

# KIT SAFETY DATA SHEET



**Kit Product Name** PCAT by HPLC Mobile Phase

**Kit Catalogue Number(s)** 1956081

**Revision date** 05-Mar-2024

## Kit Contents

Catalogue Number(s)	Product Name
1956056	Plasma Cats by HPLC-Mobile Phase



# SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:  
Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Revision date 05-Mar-2024

Revision Number 1

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

### 1.1. Product identifier

**Product Name** Plasma Cats by HPLC-Mobile Phase  
**Catalogue Number(s)** 1956056  
**Nanoforms** Not applicable  
**Pure substance/mixture** Mixture

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

**Recommended use** In-vitro laboratory reagent or component  
**Uses advised against** No information available

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

#### Corporate Headquarters

Bio-Rad Laboratories Inc.  
1000 Alfred Nobel Drive  
Hercules, CA 94547  
USA

#### Manufacturer

Bio-Rad Laboratories, Diagnostic Group  
4000 Alfred Nobel Drive  
Hercules, California 94547  
USA

#### Legal Entity / Contact Address

Bio-Rad Laboratories Ltd  
The Junction  
Station Road  
Watford, WD17 1ET  
UK

Bio-Rad Laboratories Pvt. Ltd.  
Bio-Rad House  
86-87, Udyog Vihar Phase IV Gurgaon  
122005  
Haryana India

Bio-Rad Laboratories (Pty) Ltd.  
34 Bolton Road  
Parkwood, Johannesburg 2193  
South Africa

For further information, please contact

**Technical Service** 00800 00246 723  
Ireland: Techsupport.UK@bio-rad.com  
India: support.india@bio-rad.com  
South Africa: cdg\_techsupport\_eemea@bio-rad.com

### 1.4. Emergency telephone number

24 Hour Emergency Phone Number CHEMTREC Ireland: 353-19014670  
CHEMTREC India: 000-800-100-7141  
CHEMTREC South Africa: 0-800-983-611

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

**Flammable liquids**

Category 3

**2.2. Label elements****Signal word**

Warning

**Hazard statements**

H226 - Flammable liquid and vapour

**Precautionary Statements - EU (§28, 1272/2008)**

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

P233 - Keep container tightly closed

P363 - Wash contaminated clothing before reuse

P370 + P378 - In case of fire: Use dry chemical, CO<sub>2</sub>, water spray or alcohol-resistant foam to extinguish

P403 + P235 - Store in a well-ventilated place. Keep cool

P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable

**2.3. Other hazards**

## SECTION 3: Composition/information on ingredients

**3.1 Substances**

Not applicable

**3.2 Mixtures**

Chemical name	Weight-%	REACH registration number	EC No (EU Index No)	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)
Acetonitrile 75-05-8	5 - 10	Not available	200-835-2 (608-001-00-3)	Acute Tox. 4 (H302) Acute Tox. 4 (H312) Acute Tox. 4 (H332) Eye Irrit. 2 (H319) Flam. Liq. 2 (H225)	-	-	-
Citric acid 77-92-9	0.1 - 0.299	Not available	201-069-1 (607-750-00-3)	Eye Irrit. 2 (H319)	-	-	-

**Full text of H- and EUH-phrases: see section 16****Acute Toxicity Estimate**

If LD<sub>50</sub>/LC<sub>50</sub> data is not available or does not correspond to the classification category, then the appropriate conversion value from CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATE<sub>mix</sub>) for classifying a mixture based on its components

Chemical name	Oral LD <sub>50</sub> mg/kg	Dermal LD <sub>50</sub> mg/kg	Inhalation LC <sub>50</sub> - 4 hour - dust/mist - mg/L	Inhalation LC <sub>50</sub> - 4 hour - vapour - mg/L	Inhalation LC <sub>50</sub> - 4 hour - gas - ppm
Acetonitrile 75-05-8	No data available	2000	26.8	No data available	No data available
Citric acid	3000	2000	No data available	No data available	No data available

