

## SAFETY DATA SHEET

(according to Regulation (EC) No. 1907/2006)  
Version: 1      Revision Date: 15.06.2020

### GERMFREE

#### 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

##### 1.1 Product identifier

Product Name: *Germfree – 20L*  
Product Code: *GERM25*

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

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

Company: **CHAUCER SOLUTIONS LIMITED**  
Address: *Beodric House  
5 Boldero Road  
Bury St. Edmunds  
Suffolk  
IP32 7BS  
United Kingdom*  
Telephone: *+ 44 (0) 1767 677445*  
E-mail: *admin@chaucersolutions.co.uk*

##### 1.4 Emergency telephone number

*+ 44 (0) 1767 677445 (Only available during office hours)*

#### 2. HAZARDS IDENTIFICATION

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

Classification (according to Regulation (EC) No. 1272/2008):  
*Skin Corrosion Category 1A*

*H314: Causes severe skin burns and eye damage*

##### 2.2 Label elements

#### **REGULATION (EC) No. 1272/2008**

Pictogram(s):



Signal Word: **DANGER**

Hazard Statements: H314: Causes severe skin burns and eye damage

Precautionary Statements:

- Prevention: P280: Wear protective gloves/protective clothing/ eye protection/ face protection  
P264: Wash...thoroughly after handling  
P260: Do not breathe dust/fume/gas/mist/vapours/spray
- Response: P301+P330+P331:  
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting  
P303+P361+P353:  
IF ON SKIN (or hair): Remove/Take off Immediately all contaminated clothing. Rinse SKIN with water/shower.  
P304+P340:  
IF INHALED: Remove victim to fresh air and Keep at rest in a position comfortable for breathing.  
P305+P351+P338:  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P310: Immediately call a POISON CENTER or doctor/physician.
- Storage: P405: Store locked up
- Disposal: P501: Dispose of contents / container to a waste management service provider, according to the local law and regulations

## 2.3 Other Hazards None known

## 3. COMPOSITION OF/INFORMATION ABOUT THE COMPONENTS

### 3.1 Substances

### 3.2 Mixtures

Chemical Name	CAS-No. EINECS-No.	Classification REGULATION (EC) No 1272/2008	Concentration [%]
Sodium hydroxide	1310-73-2 215-185-5	Skin Corr. Cat.1A: H314	1 - 10
Trisodium nitrilotriacetate	15046-31-3 225-768-6	Acute Tox. Cat.4: H302; Eye Irrit. Cat.2: H319; Carc. Cat.2: H351	1 - 10

For the full text of the H - statements mentioned in this section, see section 16.

## 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

- General advice: Take the Hazard and Precautionary Statements (section 2) into account. Show this Safety Data Sheet to the physician in attendance if required.
- Inhalation: Remove casualty from exposure ensuring one's own safety whilst doing so. If unconscious and breathing is OK, place in the recovery position. If conscious, ensure the casualty sits or lies down. If breathing becomes bubbly, have the casualty sit and provide oxygen if available. Transfer to hospital as soon as possible.
- Skin contact: Remove all contaminated clothes and footwear immediately unless stuck to skin. Drench the affected skin with running water for 10 minutes or longer if substance is still on skin. Transfer to hospital if there are burns or symptoms of poisoning.
- Eye contact: Bathe the eye with running water for 15 minutes. Transfer to hospital for specialist examination.
- Ingestion: Wash out mouth with water. Do not induce vomiting. Give 1 cup of water to drink every 10 minutes. If unconscious, check for breathing and apply artificial respiration if necessary. If unconscious and breathing is OK, place in the recovery position. Transfer to hospital as soon as possible.

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

Skin contact: *Blistering may occur. Progressive ulceration will occur if treatment is not immediate.*

Eye contact: *Corneal burns may occur. May cause permanent damage.*

Ingestion: *Corrosive burns may appear around the lips. Blood may be vomited. There may be bleeding from the mouth or nose.*

Inhalation: *There may be shortness of breath with a burning sensation in the throat. Exposure may cause coughing or wheezing.*

Delayed / immediate effects: *Immediate effects can be expected after short-term exposure.*

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

*Provide physician with a copy of this Safety Data Sheet.*

## 5. FIRE-FIGHTING MEASURES

### 5.1 Extinguishing media

Suitable extinguishing media:

*Water spray, carbon dioxide, dry chemical, foam.*

Extinguishing media which shall not be used for safety reasons:

*Do not use a high powered water jet directly on burning material.*

### 5.2 Special Hazards arising from the substance or mixture

*Corrosive*

### 5.3 Advice for Fire Fighters

Special protective equipment for fire fighting:

*Full protective suit.*

*Self-contained breathing apparatus (EN 133)*

Specific fire fighting methods:

*Do not use a high powered water jet directly on burning material.*

*Do not inhale fumes.*

*Evacuate personnel to a safe area.*

*Cool containers / tanks with water spray.*

## 6. ACCIDENTAL RELEASE MEASURES

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

*Remove all sources of ignition, and keep away from flames and hot surfaces. Avoid inhalation and contact with skin and eyes. Wear appropriate personal protective equipment. A self contained breathing apparatus is recommended in case of a major spill. Collect Spillage.*

