | Approximately 1.09 g/cm <sup>3</sup>            |
| Bulk density                        | >= 0.40 g/ml (loose)                            |
| Water solubility                    | Dispersible                                     |
| Partition coefficient:              | Not applicable                                  |
| noctanol/water                      |   |
| Viscosity                           | 0.6 mPas  |
| Oxidizing properties                | Non-oxidizing                                   |
| Explosivity                         | Non-explosive 92/69 / EEC, A.14 / OECD 113      |
| Other safety-related physicochemica | I properties are unknown                        |

9.2 Other safety-related physicochemical properties are unknown.

## **10 SECTION. STABILITY AND REACTIVITY**

| 10.1 Reactivity                 | Stable under normal conditions.                                    |
|---------------------------------|--|
| 10.2 Chemical stability         | Stable under recommended storage conditions.                       |
| 10.3 Possibility of hazardous   | No dangerous reactions known if stored and handled as prescribed / |
| reactions                       | indicated.   |
| <b>10.4 Conditions to avoid</b> | Freezing, temperatures above +30 °C and direct sunlight.           |
| 10.5 Incompatible materials     | Store only in the original package.                                |
|                                 |  |



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**10.6 Hazardous decomposition** Under normal conditions of use, no decomposition products are formed.

# 11 SECTION. TOXICOLOGICAL INFORMATION

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| <b>11.1</b> Information on toxicological effects                   |  |  |
|--|--|--|
| Acute toxicity   | No data available  |  |
| Skin corrosion/irritation  | No data available  |  |
| Serious eye damage/irritation                                      | No data available  |  |
| Respiratory or skin  | No data available sensitization  |  |
| Specific target organ  | Based on available data, the classification criteria are not met.                              |  |
| toxicity (STOT) – single   |  |  |
| exposure   |  |  |
| Specific target organ  | Based on available data, the classification criteria are not met.                              |  |
| toxicity (STOT) - repeated   |  |  |
| exposure   |  |  |
| Assessment mutagenicity  |  |  |
| Bacillus mojavensis MVY-007: Test i                                | not required for microorganisms.   |  |
| Assessment carcinogenicity   |  |  |
| Bacillus mojavensis MVY-007: Test not required for microorganisms. |  |  |
| Assessment toxicity to reproductio                                 |  |  |
| Bacillus mojavensis MVY-007: Test i                                |  |  |
|  | Assessment developmental toxicity  |  |
| -  | Bacillus mojavensis MVY-007: Test not required for microorganisms.                             |  |
|  | Assessment STOT Specific target organ toxicity – single exposure                               |  |
| -  | Bacillus mojavensis MVY-007: Based on available data, the classification criteria are not met. |  |
| Aspiration hazard  |  |  |
|  | Based on available data, the classification criteria are not met.                              |  |
|  | Information on likely routes of exposure   |  |
| -  | y cause respiratory tract irritation. Prolonged or frequently repeated                         |  |
|  | ctions in some individuals. May cause eye irritation. Harmful if                               |  |
| swallowed.   |  |  |
| Early onset symptoms   | Refer to Section 4   |  |
| related to exposure  |  |  |
| Delayed health effects   | Refer to Section 11  |  |
| from exposure  | Defende Cestien A  |  |
| Exposure levels and health<br>effects                              | Refer to Section 4   |  |
| Interactive effects  | Not known  |  |
| When specific chemical data  | Not applicable   |  |
| is not available   |  |  |
| Mixture of chemicals   | Refer to Section 2.1   |  |
| Further information  | Micro-organisms may have the potential to provoke skin and                                     |  |
|  | respiratory sensitisation.   |  |



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#### 12 SECTION. ECOLOGICAL INFORMATION

| 12.1 | Toxicity                          | No data available |
|------|-----------------------------------|-------------------|
| 12.2 | Persistence and degradability     | No data available |
| 12.3 | Bioaccumulative potential         | No data available |
| 12.4 | Mobility in soil                  | No data available |
| 12.5 | Results of PBT and                | Not applicable    |
|      | vPvB assessment                   |                   |
| 12.6 | Other adverse effects             |                   |
|      | Additional ecological information | No data available |

