1. Identification of the substance/mixture and of the Company

Product identifiers

<table>
<thead>
<tr>
<th>Product name</th>
<th>DeoxyNivalenol</th>
<th>Fermentek</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Code</td>
<td>DON</td>
<td></td>
</tr>
<tr>
<td>CAS #</td>
<td>51481-10-8</td>
<td></td>
</tr>
<tr>
<td>EC/REACH Number</td>
<td>610-668-0</td>
<td></td>
</tr>
</tbody>
</table>

Intended uses of the substance or mixture and uses advised against

<table>
<thead>
<tr>
<th>Intended use</th>
<th>Uses advised against:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Only For Research and/or Development</td>
<td>Not for drug. Not to be used in humans or animals. Not food additive</td>
</tr>
</tbody>
</table>

Details of the supplier of the safety data sheet

FERMENTEK ltd
4 Yatziv street, POB 47120
Jerusalem 97800, Israel

Tel: +972 2 5853953
Fax: +972 2 5853943
eMail: fermentek@fermentek.com
Website: www.fermentek.com

This company is the manufacturer of the product, and the supplier of the safety data sheet

REACH
A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

2. Hazards identification

Classification of the substance

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.122)

GHS Classification:
- Acute toxicity, Oral (Category 2), H300 (Fatal if swallowed)

GHS Label elements, including precautionary statements

Signal word (Danger) Pictogram:

Hazard statement(s)
- H300 Fatal if swallowed

Precautionary statement(s)
- P264 Wash skin thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.
- P280 Wear protective gloves/protective clothing.
- P301 + P310 + P330 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Rinse mouth.
- P405 Store locked up.
- P501 Dispose of contents/container to an approved waste disposal plant.

Unclassified Hazards/Hazards Not Otherwise Classified
No data available
3. **Composition/Information on ingredients**

**Substance**
- **Synonyms:** DON; Deoxynivalenol; Vomitoxin; 3α,7α,15-Trihydroxy-12,13-epoxytrichothec-9-en-8-one
- **Molecular Formula:** C_{15}H_{20}O_{6}
- **Molecular Weight:** 296.32
- **CAS Registry #:** 51481-10-8
- **EC#:** 610-668-0

**Concentration**
- <=100%

**Mixture**
- Not mixture.

4. **First Aid Measures**

**General advice**
- Consult a physician. Remove to fresh air. Show this safety data sheet to the doctor in attendance.

**Skin Contact**
- Wash skin with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

**Eye contact:**
- Flush with plenty of water

**Ingestion:**
- Never give anything by mouth to an unconscious person. Clean mouth with water. Consult a physician.

**Inhalation:**
- Remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration.

**Self-protection of the first aider:**
- Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

**Most important symptoms and effects, both acute and delayed**
- No information available.

**Indication of any immediate medical attention and special treatment needed**
- Note to physicians: Treat symptomatically.

5. **Fire-fighting measures**

**Extinguishing media**
- **Suitable extinguishing media:** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
- **Special hazards arising from the substance or mixture:** Carbon oxides.
- **Advice for firefighters:** Wear self-contained breathing apparatus for fire fighting if necessary. Wear protective suit.

**Further information**
- No further data available.

6. **Accidental release measures**

**Personal precautions, protective equipment and emergency procedures**
- **Personal precautions:** Ensure adequate ventilation, especially in confined areas. Use personal protective equipment as required. Keep people away from and upwind of spill/leak.

**Environmental precautions**
- **Environmental precautions:** See part 12

**Methods and material for containment and cleaning up**
**Methods for containment:**
Prevent further leakage or spillage if safe to do so. Cover powder spill with plastic sheet or tarp to minimize spreading. Dike far ahead of liquid spill for later disposal.

**Methods for cleaning up:**
Cover liquid spill with sand, earth or other non-combustible absorbent material (e.g. sand, earth, diatomaceous earth, and vermiculite). Cover powder spill with plastic sheet or tarp to minimize spreading. Sweep up and shovel into suitable containers for disposal.

**7. Handling and storage**

**Precautions for safe handling**
Advice on safe handling: Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Wash contaminated clothing before reuse. Do not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product.

**Conditions for safe storage, including any incompatibilities**
Storage Conditions: Keep container tightly closed in a dry and well-ventilated place.
Keep out of the reach of children.
Store at -20 °C.

