

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Name : Oxigon 1000
Product code : BT0077

1.2. Recommended use and restrictions on use

Recommended use : Oxygen Scavenger

1.3. Supplier

Kurita America Inc.
6600 94th Ave North
Minneapolis, MN 55445 - USA
T 866-663-7632
kai_sds@kurita-water.com - www.kuritaamerica.com

1.4. Emergency telephone number

Emergency number : CHEMTEL, For Chemical Emergency Call 800-255-3924 24hr/day 7days/week
Kurita America: 866-663-7633 International: +01-813-248-0585

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Acute toxicity (oral), Category 4 H302 Harmful if swallowed.
Acute toxicity (dermal), Category 4 H312 Harmful in contact with skin.
Skin corrosion/irritation, Category 2 H315 Causes skin irritation.

2.2. GHS Label elements, including precautionary statements

GHS US labelling

Hazard pictograms (GHS US) :



Signal word (GHS US) : Warning

Hazard statements (GHS US) : H302+H312 - Harmful if swallowed or in contact with skin
H315 - Causes skin irritation.

Precautionary statements (GHS US) : P264 - Wash hands, forearms and face thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P301+P312 - If swallowed: Call a poison center or doctor if you feel unwell.
P302+P352 - If on skin: Wash with plenty of water.
P312 - Call a poison center or doctor if you feel unwell.
P321 - Specific treatment (see supplemental first aid instruction on this label).
P322 - Specific treatment (see supplemental first aid instruction on this label)
P330 - Rinse mouth.
P332+P313 - If skin irritation occurs: Get medical advice/attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

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3.2. Mixtures

| Name | Product identifier | % | GHS US classification |
|---------------------|--------------------|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Diethylaminoethanol | (CAS-No.) 100-37-8 | < 5 | Flam. Liq. 3, H226 Acute Tox. 4 (Oral), H302 Acute Tox. 3 (Dermal), H311 Acute Tox. 4 (Inhalation), H332 Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Corr. 1, H314 Eye Dam. 1, H318 STOT RE 2, H373 Aquatic Acute 3, H402 |

SECTION 4: First-aid measures

4.1. Description of first aid measures

- First-aid measures general : Call a poison center or a doctor if you feel unwell.
- First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
- First-aid measures after skin contact : Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention.
- First-aid measures after eye contact : Rinse eyes with water as a precaution.
- First-aid measures after ingestion : Rinse mouth. Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

- Symptoms/effects after skin contact : Irritation.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

- Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Specific hazards arising from the chemical

- Fire hazard : Not flammable.
- Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

- Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- Emergency procedures : Ventilate spillage area. Avoid contact with skin, eyes and clothing.

6.1.2. For emergency responders

- Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Take up liquid spill into absorbent material.
- Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Ensure good ventilation of the work station. Do not get in eyes, on skin, or on clothing. Wear personal protective equipment.

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Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product.
Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

| | |
|---------------------------------------------------|--------------------------------------------------|
| Oxigon 1000 | |
| No additional information available | |
| Diethylaminoethanol (100-37-8) | |
| USA - ACGIH - Occupational Exposure Limits | |
| Local name | 2-Diethylaminoethanol |
| ACGIH OEL TWA [ppm] | 2 ppm |
| Remark (ACGIH) | TLV® Basis: URT irr; CNS convul. Notations: Skin |
| Regulatory reference | ACGIH 2021 |
| USA - OSHA - Occupational Exposure Limits | |
| Local name | 2-Diethylaminoethanol |
| OSHA PEL TWA [1] | 50 mg/m ³ |
| OSHA PEL TWA [2] | 10 ppm |
| Regulatory reference (US-OSHA) | OSHA Annotated Table Z-1 |

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.
Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Face shield.

Materials for protective clothing:

Plastic apron or overall

Hand protection:

Protective gloves

Eye protection:

Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of inadequate ventilation wear respiratory protection.

Personal protective equipment symbol(s):



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Appearance : clear.

