

2-BROMO-4-(TRIFLUOROMETHYL)PHENYLACETONITRILE

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

## 1.1. Product identifier

Product name: 2-BROMO-4-(TRIFLUOROMETHYL)PHENYLACETONITRILE

CAS number: 474024-36-7

Product code: PC5873

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

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

Company name:	Apollo Scientific Ltd
	Units 3 & 4
	Parkway
	Denton
	Manchester
	M34 3SG
	UK
Tel:	0161 337 9971
Fax:	0161 336 6932
Email:	david.tideswell@apolloscientific.co.uk

## 1.4. Emergency telephone number

## Section 2: Hazards identification

## 2.1. Classification of the substance or mixture

Classification under CLP: Acute Tox. 4: H302; STOT SE 3: H335; Eye Irrit. 2: H319; Skin Irrit. 2: H315
Most important adverse effects: Harmful if swallowed. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.

## 2.2. Label elements

Label elements:	
Hazard statements:	H302: Harmful if swallowed.
	H315: Causes skin irritation.
	H319: Causes serious eye irritation.
	H335: May cause respiratory irritation.
Signal words:	Warning

Hazard pictograms: GHS07: Exclamation mark



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Precautionary statements: P271: Use only outdoors or in a well-ventilated area.

P261: Avoid breathing dust/vapours.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

2.3. Other hazards

**PBT:** This product is not identified as a PBT/vPvB substance.

## Section 3: Composition/information on ingredients

## 3.1. Substances

Chemical identity: 2-BROMO-4-(TRIFLUOROMETHYL)PHENYLACETONITRILE

CAS number: 474024-36-7

Section 4: First aid measures

## 4.1. Description of first aid measures

Skin contact: Wash immediately with plenty of soap and water.

Eye contact: Bathe the eye with running water for 15 minutes.

**Ingestion:** Do not induce vomiting. Wash out mouth with water. If conscious, give half a litre of water to drink immediately. Transfer to hospital as soon as possible.

Inhalation: Remove casualty from exposure ensuring one's own safety whilst doing so. Consult a doctor.

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

**Skin contact:** There may be irritation and redness at the site of contact.

Eye contact: There may be irritation and redness. The eyes may water profusely.

**Ingestion:** There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur. There may be vomiting.

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest.

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

## Section 5: Fire-fighting measures

#### 5.1. Extinguishing media

**Extinguishing media:** Carbon dioxide, dry chemical powder, foam. Suitable extinguishing media for the surrounding fire should be used.

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

**Exposure hazards:** In combustion emits toxic fumes of carbon dioxide / carbon monoxide. Nitrogen oxides (NOx). Hydrogen cyanide (HCN). Hydrogen bromide (HBr). Hydrogen fluoride (HF).

#### 5.3. Advice for fire-fighters

Advice for fire-fighters: Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes. Keep cylinders cool with water spray.

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# Personal precautions: Refer to section 8 of SDS for personal protection details. If outside do not approach from downwind. If outside keep bystanders upwind and away from danger point. Mark out the contaminated area with signs and prevent access to unauthorised personnel. 6.2. Environmental precautions Environmental precautions: Do not discharge into drains or rivers. 6.3. Methods and material for containment and cleaning up Clean-up procedures: Transfer to a closable, labelled salvage container for disposal by an appropriate method. Avoid all incompatible materials in clean-up procedure - see section 10 of SDS. 6.4. Reference to other sections Section 7: Handling and storage 7.1. Precautions for safe handling Handling requirements: Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area. Do not handle in a confined space. Avoid the formation or spread of dust in the air. Only use in fume hood. 7.2. Conditions for safe storage, including any incompatibilities Storage conditions: Store in a cool, well ventilated area. Keep container tightly closed. Light Sensitive. Suitable packaging: Must only be kept in original packaging. 7.3. Specific end use(s) Section 8: Exposure controls/personal protection 8.1. Control parameters Workplace exposure limits: No data available. **DNEL/PNEC** Values DNEL / PNEC No data available. 8.2. Exposure controls Engineering measures: Ensure there is sufficient ventilation of the area. Respiratory protection: Self-contained breathing apparatus must be available in case of emergency. Respiratory protective device with particle filter. Hand protection: Protective gloves.

