# Scientific Laboratory Supplies - Safety Data Sheet CHE1748

**(in accordance with regulation (EU) 2015/830 and regulation (EC) 1272/2008)**

Revision: 1.0 Revision date: 04 March 2013
Date printed: 16 June 2020

## Section 1. Identification

**1.1 Product Identifier** CHE1748

Product Name 1,2-DIAMINOETHANE pure 250ml.

CAS Number 107-15-3
REACH Registration No 01-2119480383-37-XXXX

Molecular Formula $NH_2CH_2CH_2NH_2$ =60.10

**1.2 Relevent identified uses of the substance or mixure & uses advised against**

Uses of Material Chemical for industrial and laboratory use. Not suitable for domestic use.

**1.3 Supplier** Scientific Laboratory Supplies

Wilford Industrial Estate
Ruddington Lane
Wilford
Nottingham
NG11 7EP
UNITED KINGDOM

Phone 0115 9821111
Fax 0115 9825275
Email sales@scientific-labs.com

**1.4 Emergency Telephone** (08:00-17:00) 0115 9821111
(24hr) 112
(Have this document to hand)

## Section 2. Hazards Identification

**2.1 Classification of the substance or mixture**

**Classification according to regulation 1272/2008/EC**

Flammable liquid, category 3 (Flam. Liq. 3). Skin corrosion/irritation, category 1B (Skin Corr. 1B). Acute toxicity, category 4 (oral) (Acute Tox. 4 (O)). Acute toxicity, category 4 (dermal) (Acute Tox. 4 (D)). Respiratory sensitization, category 1 (Resp. Sens. 1). Skin sensitization, category 1 (Skin Sens. 1).

**2.2 Label elements**

**Labelling according to regulation 1272/2008/EC**

Signal word Danger

Hazard Pictograms

Hazard Statements Flammable liquid and vapour. Harmful in contact with skin. Harmful if swallowed. Causes severe skin burns and eye damage. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.

| | |
|---|---|
| Precautionary Statements | Keep away from heat / sparks/open flames/hot surfaces - No smoking. Wear protective gloves / protective clothing / eye protection / face protection. Do not breathe dust / fume / gas / mist / vapours / spray. Do not eat, drink or smoke when using this product. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do and continue rinsing. |

## Section 3. Composition

### 3.1 Substances

| Component | CAS No. | EEC No. | REACH No. | Conc w/w | CLP Classification (1272/2008/CE) |
|---|---|---|---|---|---|
| 1,2-Diaminoethane | 107-15-3 | 203-468-6 | 01-2119480383-37-XXXX | 99% | Flam. Liq. 3,Skin Corr. 1B,Acute Tox. 4 (O),Acute Tox. 4 (D),Resp. Sens. 1,Skin Sens. 1 |

## Section 4. First Aid

### 4.1 Description of first aid measures

| | |
|---|---|
| Eyes | Irrigate thoroughly with plenty of water for at least 10 minutes, holding the eye open. OBTAIN MEDICAL ATTENTION URGENTLY. |
| Skin | Wash off skin thoroughly with water. Remove contaminated clothing immediately and wash before re-use. In severe cases or if exposure has been great, OBTAIN MEDICAL ATTENTION. |
| Inhalation | Remove from exposure. Keep warm and at rest. If there is difficulty in breathing give oxygen if available. If breathing stops or shows signs of failing, apply artificial resuscitation. If conscious place in a sitting position. OBTAIN MEDICAL ATTENTION. |
| Ingestion | If conscious give plenty of water to drink. Do not induce vomiting. If unconscious place in the recovery position. OBTAIN MEDICAL ATTENTION URGENTLY. |
| Personal protection for first aiders | Wear protective gloves / eye protection. |

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

No further relevant information available.

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

No further relevant information available.

