

#### SAFETY DATA SHEET

# Total Base Number, Certified Reference Materials, TBN1, TBN1/3, TBN3, TBN3/3, TBN6, TBN6/3, TBN10, TBN10/3, TBN10/3, TBN15/3, TBN30, TBN30/3, TBN40, TBN40/3, TBN70, TBN70/3

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

# 1.1. Product identifier

#### **▼**Trade name

Total Base Number, Certified Reference Materials, TBN1, TBN1/3, TBN3/3, TBN6, TBN6/3, TBN10, TBN10/3, TBN15/3, TBN30, TBN30/3, TBN40, TBN40/3, TBN70, TBN70/3

#### ▼ Product no.

TBN1, TBN1/3, TBN3, TBN3/3, TBN6, TBN6/3, TBN10, TBN10/3, TBN15, TBN15/3, TBN30, TBN30/3, TBN40, TBN40/3, TBN70, TBN70/3

#### 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 users.

# 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

23/11/2023

# SDS Version

2.0

# Date of previous version

06/10/2023 (1.0)

# 1.4. Emergency telephone number

Contact The National Poisons Information Service (dial 111, 24 h service). See section 4 "First aid measures".

# SECTION 2: Hazards identification

Classified according to Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law.

#### 2.1. Classification of the substance or mixture

Skin Sens. 1; H317, May cause an allergic skin reaction.

#### 2.2. Label elements

Hazard pictogram(s)





#### Signal word

Warning

# Hazard statement(s)

May cause an allergic skin reaction. (H317)

# Precautionary statement(s)

# General

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#### Prevention

Avoid breathing mist/vapour. (P261)

Contaminated work clothing should not be allowed out of the workplace. (P272) Wear protective gloves/protective clothing/eye protection/face protection. (P280)

#### Response

If skin irritation or rash occurs: Get medical advice/attention. (P333+P313) Take off contaminated clothing and wash it before reuse. (P362+P364)

#### Storage

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#### Disposal

Dispose of contents/container in accordance with local regulation (P501)

#### Hazardous substances

Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts

# Additional labelling

Not applicable.

# 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) 2018/605.

# SECTION 3: Composition/information on ingredients

# 3.1. Substances

Not applicable. This product is a mixture.

# 3.2. Mixtures

Identifiers	% w/w	Classification	Note
CAS No.: 68584-23-6 EC No.: 271-529-4 UK-REACH: Index No.:	3-5%	Skin Sens. 1B, H317	
CAS No.: 70024-69-0 EC No.: 274-263-7 UK-REACH: Index No.:	3-5%	Skin Sens. 1B, H317	
CAS No.: 61789-86-4 EC No.: 263-093-9 UK-REACH: Index No.:	1-3%	Eye Irrit. 2, H319	
CAS No.: 1305-62-0 EC No.: 215-137-3 UK-REACH: Index No.:	<1%	Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335	[1]
	CAS No.: 68584-23-6 EC No.: 271-529-4 UK-REACH: Index No.:  CAS No.: 70024-69-0 EC No.: 274-263-7 UK-REACH: Index No.:  CAS No.: 61789-86-4 EC No.: 263-093-9 UK-REACH: Index No.:  CAS No.: 1305-62-0 EC No.: 215-137-3 UK-REACH:	CAS No.: 68584-23-6 EC No.: 271-529-4 UK-REACH: Index No.:  CAS No.: 70024-69-0 EC No.: 274-263-7 UK-REACH: Index No.:  CAS No.: 61789-86-4 EC No.: 263-093-9 UK-REACH: Index No.:  CAS No.: 1305-62-0 EC No.: 215-137-3 UK-REACH:	CAS No.: 68584-23-6 EC No.: 271-529-4 UK-REACH: Index No.:  CAS No.: 70024-69-0 EC No.: 274-263-7 UK-REACH: Index No.:  CAS No.: 61789-86-4 EC No.: 263-093-9 UK-REACH: Index No.:  CAS No.: 1305-62-0 EC No.: 215-137-3 UK-REACH: SKin Sens. 1B, H317  Experiment Sens.

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

#### Other information



[1] European occupational exposure limit.

# 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

IF ON SKIN: Wash with plenty of water and soap.

Remove contaminated clothing and shoes. Ensure to wash exposed skin thoroughly with water and soap. DO NOT use solvents or thinners.

If skin irritation occurs: Get medical advice/attention.

#### Eve 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

Sensitisation: This product contains substances, which may trigger allergic reaction upon dermal contact.

