

ALFAAA11503

# 4-Bromocinnamic acid, predominantly trans

# SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

产品说明:	4-溴肉桂酸,主体成分是反式
Product Description:	4-Bromocinnamic acid, predominantly trans
Cat No. :	<b>A11503</b>
CAS No	1200-07-3
Molecular Formula	C9 H7 Br O2
Supplier	Avocado Research Chemicals Ltd. (Part of Thermo Fisher Scientific) Shore Road, Heysham Lancashire, LA3 2XY, United Kingdom Office Tel: +44 (0) 1524 850506 Office Fax: +44 (0) 1524 850608
Emergency Telephone Number	For information <b>US</b> call: 001-800-227-6701 / <b>Europe</b> call: +32 14 57 52 11 Emergency Number <b>US:</b> 001-201-796-7100 / <b>Europe:</b> +32 14 57 52 99 <b>CHEMTREC</b> Tel. No. <b>US:</b> 001-800-424-9300 / <b>Europe:</b> 001-703-527-3887
E-mail address	begel.sdsdesk@thermofisher.com
Recommended Use	Laboratory chemicals.
Uses advised against	No Information available

# **SECTION 2. HAZARD IDENTIFICATION**

Physical	State
Powder S	Solid

Appearance Off-white Odor No information available

**Emergency Overview** 

Harmful if swallowed. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.

#### Classification of the substance or mixture

Acute Oral Toxicity	Category 4
Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2
Specific target organ toxicity - (single exposure)	Category 3

### Label Elements



Signal Word

Warning

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# Hazard Statements

H302 - Harmful if swallowed

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H335 - May cause respiratory irritation

# **Precautionary Statements**

# Prevention

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray

P264 - Wash face, hands and any exposed skin thoroughly after handling

P270 - Do not eat, drink or smoke when using this product

P271 - Use only outdoors or in a well-ventilated area

P280 - Wear protective gloves/protective clothing/eye protection/face protection

#### Response

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water

P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P312 - Call a POISON CENTER or doctor if you feel unwell

P330 - Rinse mouth

P362 + P364 - Take off contaminated clothing and wash it before reuse

#### Storage

P403 + P233 - Store in a well-ventilated place. Keep container tightly closed

Disposal

P501 - Dispose of contents/ container to an approved waste disposal plant

#### Physical and Chemical Hazards

None identified.

#### **Health Hazards**

Harmful if swallowed. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.

### **Environmental hazards**

Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants.

This product does not contain any known or suspected endocrine disruptors.

# SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No	Weight %
p-Bromocinnamic acid	1200-07-3	97

# SECTION 4. FIRST AID MEASURES

#### Eye Contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.

#### Skin Contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get medical attention.

#### Inhalation

Remove from exposure, lie down. Remove to fresh air. If not breathing, give artificial respiration. Get medical attention.

### Ingestion

Clean mouth with water. Get medical attention.

#### Most important symptoms and effects

No information available.

#### Self-Protection of the First Aider

Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of

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contamination.

#### Notes to Physician

Treat symptomatically.

# **SECTION 5. FIRE-FIGHTING MEASURES**

#### Suitable Extinguishing Media

Water spray. Carbon dioxide (CO 2). Dry chemical. Chemical foam.

#### Extinguishing media which must not be used for safety reasons

No information available.

#### **Specific Hazards Arising from the Chemical**

Thermal decomposition can lead to release of irritating gases and vapors.

#### **Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

#### **SECTION 6. ACCIDENTAL RELEASE MEASURES**

#### Personal Precautions

Ensure adequate ventilation.

#### **Environmental Precautions**

See Section 12 for additional Ecological Information.

#### Methods for Containment and Clean Up

Sweep up and shovel into suitable containers for disposal.

Refer to protective measures listed in Sections 8 and 13.

### **SECTION 7. HANDLING AND STORAGE**

#### Handling

Avoid contact with skin and eyes. Do not breathe dust. Handle product only in closed system or provide appropriate exhaust ventilation.

#### Storage

Keep in a dry, cool and well-ventilated place. Keep container tightly closed.

#### Specific Use(s)

Use in laboratories

#### **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

#### **Control Parameters**

#### Monitoring methods

BS EN 14042:2003 Title Identifier: Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents. MDHS14/3 General methods for sampling and gravimetric analysis of respirable and inhalable dust

#### Exposure Controls

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#### Engineering Measures

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location. Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source.

# Personal protective equipment

Eye Protection	Goggles (European standard - EN 166)							
Hand Protection	Protective gloves							
Glove material Natural rubber Butyl rubber Nitrile rubber Neoprene PVC	Breakthrough time See manufacturers recommendations	Glove thickness	EU standard EN 374	Glove comments (minimum requirement)				

Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information)

Ensure gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.

Remove gloves with care avoiding skin contamination.

Skin and body protection	Wear appropriate protective gloves and clothing to prevent skin exposure
<b>Respiratory Protection</b>	No protective equipment is needed under normal use conditions.
Large scale/emergency use	Use a NIOSH/MSHA or European Standard EN 136 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced
Small scale/Laboratory use	Maintain adequate ventilation
Hygiene Measures	Handle in accordance with good industrial hygiene and safety practice.
Environmental exposure controls	No information available.

