

### SECTION-1: Identification of the substance / mixture and the company / undertaking

#### 1.1 Product identifiers

**Product Name** : Ammonium D4 Deuterioxide

**Catalogue Number** : CS-T-48161

**Brand** : Clearsynth Labs Ltd.

**REACH No.** : 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.

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

**Identified uses** : Laboratory Chemicals, Manufacture of substances

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

**Company** : Clearsynth Labs Ltd.  
17, Lotus Business Park,  
New Link Road, Andheri (W),  
Mumbai-400053, INDIA

#### 1.4 Emergency telephone number

**Emergency Phone #** : +91-22-245045900

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture-Regulation (EC) No 1272/2008:

Skin corrosion (Category 1B),	H314
Serious eye damage (Category 1),	H318
Specific target organ toxicity - single exposure (Category 3), Respiratory system,	H335
Short-term (acute) aquatic hazard (Category 1),	H400
Long-term (chronic) aquatic hazard (Category 3),	H412

#### 2.2 Label Elements

Danger



## Hazard Statement(s)

H314	Causes severe skin burns and eye damage.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.
H412	Harmful to aquatic life with long lasting effects.

## Precautionary Statements

P261	Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
P264	Wash skin thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
P301 + P330 + P331	If swallowed: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353	If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P304 + P340 + P310	If inhaled: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor.
P305 + P351 + P338	If in eyes: Rinse cautiously with water for several minutes.
P310	Remove contact lenses, if present and easy to do. Continue
P363	Wash contaminated clothing before reuse.
P391	Collect spillage.
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P501	Dispose of contents/ container to an approved waste disposal plant.

## Other Hazards -

No data available

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## SECTION 3: Composition / information on ingredients

### 3.1 Mixtures

Molecular weight : 40.08 (g/mol)

Component	Classification	Concentration
<b>Ammonium D4 Deuterioxide</b>		
CAS Number : 12168-30-8		
Molecular Formula : ND <sub>4</sub> OD		
EC - No. :		

For the full text of the H-Statements mentioned in this Section, see Section 16.

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## SECTION 4: First aid measures

### 4.1 Description of First Aid Measures

#### General Advice:

Consult a physician. Show this safety data sheet to the doctor in attendance.

#### 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 with plenty of water 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.

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

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

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

No data available

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**SECTION 5: Firefighting measures****5.1 Extinguishing media****Suitable Extinguishing Media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**5.2 Special Hazards From Arising From Substance or mixture**

During a fire, irritating & highly toxic gases may be generated by thermal decomposition or combustion.

**5.3 Advice For Firefighters**

Wear self-contained breathing apparatus & full protective gear to prevent contact with skin & eyes.

**5.4 Further information**

Use water spray to cool unopened containers.

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**SECTION 6: Accidental release measures****6.1 Personal Precautions, Protective Equipment And Emergency Procedures**

Wear respiratory protection. Avoid breathing vapours, mist or gas.

Ensure adequate ventilation. Remove all sources of ignition.

Evacuate personnel to safe areas.

Beware of vapours accumulating to form explosive concentrations.

Vapours can accumulate in low areas.

For personal protection see section 8.

**6.2 Environmental Precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains or water sources.

**6.3 Methods and materials for containment and cleaning up**

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

**6.4 Reference to other sections**

For disposal see section 13.

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**SECTION-7: HANDLING AND STORAGE****7.1 Precautions For Safe Handling**

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

For precautions see section 2.2.

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

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Recommended storage temperature Store at refrigerator (2-8°C) for long term storage.

### **7.3 Specific end use(s)**

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

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## **SECTION 8: Exposure controls / personal protection**

### **8.1 Control parameters**

Components with workplace control parameters

### **8.2 Exposure controls**

#### **Appropriate Engineering Controls**

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

#### **Personal Protective Equipment**

##### **Eyes / 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.

The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it.

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is 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, Flame retardant antistatic protective clothing.

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 respirator with multi-purpose combination (US) or type ABEK (EN 14387) 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.

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## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

a) Physical State	: Liquid
b) Color	: Clear colorless
c) Odor	: No data available
d) pH	: No data available
e) Vapour Pressure	: No data available
f) Viscosity	: No data available
g) Initial Boiling Point and boiling range	: No data available
h) Melting Point / Freezing Point	: No data available
i) Auto Ignition Temperature	: No data available
j) Flash Point	: No data available
k) Explosion Limit, Lower	: No data available
l) Explosion Limit, Upper	: No data available
m) Decomposition Temperature	: No data available
n) Loss on Drying	: No data available
o) Relative Density	: 1.056 g/mL at 25 °C (77 °F)
p) Solubility	: Soluble in water
q) Oxidizing Properties	: No data available

### 9.2 Other Safety Information

No Data Available

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No data available

### 10.2 Chemical Stability

Stable under recommended storage conditions.

### 10.3 Possibility of Hazardous reactions

No data available.

### 10.4 Condition to Avoid

Heat, flames and sparks. Extremes of temperature and direct sunlight.

### 10.5 Incompatibilities with Other Materials

Strong oxidizing agents, strong bases.

### 10.6 Hazardous Decomposition Products

No data available.

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## SECTION 11: Toxicological information

### 11.1 Information on Toxicological Effects

#### Acute Toxicity

No data available

#### Skin Irritation/Corrosion

Remarks: Causes skin burns. Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

#### Eye Damage/Irritation

Remarks: Causes serious eye damage. Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

#### Respiratory or Skin Sensitization

No data available

#### Germ Cell Mutagenicity

No data available

#### Carcinogenicity

No data available

#### Reproductive Toxicity

No data available

#### Routes of Exposure

Inhalation, Ingestion, skin, eyes

#### Toxic Effects on Humans

No data available

#### Additional Information

No data available

## SECTION 12: 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 vPvB assessment

No data available

### 12.6 Other adverse effects

No data available

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## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

#### Product

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company.

#### Contaminated packaging

Dispose of as unused product.

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## SECTION 14: Transport information

### 14.1 UN Number :

DOT (US)	2672
IATA	2672
IMDG	2672
ADR/RID	2672

### 14.2 UN Proper Shipping Name :

DOT (US) / IATA	Ammonia solution
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IMDG / ADR / RID	Ammonia solution
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### 14.3 Transport Hazard Class (es) :

DOT (US)	8
IATA	8
IMDG	8
ADR/RID	8

### 14.4 Packing Group :

DOT (US)	III
IATA	III
IMDG	III
ADR/RID	III

### 14.5 Environmental Hazards :

DOT (US)	Yes
IATA	Yes
IMDG	Yes
ADR/RID	Yes

#### 14.6 Special precautions for user

No data available

### SECTION 15: Regulatory information

#### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006. REACH - Restrictions on the manufacture, : placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII)

#### 15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out

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### SECTION 16: Other information

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

Skin corrosion (Category 1B),	H314
Serious eye damage (Category 1),	H318
Specific target organ toxicity - single exposure (Category 3), Respiratory system,	H335
Short-term (acute) aquatic hazard (Category 1),	H400
Long-term (chronic) aquatic hazard (Category 3),	H412

#### Further Information

The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages. Howsoever arising, even if the company has been advised of the possibility of such damages.