

## SAFETY DATA SHEET

Density Reference Standard, DEN15-10, DEN20-09, DEN25-08, DEN15-11, DEN20-10, DEN25-09, DEN15-12, DEN20-11, DEN25-10, DEN15-10-500ML, DEN20-09-500ML, DEN25-08-500ML, DEN15-11-500ML, DEN20-10-500ML, DEN25-09-500ML, DEN15-12-500ML, DEN20-11-500ML, DEN25-10-500ML

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

#### 1.1. Product identifier

##### Trade name

Density Reference Standard, DEN15-10, DEN20-09, DEN25-08, DEN15-11, DEN20-10, DEN25-09, DEN15-12, DEN20-11, DEN25-10, DEN15-10-500ML, DEN20-09-500ML, DEN25-08-500ML, DEN15-11-500ML, DEN20-10-500ML, DEN25-09-500ML, DEN15-12-500ML, DEN20-11-500ML, DEN25-10-500ML

##### Product no.

DEN15-10, DEN20-09, DEN25-08, DEN15-11, DEN20-10, DEN25-09, DEN15-12, DEN20-11, DEN25-10, DEN15-10-500ML, DEN20-09-500ML, DEN25-08-500ML, DEN15-11-500ML, DEN20-10-500ML, DEN25-09-500ML, DEN15-12-500ML, DEN20-11-500ML, DEN25-10-500ML

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

##### Relevant identified uses of the substance or mixture

Laboratory use  
Restricted to professional and industrial use.

##### Uses advised against

None known.

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

##### Company and address

###### **ARO Scientific Ltd**

Unit 1 Bridgeway Business Park,  
Ditton Road  
WA8 0QE Widnes  
England  
+44 (0)151 424 2828

##### Contact person

Technical Help

##### E-mail

technical@aroscientific.com

##### Revision

07/01/2026

##### SDS Version

1.0

#### 1.4. Emergency telephone number

Healthcare professionals: Dial 0344 892 0111 to reach The National Poisons Information Service (NPIS) (24 hour service)

General public:

England - Dial 111 to reach NHS 111 (24 hour service)

Scotland - Dial 111 to reach NHS 24 (24 hour service)

Wales - Dial 111 or 0845 4647 to reach NHS Direct (24 hour service)  
See section 4 "First aid measures".

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

Not classified according to Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law.

### 2.2. Label elements

#### Hazard pictogram(s)

Not applicable.

#### Signal word

Not applicable.

#### Hazard statement(s)

Not applicable.

#### Precautionary statement(s)

##### General

Not applicable.

##### Prevention

Not applicable.

##### Response

Not applicable.

##### Storage

Not applicable.

##### Disposal

Not applicable.

#### Hazardous substances

Does not contain any substances required to report

#### Additional labelling

### 2.3. Other hazards

#### Additional warnings

This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.

This product does not contain any substances considered to be endocrine disruptors in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2023/707.

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable. This product is a mixture.

### 3.2. Mixtures

Does not contain any substances required to report

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

#### Other information

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## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### General information

In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet.

Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

#### Inhalation

Upon breathing difficulties or irritation of the respiratory tract: Bring the person into fresh air and stay with him/her.

#### Skin contact

Remove contaminated clothing and shoes immediately. Ensure to wash exposed skin thoroughly with water and soap. Skin cleanser can be used. DO NOT use solvents or thinners.

#### Eye contact

If in eyes: Flush eyes with water or saline water (20-30 °C) for at least 5 minutes. Remove contact lenses. Seek medical assistance and continue flushing during transport.

#### Ingestion

If the person is conscious, rinse the mouth with water and stay with the person. Never give the person anything to drink.

In case of malaise, seek medical advice immediately and bring the safety data sheet or label from the product. Do not induce vomiting, unless recommended by the doctor. Have the person lean forward with head down to avoid inhalation of or choking on vomited material.

#### Burns

Not applicable.

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

None known.

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

Treat symptomatically.

#### Information to medics

Bring this safety data sheet or the label from this product.

## SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media: Alcohol-resistant foam, carbon dioxide, powder, water mist.

Unsuitable extinguishing media: Waterjets should not be used, since they can spread the fire.

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

Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.