## Section 5. Fire Fighting

### 5.1 Extinguishing media

| | |
|---|---|
| Extinguishing Media | Water spray, alcohol resistant foam, dry powder or carbon dioxide. |
| Unsuitable Media | Nothing specified. |

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

| | |
|---|---|
| Hazards | May evolve toxic fumes if involved in a fire. Vapour-air mixtures are explosive. |

### 5.3 Advice for firefighters

| | |
|---|---|
| Advice for firefighters | Evacuate area immediately. Keep up wind. Avoid exposure to toxic vapours and fumes. Fire-fighters should wear protective clothing and breathing apparatus. |

## Section 6. Accidental Release Measures

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

| | |
|---|---|
| Personal Protection | Ensure no sources of ignition. Avoid breathing vapour. Use approved personal protective equipment. Evacuate area immediately. Do not allow general use of area until it is safe to do so. |

### 6.2 Environmental precautions

| | |
|---|---|
| Enviromental | Keep material out of sewers, storm drains, surface waters and soil. Notify the Environmental Agency and local Environmental Health Officer if major spillage occurs. |

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

| | |
|---|---|
| Major Spillage | Contain and absorb on inert material. Transfer absorbent to salvage container for removal. Wash area down with copious amounts of water. |
| Minor Spillage | Contain and absorb on inert material. Neutralise with 5M hydrochloric acid. Transfer absorbent to container for removal. Wash area down with copious amounts of water. |

**6.4 Reference to other sections**

See section 8.2 for information on protective equipment and section 13 for information on disposal.

## Section 7. Storage & Handling

**7.1 Precautions for safe handling**

Avoid contact with skin and eyes. Do not breath vapours. Do not allow to contaminate clothing.

Ensure Local Exhaust Ventilation maintains vapour concentrations below the recommended limits.

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

Well ventilated, cool, dry storage . Protect from direct sun and store away from sources of ignition.

**7.3 Specific end use(s)**

See section 1.2.

## Section 8. Workplace Exposure & Personal Protection

**8.1 Control parameters**

| Component | CAS No | Concentration | Workplace Exposure Limits | | | |
|---|---|---|---|---|---|---|
| | | | Long Term (8hr TWA) | | Short Term 15min period) | |
| 1,2-Diaminoethane | 107-15-3 | 99% | 10.0 ppm | - | 25.0 ppm | - |

Exposure data source(s) IOELV: Indicative Occupational Exposure Limit Value.

**8.2 Exposure controls**

| | |
|---|---|
| Respiratory Protection | Use L.E.V. or natural ventilation to maintain vapour concentrations below exposure limits. If not, use a well maintained chemical cartridge respirator, or use self contained breathing apparatus. |
| Hand Protection | Use nitrile gloves or PVC gauntlets. |
| Eye Protection | Use tightly fitting chemical splash proof glasses or goggles. |
| Skin Protection | If skin contact or contamination of clothing is likely, protective clothing must be worn. |
| Special Hazards | No special precautions required. |

## Section 9. Physical & Chemical Properties

**9.1 Information on basic physical and chemical properties**

| | |
|---|---|
| Appearance | Colourless liquid or frozen mass. |
| Odour | Strong ammoniacal odour. |
| pH | Not applicable |
| Boiling Point | 115°C |
| Melting Point | 11°C |
| Flash Point | 34°C (Closed cup) |
| Upper Flammable Limit | 14.2% |
| Lower Flammable Limit | 2.6% |
| Auto Ignition | 406°C |
| Explosive Properties | Moderate/severe in confined spaces. |
| Oxidising Properties | No. |
| Vapour Pressure | 10mmHg @ 20°C |
| Relative Density | 0.9000 |
| Water Solubility | Completely miscible in water. |

**9.2 Other information**

No data available.

## Section 10. Stability & Reactivity

| | | |
|---|---|---|
| **10.1** | Reactivity | No data available. |
| **10.2** | Chemical Stability | Stable under normal conditions |
| **10.3** | Possibility of hazardous reactions | No data available. |
| **10.4** | Conditions to Avoid | Hot surfaces, naked flames or other sources of ignition. |
| **10.5** | Incompatable Materials | Acids. Strong oxidising agents. Halogenated aromatic compounds. Aldehydes, ketones and acrylates. |
| **10.6** | Hazardous Decomposition Products | Burning will produce toxic fumes of NOx, carbon monoxide and/or carbon dioxide. |

## Section 11. Toxicological Information

**11.1 Information on toxicological effects**

| | |
|---|---|
| Eyes | The liquid will cause conjunctival irritation and corneal damage. Damage can range from severe irritation and corneal scarring to permanent blindness. The vapour may be irritating to the eyes. |
| Skin | The liquid will cause burns. A single prolonged exposure may result in the material being absorbed in harmful amounts. May cause skin sensitisation. |
| LD50 Skin | 657mg/kg Rabbit |
| Ingestion | Causes severe corrosion of the mouth, throat and gastro-intestinal tract. |
| LD50 Oral | 1460mg/kg Rat |
| Inhalation | Exposure to vapour concentrations above the occupational exposure limits will produce irritation of the eyes, nose, throat and respiratory tract. |
| LD50 Inhalation | Not available |
| TCLo | Not available |
| Carcinogenicity | Not considered to be a carcinogen. |
| Mutagenicity | Not considered to be a mutagen. |
| Reproductive Effects | None identified. |
| Other Information | The irritant effect provides warning that control of exposure is needed. |

