SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product name: Clostridium difficile Toxin B
Product Number: CDB-TNL
Company: The Native Antigen Company Ltd.
Building B
Langford Locks
Kidlington
Oxfordshire
OX5 1LH
Tel+44 (0)1865 595230
E-mail address: contact@thenativeantigencompany.com

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

Acute toxicity, Inhalation (Category 2)
Acute toxicity, Dermal (Category 2)
Acute toxicity, Oral (Category 2)
Skin irritation
Eye irritation

Very toxic by inhalation, in contact with skin and if swallowed. Irritating to eyes, respiratory system and skin.

Label elements

Pictogram

Signal word: Danger

Hazard statement(s)
H301 Toxic if swallowed.
H311 Toxic in contact with skin.
H331 Toxic if inhaled.

Precautionary statement(s)
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves/protective clothing.
P284 Wear respiratory protection when dealing with powder

Hazard symbol(s) Toxic

R-phrase(s) R23/24/25 Toxic by inhalation, in contact with skin and if swallowed.

S-phrase(s) S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
3. COMPOSITION/INFORMATION ON INGREDIENTS
Toxin B from Clostridium difficile. Sample is of biological origin and is presented as a white lyophilized solid in a glass vial. Each vial contains no more than 500µg. Additional components present: 0.05M Heps, 0.15M NaCl and 5% sucrose.

4. FIRST AID MEASURES
If inhaled: If breathed in, move person into fresh air. If not breathing give artificial respiration. Consult a physician.
In case of skin contact: Wash off with soap and plenty of water. Consult a physician.
In case of eye contact: Rinse thoroughly at eyewash station for at least 15 minutes and consult a physician.
If swallowed: Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. FIRE-FIGHTING MEASURES
Suitable extinguishing media Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Special protective equipment for fire-fighters Wear self contained breathing apparatus for fire fighting if necessary.

6. ACCIDENTAL RELEASE MEASURES
Personal precautions Wear respiratory protection. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation. Evacuate personnel to safe areas.
Environmental precautions Prevent further leakage or spillage if safe to do so.
Methods and materials for containment and cleaning up Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE
Precautions for safe handling Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Resuspend powder in safety cabinet. Provide appropriate exhaust ventilation at places where dust is formed.
Conditions for safe storage Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Recommended storage temperature: 2 - 8 °C

8. EXPOSURE CONTROLS/PERSONAL PROTECTION
Contains no substances with occupational exposure limit values.
Personal protective equipment
Respiratory protection Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N99 (US) or type P2 (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).
Hand protection The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. Handle with gloves.
Eye protection
Safety glasses
Skin and body protection
Laboratory coat
Hygiene measures
Avoid contact with skin, eyes and clothing. Wash and dry hands after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance
White powder, lyophilized

Safety data
pH: pH 7.2 when resuspended
Melting point: no data available
Boiling point: no data available
Flash point: no data available
Ignition temperature: no data available
Lower explosion limit: no data available
Upper explosion limit: no data available
Water solubility: soluble

10. STABILITY AND REACTIVITY

Chemical stability
Stable under recommended storage conditions.

Conditions to avoid
Avoid multiple freeze thaw cycles

Materials to avoid
Strong oxidizing agents

Hazardous decomposition products
None known

11. TOXICOLOGICAL INFORMATION

Acute toxicity
No data available

Skin corrosion/irritation
No data available

Serious eye damage/eye irritation
No data available

Respiratory or skin sensitization
No data available

Germ cell mutagenicity
No data available

Carcinogenicity
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity
No data available

Aspiration hazard
No data available

Potential health effects
Toxic if inhaled. May cause respiratory tract irritation.
Harmful if swallowed.
Toxic if absorbed through skin. May cause skin irritation.
Causes eye irritation.

Additional Information
RTECS: No data available
12. ECOLOGICAL INFORMATION

Toxicity
No data available
Persistence and degradability
No data available
Bioaccumulative potential
No data available
Mobility in soil
No data available
PBT and vPvB assessment
No data available
Other adverse effects
No data available

13. DISPOSAL CONSIDERATIONS

Product
Observe all federal, state, and local environmental regulations. Contact a licensed professional waste
disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and
burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging
Dispose of as unused product.

14. TRANSPORT INFORMATION

UN Number: 3462
Class: 6.1
Packing group: I
Proper shipping name: TOXINS EXTRACTED FROM LIVING SOURCES, SOLID, N.O.S.
Shipped as Exempted Quantity transport class 6.1

15. REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

16. OTHER INFORMATION

Take special care when working in conjunction with hypodermic needles. If i.v. or i.m. injection should
occur, consult a physician.

Last update: 21 May 2012
Prepared by: The Native Antigen Company

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sources believed to be reliable, we accept no responsibility for the accuracy, sufficiency, or reliability or for any loss
or injury resulting from the use of the information.