If the product is exposed to high temperatures, e.g. in the event of fire, dangerous decomposition compounds are produced. These are:

Carbon oxides (CO / CO<sub>2</sub>)

#### 5.3. Advice for firefighters

No specific requirements.

## SECTION 6: Accidental release measures

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

Ensure adequate ventilation, especially in confined areas.

Contaminated areas may be slippery.

#### 6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc.

Keep unauthorized persons away from the spill

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

Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.

#### 6.4. Reference to other sections

See section 13 "Disposal considerations" on handling of waste.

See section 8 "Exposure controls/personal protection" for protective measures.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Smoking, drinking and consumption of food is not allowed in the work area.

See section 8 "Exposure controls/personal protection" for information on personal protection.

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

Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

#### Recommended storage material

Always store in containers of the same material as the original container.

#### Storage conditions

No specific requirements.

#### Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

### 7.3. Specific end use(s)

This product should only be used for applications quoted in section 1.2.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

Glycerol

Long term exposure limit (8 hours) (mg/m<sup>3</sup>): 10

The Control of Substances Hazardous to Health Regulations 2002. SI 2002/2677 The Stationery Office 2002.  
EH40/2005 Workplace exposure limits (Fourth Edition 2020).

#### DNEL

Glycerol

Duration:	Route of exposure:	DNEL:
Long term - Local effects - General population	Inhalation	132 mg/m <sup>3</sup>
Long term - Local effects - Workers	Inhalation	220 mg/m <sup>3</sup>

#### PNEC

Glycerol

Route of exposure:	Duration of Exposure:	PNEC:
Sewage treatment plant		1 g/L

### 8.2. Exposure controls

Compliance with the given occupational exposure limits values should be controlled on a regular basis.

#### General recommendations

Smoking, drinking and consumption of food is not allowed in the work area.

#### Exposure scenarios

There are no exposure scenarios implemented for this product.

#### Exposure limits

Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above.

#### Appropriate technical measures

The formation of vapours must be kept at a minimum and below current limit values (see above). Installation of a local exhaust system if normal air flow in the work room is not sufficient is recommended. Ensure eyewash and emergency showers are clearly marked.

Apply standard precautions during use of the product. Avoid inhalation of vapours.

#### Hygiene measures

In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Pay special attention to hands, forearms and face.

#### Measures to avoid environmental exposure

No specific requirements.

#### Individual protection measures, such as personal protective equipment

##### Generally

No specific requirements.

##### Respiratory Equipment

No specific requirements.

##### Skin protection

No specific requirements.

##### Hand protection

No specific requirements.

##### Eye protection

No specific requirements.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

#### Physical state

Liquid

#### Colour

No data available.

#### Odour / Odour threshold

No data available.

#### pH

No data available.

#### Density (g/cm<sup>3</sup>)

No data available.

#### Kinematic viscosity

No data available.

#### Particle characteristics

Does not apply to liquids.

#### Phase changes

##### Melting point/Freezing point (°C)

No data available.

##### Softening point/range (°C)

Does not apply to liquids.

##### Boiling point (°C)

No data available.

##### Vapour pressure

No data available.

##### Relative vapour density

No data available.

##### Decomposition temperature (°C)

No data available.

## Data on fire and explosion hazards

### Flash point (°C)

No data available.

### Flammability (°C)

No data available.

### Auto-ignition temperature (°C)

No data available.

### Lower and upper explosion limit (% v/v)

No data available.

## Solubility

### Solubility in water

No data available.

### n-octanol/water coefficient (LogKow)

No data available.

### Solubility in fat (g/L)

No data available.

## 9.2. Other information

### Oxidizing properties

No data available.

### Other physical and chemical parameters

No data available.

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No data available.

### 10.2. Chemical stability

The product is stable under the conditions, noted in section 7 "Handling and storage".

### 10.3. Possibility of hazardous reactions

None known.

### 10.4. Conditions to avoid

None known.

### 10.5. Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

### 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 hazard classes as defined in Regulation (EC) No 1272/2008 as retained and amended in UK law

#### Acute toxicity

Based on available data for the mixture, the classification criteria are not met.

#### Skin corrosion/irritation

Based on available data for the mixture, the classification criteria are not met.