## Section 12. Ecological

| | | |
|---|---|---|
| **12.1** | Toxicity | Material is practically non-toxic to fish on an acute basis (LC50 > 100mg/l. Material is moderately toxic to aquatic invertebrates on a static acute basis (LC50 1-10mg/l) Material is readily bio-degradable in the environment. Passes BOD >60%. |
| | LC50 Algal | Not available |
| | LC50 Crustacea | Not available |
| | LC50 Fish | Not 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 & vPvB assessment | Assessment not required. |
| **12.6** | Other adverse effects | None known at present. |

## Section 13. Disposal Considerations

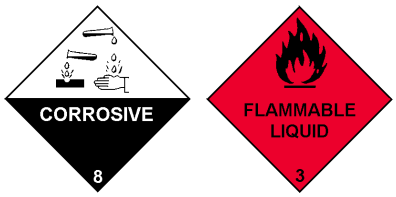
**13.1 Waste treatment methods**

| | |
|---|---|
| Disposal Methods | Dispose of in a licensed incinerator. Never dispose of into water courses or sewerage systems. |

| | |
|---|---|
| Contaminated Packaging | Use a licensed waste disposer. Do not attempt to burn any residual liquids due to risk of explosion. Clean out with a weak hydrochloric acid solution then wash out thoroughly with water. |

## Section 14. Transport Information

| | | |
|---|---|---|
| **14.1** | **UN Number** | 1604 |
| **14.2** | **Proper Shipping Name** | Ethylenediamine |
| **14.3** | **Transport classes** | |
| | UN classification | 8 |
| | Subsidiary hazard(s) | 3 |
| | Transport category | 2 |
| | ADR Hazard ID | 83 |
| | Tunnel Restriction Code | D/E |
| **14.4** | **Packing Group** | II |
| **14.5** | **Environment hazards** | See section 12. |
| **14.6** | **Special precautions for user** | No special precautions required. |
| **14.7** | **Transport in bulk** | Not transported in bulk. |




## Section 15. Regulatory Information

**15.1 Safety, health and environment regulations specific for subtance/mixture.**

**Classification, Labeling & Packaging of Substances & Mixtures Regulations (1272/2008/CE)**

| | |
|---|---|
| Classification | Flammable liquid, category 3; Skin corrosion/irritation, category 1B; Acute toxicity, category 4 (oral); Acute toxicity, category 4 (dermal); Respiratory sensitization, category 1; Skin sensitization, category 1 |
| Signal word | Danger |
| Hazard Pictograms |  |
| Hazard Statements | H226, H312, H302, H314, H334, H317<br>Flammable liquid and vapour. Harmful in contact with skin. Harmful if swallowed. Causes severe skin burns and eye damage. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction. |
| Hazard Statements (Packs of 500ml/g or less) | H226, H302+H312, H314, H334, H317<br>Flammable liquid and vapour. Harmful if swallowed and in contact with skin. Causes severe skin burns and eye damage. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction. |
| Precautionary Statements | P210, P280, P260, P270, P301+P330+P331, P305+P351+P338<br>Keep away from heat / sparks/open flames/hot surfaces - No smoking. Wear protective gloves / protective clothing / eye protection / face protection. Do not breathe dust / fume / gas / mist / vapours / spray. Do not eat, drink or smoke when using this product. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do and continue rinsing. |
| Precautionary Statements (Packs of 500ml/g or less) | P210, P280, P270, P301+P330+P331, P305+P351+P338<br>Keep away from heat / sparks/open flames/hot surfaces - No smoking. Wear protective gloves / protective clothing / eye protection / face protection. Do not eat, drink or smoke when using this product. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do and continue rinsing. |

**15.2 Chemical safety assessment**

Assessment not required.

## Section 16. Other Information

The information contained in this document only covers the hazards presented by this material, it DOES NOT constitute a workplace risk assessment. See sections 11 for toxicological information and section 12 for ecological information.

Revision number: 1.0

Revision date: 04 March 2013

Reviewed by chemist: 02 October 2014

Printed date: 16 June 2020