Chemical name	Oral LD50 mg/kg	Dermal LD50 mg/kg	Inhalation LC50 - 4 hour - dust/mist - mg/L	Inhalation LC50 - 4 hour - vapour - mg/L	Inhalation LC50 - 4 hour - gas - ppm
77-92-9					

This product does not contain candidate substances of very high concern at a concentration  $\geq 0.1\%$  (Regulation (EC) No. 1907/2006 (REACH), Article 59)

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

<b>Inhalation</b>	Remove to fresh air.
<b>Eye contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.
<b>Ingestion</b>	Rinse mouth.
<b>Self-protection of the first aider</b>	Remove all sources of ignition. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Use personal protective equipment as required. See section 8 for more information.

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

<b>Symptoms</b>	No information available.
-----------------	---------------------------

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

<b>Note to doctors</b>	Treat symptomatically.
------------------------	------------------------

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

<b>Suitable Extinguishing Media</b>	Dry chemical. Carbon dioxide (CO <sub>2</sub> ). Water spray. Alcohol resistant foam.
<b>Large Fire</b>	CAUTION: Use of water spray when fighting fire may be inefficient.
<b>Unsuitable extinguishing media</b>	Do not scatter spilled material with high pressure water streams.

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

<b>Specific hazards arising from the chemical</b>	Risk of ignition. Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
---	---

### 5.3. Advice for firefighters

<b>Special protective equipment and precautions for fire-fighters</b>	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.
---	--

## SECTION 6: Accidental release measures

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

<b>Personal precautions</b>	Evacuate personnel to safe areas. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material.
<b>Other information</b>	Ventilate the area.
<b>For emergency responders</b>	Use personal protection recommended in Section 8.

### **6.2. Environmental precautions**

<b>Environmental precautions</b>	Refer to protective measures listed in Sections 7 and 8. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.
----------------------------------	--

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

<b>Methods for containment</b>	Stop leak if you can do it without risk. Do not touch or walk through spilled material. A vapour suppressing foam may be used to reduce vapours. Dyke far ahead of spill to collect run-off water. Keep out of drains, sewers, ditches and waterways. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.
<b>Methods for cleaning up</b>	Take precautionary measures against static discharges. Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labelled containers.
<b>Prevention of secondary hazards</b>	Clean contaminated objects and areas thoroughly observing environmental regulations.

### **6.4. Reference to other sections**

<b>Reference to other sections</b>	See section 8 for more information. See section 13 for more information.
------------------------------------	--

## **SECTION 7: Handling and storage**

### **7.1. Precautions for safe handling**

<b>Advice on safe handling</b>	Use personal protection equipment. Avoid contact with skin and eyes. Avoid breathing vapours or mists. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion. Use with local exhaust ventilation. Use spark-proof tools and explosion-proof equipment. Keep in an area equipped with sprinklers. Use according to package label instructions.
<b>General hygiene considerations</b>	Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product.

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

<b>Storage Conditions</b>	Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labelled containers. Do not store near combustible materials. Keep in an area equipped with sprinklers. Store in accordance with the particular national regulations. Store in accordance with local regulations. Store according to product and label instructions.
---------------------------	---

### **7.3. Specific end use(s)**

<b>Risk Management Methods (RMM)</b>	The information required is contained in this Safety Data Sheet.
--------------------------------------	--