### **13 SECTION. WASTE MANAGEMENT**

| 13.1 | Waste management methods |  |
|------|--------------------------|--|
|      | Product                  | In accordance with current legislation and, if necessary, after      |
|      |                          | consultation with waste disposal facility operator and / or          |
|      |                          | responsible authority, the product may be disposed of in a landfill, |
|      |                          | disposed of in an incineration plant or used as a secondary raw      |
|      |                          | material.  |
|      | Contaminated packaging   | Empty contaminated packaging thoroughly. They may be recycled        |
|      |                          | after thorough and proper cleaning. Do not reuse empty               |
|      |                          | contaminated packaging for other purposes.                           |
|      | Waste key for the unused | 02 01 09: agrochemical waste other than those mentioned in 02 01     |
|      |                          | 08 product   |

#### **14 SECTION. TRANSPORT INFORMATION**

According to ADN/ADR/UK 'Carriage' Regulations/RID/IMDG/IATA not classified as dangerous goods. This classification is in principle not valid for carriage by tank vessel on inland waterways. Please refer to the manufacturer for further information.

| 14.1. | UN number                    |
|-------|------------------------------|
| 14.2. | UN proper shipping name      |
| 14.3. | Transport hazard class(es)   |
| 14.4. | Packing group                |
| 14.5. | Environmental hazards        |
| 14.6  | Special precautions for user |
| 14.7  | Transport in bulk            |
|       | According to Annex II of     |
|       | MARPOL and the IBC Code      |

# Not applicable Not applicable. Not applicable. Not applicable. Not applicable. Not applicable.

Not applicable.

# **15 SECTION. REGULATORY INFORMATION**

15.1 Safety, health and environmental regulations / legislation specific for the substance or mixture Appendix C to the Convention concerning International Carriage by Rail (COTIF) Regulations concerning the International Carriage of Dangerous Goods by Rail (RID) Concerning the classification, labeling and packaging of substances and mixtures, amending and repealing Regulation (EC) No 1272/2008, amending and repealing amending and repealing Directives 67/548/EEC and 1999/45/EC and amending Regulation (EC) No 1907/2006.



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**15.2 Chemical Safety Assessment** A chemical safety assessment is not required.

15.3 Further information

WHO-classification: U (Unlikely to present acute hazard in normal use) Water hazard class (WGK): Generally not hazardous for water.

## **16** SECTION. OTHER INFORMATION

#### Text of the hazard statements mentioned in Section 3

#### Abbreviations and acronyms

| AND         | European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways                   |
|-------------|---|
| ADR         | European Agreement concerning the International Carriage of Dangerous Goods by Road                               |
| ATE         | Acute toxicity estimates  |
| CAS-No.     | Chemical Abstracts Service number   |
| Conc.       | Concentration   |
| EC-No.      | European Community number   |
| ECx         | Effective concentration x%  |
| EINECS      | European Inventory of Existing Commercial Substances  |
| ELINCS      | European List of Notified Chemical Substances   |
| EN          | European Standard   |
| EU          | European Union  |
| IATA        | International Air Transport Association   |
| IBC         | International Code for the Construction and Equipment of Ships Carrying<br>Dangerous Chemicals in Bulk (IBC Code) |
| ICx         | Inhibitory concentration x%   |
| IMDG        | International Maritime Dangerous Goods  |
| Lcx         | Lethal concentration x%   |
| Ldx         | Lethal dose x%  |
| LOEC / LOEL | Lowest observed effect concentration/level  |
| MARPOL      | MARPOL: International Convention for the Prevention of Pollution from Ships.                                      |
| N.O.S.      | Not otherwise specified   |
| NOEC / NOEL | No observed effect concentration/level  |
| OECD        | Organization for Economic Co-operation and Development  |
| RID         | Rules concerning the International Carriage of Dangerous Goods by Rail  |
| TWA         | Time weighted average   |
| UN          | United Nations  |
| WHO         | World Health Organization   |

The information in the safety data sheet shall be in accordance with Regulation (EU) No. 1907/2006. Regulation (EU) No 1907/2006 and Regulation (EU) No Amending Regulation (EU) No 2015/830 1907/2006 (and subsequent amendments). This safety data sheet supplements the product instructions for use but does not replace them. The information is based on our knowledge of the product at the time of writing. Consumers are warned of the potential dangers of using the products for purposes other than those for which they were intended. The required information is provided in accordance with current EEC legislation. Recipients are kindly requested to comply with all relevant national legislation.

Reason for revision: Revised sections: 1,2,3,4,5,6,7,8,9,11,14,15