# **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance Physical State	Off-white Powder Solid	
Odor Odor Threshold pH Melting Point/Range Softening Point Boiling Point/Range Flash Point Evaporation Rate Flammability (solid,gas) Explosion Limits	No information available No data available No information available 260 - 265 °C / 500 - 509 °F No data available No information available No information available Not applicable No information available No data available	<b>Method -</b> No information available Solid
Vapor Pressure Vapor Density Specific Gravity / Density Bulk Density	No data available Not applicable No data available No data available	Solid

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Water Solubility	No information available	
Solubility in other solvents	No information available	
Partition Coefficient (n-octanol/v	vater)	
Autoignition Temperature	No data available	
Decomposition Temperature	No data available	
Viscosity	Not applicable	Solid
Explosive Properties	No information available	
Oxidizing Properties	No information available	
Molecular Formula Molecular Weight	C9 H7 Br O2 227.06	

# **SECTION 10. STABILITY AND REACTIVITY**

Stability	Stable under normal conditions.
Hazardous Reactions Hazardous Polymerization	No information available. No information available.
Conditions to Avoid	Incompatible products.
Materials to avoid	Strong oxidizing agents. Strong bases.

Hazardous Decomposition Products Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>). Hydrogen halides.

SECTION 11. TOXICOLOGICAL INFORMATION						
Product Information						
(a) acute toxicity;						
(b) skin corrosion/irritation;	Category 2					
(c) serious eye damage/irritation;	Category 2					
(d) respiratory or skin sensitizatior Respiratory Skin	r; No data available No data available					
(e) germ cell mutagenicity;	No data available					
(f) carcinogenicity;	No data available					
	There are no known carcinogenic chemicals in this product					
(g) reproductive toxicity;	No data available					
(h) STOT-single exposure;	Category 3					
Results / Target organs	Respiratory system					
(i) STOT-repeated exposure;	No data available					
Target Organs	No information available.					

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(j) aspiration hazard;	Not applicable
Other Adverse Effects	Solid The toxicological properties have not been fully investigated.
Symptoms / effects,both acute and	
delayed	
	SECTION 12. ECOLOGICAL INFORMATION
Ecotoxicity effects	Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Do not empty into drains.
Persistence and Degradability	No information available
Bioaccumulative Potential	No information available
Mobility in soil	No information available
Endocrine Disruptor Information Persistent Organic Pollutant Ozone Depletion Potential	This product does not contain any known or suspected endocrine disruptors This product does not contain any known or suspected substance This product does not contain any known or suspected substance
	SECTION 13. DISPOSAL CONSIDERATIONS
Waste from Residues/Unused Products	Waste is classified as hazardous. Dispose of in accordance with the European Directives on waste and hazardous waste. Dispose of in accordance with local regulations.
Contaminated Packaging	Dispose of this container to hazardous or special waste collection point.
Other Information	Waste codes should be assigned by the user based on the application for which the product was used. Do not empty into drains.
	SECTION 14. TRANSPORT INFORMATION
Road and Rail Transport	Not Regulated
IMDG/IMO	Not regulated
IATA	Not regulated
Special Precautions for User	No special precautions required
	SECTION 15. REGULATORY INFORMATION

International Inventories X = listed, China (IECSC), Europe (EINECS/ELINCS/NLP), U.S.A. (TSCA), Canada (DSL/NDSL), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), Korea (KECL).

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	The Inventory of Hazardous Chemicals (2015 Edition)		TCSI	IECSC	EINECS	TSCA	DSL	PICCS	ENCS	ISHL	AICS	KECL
p-Bromocinnamic acid	-	-	Х	-	214-850-7	-	-	-	-		-	-

### **National Regulations**

# **SECTION 16. OTHER INFORMATION**

Prepared By Revision Date	Health, Safety and Environmental Department 30-Apr-2024
Revision Summary	New emergency telephone response service provider.
<b>Training Advice</b> Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene. Use of personal protective equipment, covering appropriate selection, compatibility, breakthrough thresholds, care, maintenance, fit	
and standards.	ding the use of eye wash and safety showers.

Legend

<ul> <li>CAS - Chemical Abstracts Service</li> <li>EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances</li> <li>PICCS - Philippines Inventory of Chemicals and Chemical Substances</li> <li>IECSC - Chinese Inventory of Existing Chemical Substances</li> <li>KECL - Korean Existing and Evaluated Chemical Substances</li> </ul>	<ul> <li>TSCA - United States Toxic Substances Control Act Section 8(b) Inventory</li> <li>al DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List</li> <li>ENCS - Japanese Existing and New Chemical Substances</li> <li>AICS - Australian Inventory of Chemical Substances</li> <li>NZIOC - New Zealand Inventory of Chemicals</li> </ul>
<ul> <li>WEL - Workplace Exposure Limit</li> <li>ACGIH - American Conference of Governmental Industrial Hygienists</li> <li>DNEL - Derived No Effect Level</li> <li>RPE - Respiratory Protective Equipment</li> <li>LC50 - Lethal Concentration 50%</li> <li>NOEC - No Observed Effect Concentration</li> <li>PBT - Persistent, Bioaccumulative, Toxic</li> </ul>	<ul> <li>TWA - Time Weighted Average</li> <li>IARC - International Agency for Research on Cancer</li> <li>PNEC - Predicted No Effect Concentration</li> <li>LD50 - Lethal Dose 50%</li> <li>EC50 - Effective Concentration 50%</li> <li>POW - Partition coefficient Octanol:Water</li> <li>vPvB - very Persistent, very Bioaccumulative</li> </ul>
ICAO/IATA - International Civil Aviation Organization/International Air Transport Association ADR - European Agreement Concerning the International Carriage of Dangerous Goods by Road OECD - Organisation for Economic Co-operation and Development BCF - Bioconcentration factor	IMO/IMDG - International Maritime Organization/International Maritime Dangerous Goods Code MARPOL - International Convention for the Prevention of Pollution from Ships ATE - Acute Toxicity Estimate VOC - (Volatile Organic Compound)

#### Key literature references and sources for data https://echa.europa.eu/information-on-chemicals

Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

### Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage,

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transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

# **End of Safety Data Sheet**