Incompatible materials: None known based on information available.

**8. Exposure Controls/Personal Protection**

No occupational exposure limits are listed for this material.

OSHA Permissible Exposure Limits: No Data Available
NIOSH Recommended Exposure Limits: No Data Available
ACGIH Threshold Limit Values: No Data Available

**Exposure controls**

**Appropriate engineering controls**
Engineering Controls: Showers; Eyewash stations; Ventilation systems

**General Hygiene Considerations:** Handle in accordance with good industrial hygiene and safety practice.

**Personal protective equipment**
The employer/end user, prior to use of this product should perform all recommendations below are advisory in nature and a risk assessment. The type of protective equipment must be selected based on the amount and concentration of the dangerous material being used in the workplace.

[**PPE=Personal Protection Equipment**]

**Eye/face protection**
Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

**Full contact**
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min

**Splash contact**
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min

The recommendations brought here, are advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Body Protection
Complete suit protecting against chemicals, the type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection
Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

9. Physical and chemical properties

Physical / chemical properties
Physical State at room temperature: Solid / powder
Color: White to off White
Melting/freezing point: 151-153°C

No further safety-relevant information is available

10. Stability and reactivity

Reactivity: No information available.
Chemical stability: Stable under normal conditions.
Conditions to avoid: Heat, flames and sparks
Incompatible materials: Strong reducers and exidizers
Possibility of Hazardous Reactions: None under normal processing
Hazardous decomposition products: Carbon monoxide CO, Carbon dioxide (CO2).

11. Toxicological information

Information on toxicological effects

Information on likely routes of exposure

<table>
<thead>
<tr>
<th>Acute toxicity</th>
<th>LD50 Oral - Mouse – 46 mg/kg</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>LD50 Dermal - Rat - 2.56 mg/kg</td>
</tr>
<tr>
<td></td>
<td>LC50 Inhalation : Rat - 10 M - 20 mg/m³</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation: Mild skin irritation

Reproductive toxicity: Laboratory experiments have shown teratogenic effects.

Additional Information: RTECS: Y00167000

Carcinogenicity: Limited evidence of a carcinogenic effect.
IARC Group 3: Not classifiable as to its carcinogenicity to humans

Symptoms, signs of poisoning: Dizziness, Nausea, Vomiting;
Gastrointestinal:Ulceration or bleeding from small intestine. Diarrhoea

Based on Human Evidence:
Gastrointestinal disturbance, Vomiting, Diarrhoea, Nausea, Dizziness, Headache, Anorexia, Stomach - Irregularities -

Contact with skin can cause: Dermatitis, Severe irritation
To the best of our knowledge, the chemical, physical, and toxicological properties of this material have not been thoroughly investigated.

12. Ecological Information

Eco-Toxicity  May cause long lasting harmful effects to aquatic life
Other adverse effects  No further relevant information available.

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

13. Disposal Considerations

<table>
<thead>
<tr>
<th>Waste treatment methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waste from residues / unused products</td>
</tr>
<tr>
<td>Contaminated packaging</td>
</tr>
</tbody>
</table>

14. Transport Information

<table>
<thead>
<tr>
<th>UN number, Proper Shipping Name, Transport Hazard Class, packing group</th>
</tr>
</thead>
<tbody>
<tr>
<td>US DOT</td>
</tr>
<tr>
<td>UN Number / UN proper shipping name</td>
</tr>
<tr>
<td>Transport Hazard Class / &amp; Packing Group</td>
</tr>
</tbody>
</table>

15. Regulatory Information

Safety, health and environmental regulations/legislation

<table>
<thead>
<tr>
<th>USA EPA / TSCA</th>
<th>This product is not listed on the USA EPA TSCA</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU ECHA Status</td>
<td>This product is not registered with the EU ECHA</td>
</tr>
<tr>
<td>CA: DSL/NDSL Status</td>
<td>This product is not listed on the Canadian DSL/NDSL</td>
</tr>
</tbody>
</table>

SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazard Categories

<table>
<thead>
<tr>
<th>Hazard Category</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute health hazard</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chronic Health Hazard</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Fire hazard</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Sudden release of pressure hazard</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Reactive hazard</td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>

16. Other Information

Date of revision: 17 January 2017

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given here is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of SDS