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| | |
|-------------------------------------------------|-----------------------------|
| Colour | : Colorless to light yellow |
| Odour | : Slight amine |
| Odour threshold | : No data available |
| pH | : 11 |
| Melting point | : Not applicable |
| Freezing point | : -2 °C / 27°F |
| Boiling point | : No data available |
| Flash point | : > 93 °C / >200°F |
| Relative evaporation rate (butylacetate=1) | : No data available |
| Flammability (solid, gas) | : Not applicable. |
| Vapour pressure | : Same as water |
| Relative vapour density at 20 °C | : Same as water |
| Relative density | : No data available |
| Density | : 8.74 |
| Solubility | : Miscible with water. |
| Partition coefficient n-octanol/water (Log Pow) | : No data available |
| Auto-ignition temperature | : Does not burn |
| Decomposition temperature | : No data available |
| No data availableViscosity, kinematic | : No data available |
| Viscosity, dynamic | : No data available |
| Explosive limits | : No data available |
| Explosive properties | : No data available |
| Oxidising properties | : No data available |

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Extremely high or low temperatures. Protect from freezing. Keep container closed when not in use.

10.5. Incompatible materials

Strong oxidizing agents. Strong acids. Strong alkalis.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

| | |
|-----------------------------|---------------------------------|
| Acute toxicity (oral) | : Harmful if swallowed. |
| Acute toxicity (dermal) | : Harmful in contact with skin. |
| Acute toxicity (inhalation) | : Not classified |

| | |
|---------------------------------------|----------------------------------------|
| ATE US (oral) | 500 mg/kg bodyweight |
| ATE US (dermal) | 1100 mg/kg bodyweight |
| Diethylaminoethanol (100-37-8) | |
| LD50 oral rat | ≈ 1320 mg/kg bodyweight Animal: rat |
| LD50 dermal rat | 1100 mg/kg Source: ECHA |
| LD50 dermal rabbit | ≈ 1100 mg/kg bodyweight Animal: rabbit |

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Diethylaminoethanol (100-37-8)

| | |
|-----------------------|----------------------------|
| LC50 Inhalation - Rat | ≈ 4.6 mg/l air Animal: rat |
| ATE US (oral) | 500 mg/kg bodyweight |
| ATE US (dermal) | 885 mg/kg bodyweight |
| ATE US (gases) | 4500 ppmv/4h |
| ATE US (vapours) | 4.6 mg/l/4h |
| ATE US (dust,mist) | 1.5 mg/l/4h |

Skin corrosion/irritation : Causes skin irritation.
pH: 11

Serious eye damage/irritation : Not classified
pH: 11

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

Diethylaminoethanol (100-37-8)

| | |
|-------------------------------------------------|--------------------------------------------------------------------|
| LOAEC (inhalation, rat,dust/mist/fume, 90 days) | 0.12 mg/l air Animal: rat, Guideline: other: |
| NOAEL (oral, rat, 90 days) | 50 – 400 mg/kg bodyweight Animal: rat |
| STOT-repeated exposure | May cause damage to organs through prolonged or repeated exposure. |

Aspiration hazard : Not classified

Viscosity, kinematic : No data available

Symptoms/effects after skin contact : Irritation.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Transport document description (DOT) : UN1760 Corrosive liquids, n.o.s. (Diethylaminoethanol), 8, PG III

UN-No.(DOT) : UN1760

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| | |
|----------------------------|----------------------------------------------------|
| Proper Shipping Name (DOT) | : Corrosive liquids, n.o.s. Diethylaminoethanol |
| Class (DOT) | : 8 - Class 8 - Corrosive material 49 CFR 173.136 |
| Packing group (DOT) | : PG III - Minor Danger |
| Hazard labels (DOT) | : 8 - Corrosive |



| | |
|------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DOT Packaging Non Bulk (49 CFR 173.xxx) | : 203 |
| DOT Packaging Bulk (49 CFR 173.xxx) | : 241 |
| DOT Special Provisions (49 CFR 172.102) | : IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672). T7 - 4 178.274(d)(2) Normal..... 178.275(d)(3) TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = $97 / (1 + a (tr - tf))$ Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling. TP28 - A portable tank having a minimum test pressure of 2.65 bar (265 kPa) may be used provided the calculated test pressure is 2.65 bar or less based on the MAWP of the hazardous material, as defined in 178.275 of this subchapter, where the test pressure is 1.5 times the MAWP. |
| DOT Packaging Exceptions (49 CFR 173.xxx) | : 154 |
| DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) | : 5 L |
| DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) | : 60 L |
| DOT Vessel Stowage Location | : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel. |
| DOT Vessel Stowage Other | : 40 - Stow "clear of living quarters" |
| Emergency Response Guide (ERG) Number | : 154 |
| Other information | : No supplementary information available. |