### 6.2 Environmental precautions

*Keep away from drains, surface and ground water and soil.*

### 6.3 Methods for cleaning or taking up

*Clean up spillage promptly. Remove ignition sources. Provide adequate ventilation. Avoid excessive inhalation of vapours. Gross spillages should be contained by use of sand or inert powder and disposed of according to the local regulations.*

## 7. HANDLING AND STORAGE

### 7.1 Handling

Advice on safe handling:

*Avoid contact with the eyes, skin and clothing. Avoid excessive inhalation of concentrated vapours. Follow good manufacturing practices for housekeeping and personal hygiene. Wash any exposed skin immediately after any chemical contact, before breaks and meals, and at the end of each working period. Contaminated clothing and shoes should be thoroughly cleaned before re-use.*

*If appropriate, procedures used during the handling of this material should also be used when cleaning equipment or removing residual chemicals from tanks or other containers, especially when steam or hot water is used, as this may increase vapour concentrations in the work place air. Where chemicals are openly handled, access should be restricted to properly trained employees.*

*Keep all heated processes at the lowest necessary temperature to minimize emissions of volatile chemicals into the air.*

Advice on protection against fire and explosion:  
*Keep away from ignition sources and naked flame.*

## **7.2 Storage**

Requirements for storage areas and containers:  
*Store in a cool, dry, ventilated area away from heat sources. Keep containers upright and tightly closed when not in use.*

## **8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

### **8.1 Control Parameters**

*Sodium Hydroxide (CAS 1310-73-2)  
Occupational Exposure Limits – UK: 2 mg/m<sup>3</sup> STEL (15 min)*

### **8.2 Personal protective equipment**

Respiratory protection:  
*Use local exhaust ventilation around open tanks and other open sources of potential exposures in order to avoid excessive inhalation including places where this material is openly weighed or measured.*

*In addition, use general dilution ventilation of the work area to eliminate or reduce possible worker exposures. No respiratory protection is required during normal operations in a workplace where engineering controls such as adequate ventilation, etc. are sufficient.*

*If engineering controls and safe work practices are not sufficient, an approved, properly fitted respirator with organic vapor cartridges or canisters and particulate filters should be used:*

- a) while engineering controls and appropriate safe work practices and/or procedures are being implemented; or*
- b) during short term maintenance procedures when engineering controls are not in normal operation or are not sufficient; or*
- c) if normal operational workplace vapour concentration in the air is increased due to heat;*
- d) during emergencies; or*
- e) if engineering controls and operational practices are not sufficient to reduce airborne concentrations below an established occupational exposure limit.*

Hand protection: *Avoid skin contact. Use chemically resistant gloves.*

Skin and body protection:  
*Avoid contact with the skin. Wear a protective suit. Wash all contaminated clothing thoroughly before re-use.*

Eye protection: *Avoid contact with the eyes. Use tight-fitting goggles, face shield or safety glasses with side shields.*

Hygiene Measures:



*Ensure that eyewash stations and safety showers are close to the workstation location. Use clean, well-maintained personal protection equipment. Wash hands before breaks and at the end of the work day. Do not eat, drink or smoke whilst using or handling the product.*

*To the extent deemed appropriate, implement pre placement and regularly scheduled ascertainment of symptoms and spirometry testing of lung function for workers who are regularly exposed to this material.*

*To the extent deemed appropriate, use an experienced air sampling expert to identify and measure volatile chemicals that could be present in the workplace air or determine potential exposures and to ensure the continuing effectiveness of engineering controls and operational practices to minimize exposure.*

**Protective measures:**

*The protective equipment must be selected in accordance with current CEN standards and in cooperation with the supplier of the protective equipment. Selection of appropriate personal protective equipment should be based on an evaluation of the performance characteristics of the protective equipment relative to the task(s) to be performed, conditions present, duration of use, and the potential hazards and / or risks that may occur during use.*

**General Advice:** *Do not allow uncontrolled discharge of the product into the environment.*

## **9. PHYSICAL AND CHEMICAL PROPERTIES**

### **9.1 Appearance**

Physical state: *Liquid*  
Colour: *Colourless*  
Odour: *Odourless*

### **9.2 Safety data**

Boiling Point: *> 35°C*  
Flash Point: *> 93°C*

## **10. STABILITY AND REACTIVITY**

### **10.1 Reactivity**

*This product is not considered reactive under normal working conditions.*

### **10.2 Chemical Stability**

*This product is stable at room temperature.*

### **10.3 Possibility of hazardous reactions**

*This product may react with strong oxidizing agents, acids and / or alkalis.*

### **10.4 Conditions to avoid**

*Keep away from heat, sparks and open flame.*

### **10.5 Incompatible materials**

*Acids*

### **10.6 Hazardous decomposition products**

*Toxic Gas (Carbon Monoxide and Carbon Dioxide) and unidentified organic compounds may be formed during combustion).*