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Exposure Limits

Chemical name	European Union	Austria	Belgium	Bulgaria	Croatia
Acetonitrile 75-05-8	TWA: 40 ppm TWA: 70 mg/m <sup>3</sup> *	TWA: 40 ppm TWA: 70 mg/m <sup>3</sup> STEL 160 ppm STEL 280 mg/m <sup>3</sup> H*	TWA: 20 ppm TWA: 34 mg/m <sup>3</sup> D*	TWA: 40 ppm TWA: 70 mg/m <sup>3</sup> K*	TWA: 40 ppm TWA: 70 mg/m <sup>3</sup> *
Chemical name	Cyprus	Czech Republic	Denmark	Estonia	Finland
Acetonitrile 75-05-8	TWA: 40 ppm TWA: 70 mg/m <sup>3</sup>	TWA: 70 mg/m <sup>3</sup> Ceiling: 100 mg/m <sup>3</sup> D*	TWA: 40 ppm TWA: 70 mg/m <sup>3</sup> H* STEL: 80 ppm STEL: 140 mg/m <sup>3</sup>	TWA: 40 ppm TWA: 70 mg/m <sup>3</sup> A*	TWA: 20 ppm TWA: 34 mg/m <sup>3</sup> STEL: 40 ppm STEL: 68 mg/m <sup>3</sup> iho*
Citric acid 77-92-9	-	TWA: 4 mg/m <sup>3</sup>	-	-	-
Chemical name	France	Germany TRGS	Germany DFG	Greece	Hungary
Acetonitrile 75-05-8	TWA: 40 ppm TWA: 70 mg/m <sup>3</sup> *	TWA: 10 ppm TWA: 17 mg/m <sup>3</sup> H*	TWA: 10 ppm TWA: 17 mg/m <sup>3</sup> Peak: 20 ppm Peak: 34 mg/m <sup>3</sup> *	TWA: 40 ppm TWA: 70 mg/m <sup>3</sup> STEL: 60 ppm STEL: 105 mg/m <sup>3</sup> *	TWA: 40 ppm TWA: 70 mg/m <sup>3</sup> STEL: 5 mg/m <sup>3</sup> b*
Citric acid 77-92-9	-	TWA: 2 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup> Peak: 4 mg/m <sup>3</sup>	-	-
Chemical name	Ireland	Italy MDLPS	Italy AIDII	Latvia	Lithuania
Acetonitrile 75-05-8	TWA: 40 ppm TWA: 70 mg/m <sup>3</sup> STEL: 120 ppm STEL: 310 mg/m <sup>3</sup> Sk*	TWA: 20 ppm TWA: 35 mg/m <sup>3</sup> cute*	TWA: 20 ppm TWA: 34 mg/m <sup>3</sup> cute*	TWA: 40 ppm TWA: 70 mg/m <sup>3</sup> Ada*	O* TWA: 40 ppm TWA: 70 mg/m <sup>3</sup>
Chemical name	Luxembourg	Malta	Netherlands	Norway	Poland
Acetonitrile 75-05-8	Peau* TWA: 40 ppm TWA: 70 mg/m <sup>3</sup>	skin* TWA: 40 ppm TWA: 70 mg/m <sup>3</sup>	TWA: 20 ppm TWA: 34 mg/m <sup>3</sup> STEL: 4.5 ppm STEL: 5 mg/m <sup>3</sup> H*	TWA: 30 ppm TWA: 50 mg/m <sup>3</sup> STEL: 45 ppm STEL: 75 mg/m <sup>3</sup> H*	STEL: 140 mg/m <sup>3</sup> TWA: 70 mg/m <sup>3</sup> skóra*
Chemical name	Portugal	Romania	Slovakia	Slovenia	Spain
Acetonitrile 75-05-8	TWA: 40 ppm TWA: 70 mg/m <sup>3</sup> Cutânea*	TWA: 40 ppm TWA: 70 mg/m <sup>3</sup> STEL: 1 mg/m <sup>3</sup> P*	TWA: 40 ppm TWA: 70 mg/m <sup>3</sup> K* Ceiling: 5 mg/m <sup>3</sup>	TWA: 40 ppm TWA: 70 mg/m <sup>3</sup> STEL: 140 mg/m <sup>3</sup> STEL: 80 ppm K*	TWA: 40 ppm TWA: 68 mg/m <sup>3</sup> vía dérmica*
Chemical name	Sweden		Switzerland		United Kingdom
Acetonitrile 75-05-8	NGV: 30 ppm NGV: 50 mg/m <sup>3</sup> Vägledande KGV: 60 ppm Vägledande KGV: 100 mg/m <sup>3</sup> H*		TWA: 20 ppm TWA: 34 mg/m <sup>3</sup> STEL: 40 ppm STEL: 68 mg/m <sup>3</sup> H*		TWA: 40 ppm TWA: 68 mg/m <sup>3</sup> STEL: 60 ppm STEL: 102 mg/m <sup>3</sup> Sk*
Citric acid 77-92-9	-		TWA: 2 mg/m <sup>3</sup> STEL: 4 mg/m <sup>3</sup>		-