Transportation of Dangerous Goods

| | |
|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Transport document description (TDG) | : UN1760 CORROSIVE LIQUID, N.O.S. (Diethylaminoethanol), 8, III |
| UN-No. (TDG) | : UN1760 |
| Proper Shipping Name (TDG) | : CORROSIVE LIQUID, N.O.S. |
| TDG Primary Hazard Classes | : 8 - Class 8 - Corrosives |
| Packing group (TDG) | : III - Minor Danger |
| TDG Special Provisions | : 16 - (1) The technical name of at least one of the most dangerous substances that predominantly contributes to the hazard or hazards posed by the dangerous goods must be shown, in parentheses, on the shipping document following the shipping name in accordance with clause 3.5(1)(c)(ii)(A) of Part 3 (Documentation). The technical name must also be shown, in parentheses, on a small means of containment or on a tag following the shipping name in accordance with subsections 4.11(2) and (3) of Part 4 (Dangerous Goods Safety Marks). (2) Despite subsection (1), the technical name for the following dangerous goods is not required to be shown on a shipping document or on a small means of containment when Canadian law for domestic transport or an international convention for international transport prohibits the disclosure of the technical name: (a) UN1544, ALKALOID SALTS, SOLID, N.O.S. or ALKALOIDS, SOLID, N.O.S; (b) UN1851, MEDICINE, LIQUID, TOXIC, N.O.S; (c) UN3140, ALKALOID SALTS, LIQUID, N.O.S. or ALKALOIDS, LIQUID, N.O.S; (d) UN3248, MEDICINE, LIQUID, FLAMMABLE, TOXIC, N.O.S; or (e) UN3249, MEDICINE, SOLID, TOXIC, N.O.S. (3) Despite subsection (1), the technical name for the following dangerous goods is not required to be shown on a small means of containment: (a) UN2814, INFECTIOUS SUBSTANCE, AFFECTING HUMANS; or (b) UN2900, INFECTIOUS SUBSTANCE, AFFECTING ANIMALS. |

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Explosive Limit and Limited Quantity Index : 5 L
Passenger Carrying Road Vehicle or Passenger : 5 L
Carrying Railway Vehicle Index

Transport by sea

UN-No. (IMDG) : UN 1760 CORROSIVE LIQUID, N.O.S. (Diethylaminoethanol), 8, III
Proper Shipping Name (IMDG) : CORROSIVE LIQUID, N.O.S.
Class (IMDG) : 8 - Corrosive substances
Packing group (IMDG) : III - substances presenting low danger
Limited quantities (IMDG) : 5 L

Air transport

UN-No. (IATA) : UN 1760 Corrosive liquid, n.o.s. (Diethylaminoethanol), 8, III
Proper Shipping Name (IATA) : Corrosive liquid, n.o.s.
Class (IATA) : 8 - Corrosives
Packing group (IATA) : III - Minor Danger

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

This product or mixture is not known to contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

15.2. International regulations

CANADA

Diethylaminoethanol (100-37-8)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

No additional information available

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

| Component | State or local regulations |
|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| Diethylaminoethanol(100-37-8) | U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List |

SECTION 16: Other information

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| | |
|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Hazard Rating | |
| Health | : 2 Moderate Hazard - Temporary or minor injury may occur |
| Flammability | : 0 Minimal Hazard - Materials that will not burn |
| Physical | : 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives. |
| Personal protection | : D D - Face shield and eye protection, Gloves, Synthetic apron |

Kurita - SDS US (GHS HazCom 2012)

Author: Kurita Water Industries Ltd.

Revision Notes: Updated to GHS format

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