Manifestation of allergic reactions typically takes place within 12-72 hours after exposure.

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

If skin irritation or rash occurs: Get medical advice/attention.

#### 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.

# 5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact The National Poisons Information Service (dial 111, 24 h service) in order to obtain further advice.

#### SECTION 6: Accidental release measures

# 6.1. Personal precautions, protective equipment and emergency procedures

Avoid direct contact with spilled substances.

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 temperature

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

No substances are listed in the national list of substances with an occupational exposure limit.

# DNEL

No data available.

# **PNEC**

No data available.

# 8.2. Exposure controls

Control is unnecessary if the product is used as intended.

# 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**

Occupational exposure limits have not been defined for the substances in this product.

#### Appropriate technical measures

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. Always wash hands, forearms and face.

#### Measures to avoid environmental exposure

No specific requirements.

# Individual protection measures, such as personal protective equipment

#### **▼** Generally

Use only UKCA marked protective equipment.

#### Respiratory Equipment

No specific requirements

#### Skin protection

No specific requirements.

**▼** Hand protection



Material	Glove thickness (mm)	Breakthrough time (min.)	Standards	
Gloves	-	-	EN374	

#### Eye protection

No specific requirements.

# SECTION 9: Physical and chemical properties

# 9.1. Information on basic physical and chemical properties

# Physical state

Liquid

Colour

Testing not relevant or not possible due to the nature of the product.

Odour / Odour threshold

Testing not relevant or not possible due to the nature of the product.

На

Testing not relevant or not possible due to the nature of the product.

Density (g/cm³)

Testing not relevant or not possible due to the nature of the product.

Kinematic viscosity

Testing not relevant or not possible due to the nature of the product.

Particle characteristics

Does not apply to liquids.

# Phase changes

# Melting point/Freezing point (°C)

Testing not relevant or not possible due to the nature of the product.

Softening point/range (waxes and pastes) (°C)

Does not apply to liquids.

# Boiling point (°C)

Testing not relevant or not possible due to the nature of the product.

Vapour pressure

Testing not relevant or not possible due to the nature of the product.

Relative vapour density

Testing not relevant or not possible due to the nature of the product.

Decomposition temperature (°C)

Testing not relevant or not possible due to the nature of the product.

# Data on fire and explosion hazards

Flash point (°C)

Testing not relevant or not possible due to the nature of the product.

Flammability (°C)

Testing not relevant or not possible due to the nature of the product.

Auto-ignition temperature (°C)

Testing not relevant or not possible due to the nature of the product.

Lower and upper explosion limit (% v/v)

Testing not relevant or not possible due to the nature of the product.

# Solubility

Solubility in water

Testing not relevant or not possible due to the nature of the product.

n-octanol/water coefficient

Testing not relevant or not possible due to the nature of the product.

Solubility in fat (g/L)

Testing not relevant or not possible due to the nature of the product.

#### 9.2. Other information

# Oxidizing properties

Testing not relevant or not possible due to the nature of the product.



# 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

The product is not degraded when used as specified in section 1.

# **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, the classification criteria are not met.

# Skin corrosion/irritation

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

# Serious eye damage/irritation

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

# Respiratory sensitisation

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

#### Skin sensitisation

May cause an allergic skin reaction.

#### Germ cell mutagenicity

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

# Carcinogenicity

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

# Reproductive toxicity

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

#### STOT-single exposure

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

# STOT-repeated exposure

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

# Aspiration hazard

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

# 11.2. Information on other hazards

# Long term effects

None known.

# 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

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

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.

Dispose of contents/container to an approved waste disposal plant.

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 / I	14.2 D UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information:
ADR	-	-	-	-	-	-
IMDG	-	-	-	-	-	-
IATA	-	-	-	-	-	-

<sup>\*</sup> Packing group

Additional information

Not dangerous goods according to ADR, 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

Restricted to professional users.

People under the age of 18 shall not be exposed to this product.

#### Demands for specific education

No specific requirements.

# SEVESO - Categories / dangerous substances

Not applicable.

#### Additional information

Not applicable.

#### Source

The Management of Health and Safety at Work Regulations 1999.

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

<sup>\*\*</sup> Environmental hazards



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

# Full text of H-phrases as mentioned in section 3

H315, Causes skin irritation.

H317, May cause an allergic skin reaction.

H318, Causes serious eye damage.

H319, Causes serious eye irritation.

H335, May cause respiratory irritation.

#### 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

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

The classification of the substance/mixture in regard of health hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law.

# ▼ 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 blue



#### 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