

## SECTION 1: Identification

### 1.1. Identification

Product form : Mixture  
 Trade name : JumpStart® liquid

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

Use of the substance/mixture : *Penicillium* inoculant

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

Novozymes BioAg  
 3935 Thatcher Ave  
 Saskatoon, SK Canada S7R 1A3  
 Information Telephone Number : 1-888-744-5662  
 Available 24 hours a day 7 days a week from April 1st to June 15th, otherwise available from 8:00am to 4:30pm CST, Monday to Friday.

### 1.4. Emergency telephone number

Emergency number : 1-800-424-9300 (Chemtrec) 24 hours every day

## SECTION 2: Hazard(s) identification

### 2.1. Classification of the substance or mixture

#### GHS-US classification

Skin Sens. 1 May cause an allergic skin reaction

### 2.2. Label elements

#### GHS-US labelling

Hazard pictograms (GHS-US) :



GHS07

Signal word (GHS-US) : Warning  
 Hazard statements (GHS-US) : May cause an allergic skin reaction  
 Precautionary statements (GHS-US) : Avoid breathing mist, spray, vapours  
 Contaminated work clothing must not be allowed out of the workplace  
 Wear protective gloves, protective clothing, eye protection  
 If on skin: Wash with plenty of soap, water  
 If skin irritation or rash occurs: Get medical advice/attention  
 Wash contaminated clothing before reuse  
 Dispose of contents/container to comply with applicable local, national and international regulation.

### 2.3. Other hazards

No additional information available

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

This mixture contains 10% of ingredients with unknown acute toxicity.

## SECTION 3: Composition/information on ingredients

### 3.1. Substance

Not applicable

### 3.2. Mixture

Full text of H-statements: see section 16

The specific chemical identity and/or concentration range is being withheld because it is trade secret information of Novozymes BioAg.

Name	Product identifier	%	GHS-US classification
<i>Penicillium bilaiae</i>	NA	≤ 8	
Alcohols, C11-15-secondary, ethoxylated	CAS No 68131-40-8	≤ 1	Skin Sens. 1
Water and minor formulating ingredients	NA	> 91 %	

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### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

- First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
- First-aid measures after inhalation : Allow breathing of fresh air. Allow the victim to rest. If not breathing, give artificial respiration, preferably mouth to mouth. Immediately get medical attention.
- First-aid measures after skin contact : Remove contaminated clothing and shoes. Rinse immediately with plenty of water (for at least 15 minutes). Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
- First-aid measures after eye contact : Rinse immediately and thoroughly, pulling the eyelids well away from the eye (15 minutes minimum). Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
- First-aid measures after ingestion : Rinse mouth. Do not induce vomiting. Obtain emergency medical attention.

#### 4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries : This product contains beneficial microorganisms. Novozymes exclusively uses non-pathogenic beneficial microorganisms that are considered to be non-allergenic, non-irritating and non-sensitizing when used as directed. Exposure to very high levels of airborne microbial spores may result in very rare respiratory impairments or cause an allergic reaction in sensitized individuals.
- Symptoms/injuries after skin contact : May cause an allergic skin reaction.

#### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

- Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire. Foam. Dry powder. Carbon dioxide. Water spray. Sand.
- Unsuitable extinguishing media : Do not use a heavy water stream.

#### 5.2. Special hazards arising from the substance or mixture

- Reactivity : Thermal decomposition generates : Carbon dioxide. Carbon monoxide.

#### 5.3. Advice for firefighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
- Protective equipment for firefighters : As in any fire, wear self-contained breathing apparatus pressure-demand, NIOSH (approved or equivalent) and full protective gear.

### SECTION 6: Accidental release measures

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

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

- Emergency procedures : Evacuate unnecessary personnel.

##### 6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection.
- Emergency procedures : Ventilate area.

#### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

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

- Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials. Collect all waste in suitable and labelled containers and dispose according to local legislation.

#### 6.4. Reference to other sections

No additional information available

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## Safety Data Sheet

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

- |                               |   |
|-------------------------------|---|
| Precautions for safe handling | : Ensure adequate ventilation. Avoid contact with eyes, skin, and clothing. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Avoid breathing dust/fume/gas/mist/vapours/spray. |
| Hygiene measures              | : Handle in accordance with good industrial hygiene and safety practices. Wash hands thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.                     |

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

- |                        |   |
|------------------------|---|
| Storage conditions     | : Store in a well-ventilated place. Keep container tightly closed. Keep away from: Heat sources, Extremely high or low temperatures, Direct sunlight. Keep away from food, drink and animal feeding stuffs. |
| Incompatible materials | : Acids. Bases. Oxidizing agents. Reducing agents. Disinfectants, fungicides, and/or biocides may inactivate.   |