#### Serious eye damage/irritation

Based on available data for the mixture, the classification criteria are not met.

#### Respiratory sensitisation

Based on available data for the mixture, the classification criteria are not met.

#### Skin sensitisation

Based on available data for the mixture, the classification criteria are not met.

#### Germ cell mutagenicity

Based on available data for the mixture, the classification criteria are not met.

#### Carcinogenicity

Based on available data for the mixture, the classification criteria are not met.

#### Reproductive toxicity

Based on available data for the mixture, the classification criteria are not met.

#### STOT-single exposure

Based on available data for the mixture, the classification criteria are not met.

#### STOT-repeated exposure

Based on available data for the mixture, the classification criteria are not met.

#### Aspiration hazard

Based on available data for the mixture, the classification criteria are not met.

#### Symptoms related to the physical, chemical and toxicological characteristics

None known.

#### 11.2. Information on other hazards

##### Endocrine disrupting properties

This mixture/product does not contain any substances known to have hormone-disrupting properties in relation to health.

##### Other information

None known.

## SECTION 12: Ecological information

#### 12.1. Toxicity

Based on available data for the mixture, the classification criteria are not met.

#### 12.2. Persistence and degradability

Based on available data for the mixture, the classification criteria are not met.

#### 12.3. Bioaccumulative potential

Based on available data for the mixture, the classification criteria are not met.

#### 12.4. Mobility in soil

No data available.

#### 12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.

#### 12.6. Endocrine disrupting properties

This mixture/product does not contain any substances considered to have endocrine-disrupting properties in relation to the environment.

#### 12.7. Other adverse effects

None known.

## SECTION 13: Disposal considerations

#### Waste treatment methods

Product is not covered by regulations on dangerous waste.

Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law.

#### EWC code

Not applicable.

#### Specific labelling

#### Contaminated packing

Packaging containing residues of the product must be disposed of similarly to the product.

## SECTION 14: Transport information

	14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other informatio n:
ADR/ADN/RID	-	-	-	-	-	-
IMDG	-	-	-	-	-	-
IATA	-	-	-	-	-	-

\* Packing group

\*\* Environmental hazards

#### Additional information

Not dangerous goods according to ADR/ADN/RID, IATA and IMDG.

#### 14.6. Special precautions for user

Not applicable.

#### 14.7. Maritime transport in bulk according to IMO instruments

No data available.

## SECTION 15: Regulatory information

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

#### Restrictions for application

Industrial use only.

#### Demands for specific education

No specific requirements.

#### Control of Major Accident Hazards (COMAH) - Categories / dangerous substances

Not applicable.

#### Additional information

Not applicable.

#### Sources

Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law.

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP) as retained and amended in UK law.

Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) as retained and amended in UK law.

### 15.2. Chemical safety assessment

No

## SECTION 16: Other information

### Abbreviations and acronyms

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway

ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road

ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

CAS = Chemical Abstracts Service

CE = Conformité Européenne (European conformity)

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]

CSA = Chemical Safety Assessment

CSR = Chemical Safety Report

DMEL = Derived Minimal Effect Level

DNEL = Derived No Effect Level

EINECS = European Inventory of Existing Commercial chemical Substances

ES = Exposure Scenario

EUH statement = CLP-specific Hazard statement

EuPCS = European Product Categorisation System

EWC = European Waste Catalogue

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

GWP = Global warming potential

IARC = International Agency for Research on Cancer (IARC)

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

OECD = Organisation for Economic Co-operation and Development

PBT = Persistent, Bioaccumulative and Toxic

PNEC = Predicted No Effect Concentration

RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail

RRN = REACH Registration Number

SCL = A specific concentration limit

SVHC = Substances of Very High Concern

STOT-RE = Specific Target Organ Toxicity - Repeated Exposure

STOT-SE = Specific Target Organ Toxicity - Single Exposure

TWA = Time weighted average

UN = United Nations

UVBC = Unknown or variable composition, complex reaction products or of biological materials

VOC = Volatile Organic Compound

vPvB = Very Persistent and Very Bioaccumulative

#### Additional information

Not applicable.

#### The safety data sheet is validated by

Technical Help

#### Other

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a triangle.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.

Country-language: GB-en