## **11. TOXICOLOGICAL INFORMATION**

### **11.1 Acute Toxicity**

Acute oral toxicity:

*No data available*

Acute inhalation toxicity:

*No data available*

Acute dermal toxicity:

Acute dermal toxicity (other routes of administration):

*No data available.*

Aspiration toxicity:

*No data available.*

### **11.2 Skin corrosion/irritation**

Skin irritation: *Blistering may occur. Progressive ulceration will occur if treatment is not immediate.*

### **11.3 Serious eye damage/eye irritation**

Eye irritation: *Corneal burns may occur. May cause permanent damage.*

### **11.4 Respiratory or skin sensitization**

Sensitisation: *No data available*

### **11.5 Aspiration hazard:**

Sensitisation: *No data available*

### **11.6 Repeated dose toxicity**

Repeated dose toxicity:

*No data available.*

### **11.7 STOT**

STOT – single exposure:

STOT – repeated exposure:

*No data available.*

### **11.8 Carcinogenicity**

Carcinogenicity: *No data available.*

### **11.9 Mutagenicity**

Genotoxicity in vitro:

*No data available.*

Genotoxicity in vivo:

*No data available.*

### **11.10 Reproductive toxicity**

Reproductive toxicity:

*No data available.*

Developmental toxicity/Teratogenicity:

*No data available.*

## **12. ECOLOGICAL INFORMATION**

### **12.1 Ecotoxicity effects**

Aquatic Compartment (including sediment)

*Acute Fish Toxicity:*

*Aquatic Invertebrate Toxicity:*

### **12.2 Persistence and degradability**

Biodegradability: *Biodegradable*

### 12.3 Bioaccumulation

Partition coefficient (n-octanol/water):  
*No data available.*

### 12.4 Mobility

Known distribution to environmental compartments:  
*No data available.*

### 12.5 Other adverse effects

Environmental assessment:  
*Based on available data the product is not classified as dangerous for the environment, or toxic to aquatic organisms.*

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

Product: *Dispose of according to local regulations. Do NOT dispose of into drainage systems and into the environment.*

Contaminated packaging:  
*Empty containers should be taken to an approved waste handling site for recycling or disposal.*

## 14. TRANSPORT INFORMATION

### 14.1 ADR

UN-Number: 1760  
Dangerous Goods Description: CORROSIVE LIQUID, N.O.S.  
Class: 8  
Packing group: I  
Tunnel restriction code: (E)  
Environmentally hazardous mark: NO

### 14.2 RID

UN-Number: 1760  
Dangerous Goods Description: CORROSIVE LIQUID, N.O.S.  
Class: 8  
Packing group: I  
Tunnel restriction code: (E)  
Environmentally hazardous mark: NO

### 14.3 IATA

UN-Number: 1760  
Dangerous Goods Description: CORROSIVE LIQUID, N.O.S.  
Class: 8  
Packing group: I  
Environmentally hazardous mark: NO

### 14.4 IMDG

UN-Number: 1760  
Dangerous Goods Description: CORROSIVE LIQUID, N.O.S.  
Class: 8  
Packing group: I  
Marine Pollutant: NO

Note: The above regulatory prescriptions are those valid on the date of publication of this sheet. Given the possible evolution of transport regulations for hazardous materials, it would be advisable to regularly check their validity.

## **15. REGULATORY INFORMATION**

N/A

## **16. OTHER INFORMATION**

Full text of H – Statements referred to under sections 2 and 3

- H302: Harmful if swallowed*
- H314: Causes severe skin burns and eye damage*
- H319: Causes serious eye irritation*
- H351: Suspected of causing cancer*

Full text of P – Statements referred to under sections 2 and 3

- P280: Wear protective gloves/protective clothing/ eye protection/ face protection*
- P264: Wash...thoroughly after handling*
- P260: Do not breathe dust/fume/gas/mist/vapours/spray*
- P301+P330+P331:  
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting*
- P303+P361+P353:  
IF ON SKIN (or hair): Remove/Take off Immediately all contaminated clothing. Rinse SKIN with water/shower.*
- P304+P340:  
IF INHALED: Remove victim to fresh air and Keep at rest in a position comfortable for breathing.*
- P305+P351+P338:  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.*
- P310: Immediately call a POISON CENTER or doctor/physician.*
- P405: Store locked up*
- P501: Dispose of contents / container to a waste management service provider, according to the local law and regulations*

Further information:

According to Regulation (EC) No. 1907/2006 the information in this safety data sheet is based on the properties of the material known to Chaucer Solutions Ltd at the time the data sheet was issued. The Safety data sheet is intended to provide information for a health and safety assessment of the material and the circumstances, under which it is packaged, stored or applied in the workplace. The information hereon is reliable to the best of our knowledge. However, the recommendations or suggestions hereon shall not be construed as a warranty or representation as to the results, safety and efficacy. Users should always make their own evaluations and tests suitable for their particular needs. We cannot be held liable for any loss or damage arising from the use of the information hereon. This document is not intended for quality assurance purposes.

- End of Safety Data Sheet -