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

No specific occupational exposure limit has been established

#### 8.2. Exposure controls

- |                                  |   |
|----------------------------------|---|
| Appropriate engineering controls | : Ensure adequate ventilation. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. |
| Personal protective equipment    | : Protective goggles. Gloves. Protective clothing. Dust formation: dust mask. Avoid all unnecessary exposure.   |



- |                          |   |
|--------------------------|---|
| Hand protection          | : Wear protective gloves.   |
| Eye protection           | : Chemical goggles or safety glasses.   |
| Skin and body protection | : Wear suitable protective clothing.  |
| Respiratory protection   | : Where exposure through inhalation may occur from use, approved respiratory protection equipment is recommended. |
| Other information        | : Do not eat, drink or smoke during use.  |

### SECTION 9: Physical and chemical properties

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

- |   |                          |
|---|--------------------------|
| Physical state                              | : Liquid                 |
| Appearance                                  | : Dark grey/black liquid |
| Colour                                      | : Dark grey/black        |
| Odour                                       | : Odourless              |
| Odour threshold                             | : No data available      |
| pH  | : No data available      |
| Melting point                               | : No data available      |
| Freezing point                              | : No data available      |
| Boiling point                               | : No data available      |
| Flash point                                 | : No data available      |
| Relative evaporation rate (butyl acetate=1) | : No data available      |
| Flammability (solid, gas)                   | : No data available      |
| Explosive limits                            | : No data available      |
| Explosive properties                        | : No data available      |
| Oxidising properties                        | : No data available      |
| Vapour pressure                             | : No data available      |
| Relative density                            | : No data available      |

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Relative vapour density at 20 °C	: No data available
Solubility	: No data available
Log Pow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Stable

### 10.2. Chemical stability

Stable

### 10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

### 10.4. Conditions to avoid

Heat sources. Direct sunlight. Extremely high or low temperatures.

### 10.5. Incompatible materials

Acids. Bases. oxidizing agents. Reducing agents. Disinfectants, fungicides, and/or biocides may inactivate.

### 10.6. Hazardous decomposition products

Thermal decomposition generates : Carbon dioxide. Carbon monoxide.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity	: Not classified
	(Based on available data, the classification criteria are not met)

Alcohols, C11-15-secondary, ethoxylated (68131-40-8)	
LD50 oral rat	2100 mg/kg
LD50 dermal rabbit	2 ml/kg
ATE US (oral)	2100.000 mg/kg bodyweight

Skin corrosion/irritation	: Not classified
	(Based on available data, the classification criteria are not met)
Serious eye damage/irritation	: Not classified
	(Based on available data, the classification criteria are not met)
Respiratory or skin sensitisation	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
	(Based on available data, the classification criteria are not met)
Carcinogenicity	: Not classified
	(Based on available data, the classification criteria are not met)
Reproductive toxicity	: Not classified
	(Based on available data, the classification criteria are not met)
Specific target organ toxicity (single exposure)	: Not classified
	(Based on available data, the classification criteria are not met)
Specific target organ toxicity (repeated exposure)	: Not classified
	(Based on available data, the classification criteria are not met)
Aspiration hazard	: Not classified
	(Based on available data, the classification criteria are not met)

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## Safety Data Sheet

Symptoms/injuries after skin contact : May cause an allergic skin reaction.

### SECTION 12: Ecological information

#### 12.1. Toxicity

No additional information available

#### 12.2. Persistence and degradability

JumpStart® liquid	
Persistence and degradability	Not established

#### 12.3. Bioaccumulative potential

JumpStart® liquid	
Bioaccumulative potential	Not established

#### 12.4. Mobility in soil

No additional information available

#### 12.5. Other adverse effects

Effect on ozone layer : No additional information available

Effect on the global warming : No additional information available

Other information : Avoid release to the environment.

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

Ecology - waste materials : Avoid release to the environment.

### SECTION 14: Transport information

#### Department of Transportation (DOT)

In accordance with DOT

Not regulated for transport

#### TDG

No additional information available

#### Transport by sea

No additional information available

#### Air transport

No additional information available

### 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

This product or mixture does not contain a toxic chemical or chemicals in excess of the applicable 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.

#### 15.2. International regulations

No additional information available

#### National regulations

This material is considered hazardous according to the criteria of the US OSHA Hazard Communication Standard (29 CFR 1910.1200).

#### 15.3. US State regulations

# JumpStart<sup>®</sup> liquid

## Safety Data Sheet

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

Abbreviations and acronyms : CAS - Chemical Abstracts Service. GHS - Globally Harmonised System. HCS - Hazard Communication Standard. OSHA - Occupational Safety and Health Administration. PEL- Permissible Exposure Level. STEL- Short-Term Exposure Limit. TWA- Time Weighted Average.

Other information : None

Full text of H-statements:

Skin Sens. 1	Sensitisation — Skin, Category 1
H317	May cause an allergic skin reaction

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.*

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