**Eye protection:** Safety glasses. Ensure eye bath is to hand.

Skin protection: Protective clothing.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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Relative density: 1.626 g/cm3

## Section 9: Physical and chemical properties

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

State: Low-melting solid.

Boiling point/range ℃: 265-266

#### 9.2. Other information

Other information: No data available.

## Section 10: Stability and reactivity

10.1. Reactivity

Reactivity: Stable under recommended transport or storage conditions.

## 10.2. Chemical stability

Chemical stability: Stable under normal conditions.

## 10.3. Possibility of hazardous reactions

Hazardous reactions: Hazardous reactions will not occur under normal transport or storage conditions.

## 10.4. Conditions to avoid

Conditions to avoid: Heat. Light.

### 10.5. Incompatible materials

Materials to avoid: Strong oxidising agents. Strong acids.

## 10.6. Hazardous decomposition products

Haz. decomp. products: In combustion emits toxic fumes of carbon dioxide / carbon monoxide. Nitrogen oxides

(NOx). Hydrogen cyanide (HCN). Hydrogen bromide gas (HBr). Hydrogen fluoride (HF).

## Section 11: Toxicological information

## 11.1. Information on toxicological effects

## Relevant hazards for substance:

Hazard	Route	Basis
Acute toxicity (ac. tox. 4)	ING	Hazardous: calculated
Skin corrosion/irritation	DRM	Hazardous: calculated
Serious eye damage/irritation	OPT	Hazardous: calculated
STOT-single exposure	INH	Hazardous: calculated

## Symptoms / routes of exposure

Skin contact: There may be irritation and redness at the site of contact.

Eye contact: There may be irritation and redness. The eyes may water profusely.

Ingestion: There may be soreness and redness of the mouth and throat. Nausea and stomach

pain may occur. There may be vomiting.

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Inhalation: There may be irritation of the throat with a feeling of tightness in the chest.

## Section 12: Ecological information

12.1. Toxicity

Ecotoxicity values: No data available.

## 12.2. Persistence and degradability

Persistence and degradability: No data available.

## 12.3. Bioaccumulative potential

Bioaccumulative potential: No data available.

12.4. Mobility in soil

Mobility: No data available.

## 12.5. Results of PBT and vPvB assessment

PBT identification: This product is not identified as a PBT/vPvB substance.

12.6. Other adverse effects

Other adverse effects: No data available.

## Section 13: Disposal considerations

## 13.1. Waste treatment methods

Disposal operations:	Transfer to a suitable container and arrange for collection by specialised disposal
	company. MATERIAL SHOULD BE DISPOSED OF IN ACCORDANCE WITH LOCAL,
	STATE AND FEDERAL REGULATIONS
Disposal of packaging:	Dispose of as special waste in compliance with local and national regulations Observe
	all federal, state and local environmental regulations.
NB:	The user's attention is drawn to the possible existence of regional or national
	regulations regarding disposal.

## Section 14: Transport information

Transport class: This product does not require a classification for transport.

## Section 15: Regulatory information

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

Specific regulations: Not applicable.

15.2. Chemical Safety Assessment

## Section 16: Other information

## Other information

Other information: This safety data sheet is prepared in accordance with Commission Regulation (EU) No

## 2-BROMO-4-(TRIFLUOROMETHYL)PHENYLACETONITRILE

	* Data predicted using computational software. Toxtree - Toxic Hazard Estimation by
	decision tree approach. http://ecb.jrc.ec.europa.eu/qsar/qsar-tools/index.php?
	c=TOXTREE
	~ Data predicted using computational software ACD/ToxSuite v 2.95.1 Copyright 1994-
	2009 ACD/labs, Copyright 2001-2009 Pharma Algorithms, Inc, Advanced Chemistry
	Development, Inc (ACD/Labs). http://www.acdlabs.com/products/pc_admet/tox/tox/
Phrases used in s.2 and s.3:	H302: Harmful if swallowed.
	H315: Causes skin irritation.
	H319: Causes serious eye irritation.
	H335: May cause respiratory irritation.
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