#### Biological occupational exposure limits

Chemical name	European Union	Austria	Bulgaria	Croatia	Czech Republic
Acetonitrile 75-05-8	-	-	-	6.5 mg/24 hours - urine (Thiocyanates) - urine collected over	-

				24 hours <3 mg - urine and blood (Thiocyanate ratio in urine (mg/g Creatinine) and Carboxyhemoglobin in blood (%)) - urine and blood collected at the end of the work shift	
--	--	--	--	--	--

**Derived No Effect Level (DNEL)** No information available.  
**Predicted No Effect Concentration (PNEC)**

## 8.2. Exposure controls

### Personal protective equipment

**Eye/face protection** Tight sealing safety goggles.

**Hand protection** Wear suitable gloves. Impervious gloves.

**Skin and body protection** Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron. Antistatic boots.

**Respiratory protection** No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

**General hygiene considerations** Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product.

**Environmental exposure controls** No information available.

## SECTION 9: Physical and chemical properties

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

**Physical state** Liquid  
**Appearance** aqueous solution  
**Colour** white  
**Odour** Ether.  
**Odour threshold** No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
<b>Melting point / freezing point</b>	No data available	None known
<b>Initial boiling point and boiling range</b>	88 °C	
<b>Flammability</b>	No data available	None known
<b>Flammability Limit in Air</b>		None known
<b>Upper flammability or explosive limits</b>	No data available	
<b>Lower flammability or explosive limits</b>	No data available	
<b>Flash point</b>	28 °C	
<b>Autoignition temperature</b>	No data available	None known
<b>Decomposition temperature</b>		None known
<b>pH</b>	6.8	
<b>pH (as aqueous solution)</b>	No data available	No information available
<b>Kinematic viscosity</b>	No data available	None known
<b>Dynamic viscosity</b>	No data available	None known

Water solubility	Miscible in water	None known
Solubility(ies)	No data available	None known
Partition coefficient	No data available	None known
Vapour pressure	No data available	None known
Relative density	No data available	None known
Bulk density	No data available	
Liquid Density	No data available	
Relative vapour density	No data available	None known
Particle characteristics		
Particle Size	No information available	
Particle Size Distribution	No information available	

**9.2. Other information****9.2.1. Information with regards to physical hazard classes**

Not applicable

**9.2.2. Other safety characteristics**

No information available

**SECTION 10: Stability and reactivity****10.1. Reactivity**

Reactivity No information available.

**10.2. Chemical stability**

Stability Stable under normal conditions.

**Explosion data**

Sensitivity to mechanical impact None.

Sensitivity to static discharge Yes.

**10.3. Possibility of hazardous reactions**

Possibility of hazardous reactions None under normal processing.

**10.4. Conditions to avoid**

Conditions to avoid Heat, flames and sparks.

**10.5. Incompatible materials**

Incompatible materials None known based on information supplied.

**10.6. Hazardous decomposition products**

Hazardous decomposition products None known based on information supplied.

**SECTION 11: Toxicological information****11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008****Information on likely routes of exposure****Product Information**

Inhalation Specific test data for the substance or mixture is not available.

Eye contact Specific test data for the substance or mixture is not available.

Skin contact Specific test data for the substance or mixture is not available.



**Ingestion**

Specific test data for the substance or mixture is not available.

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

No information available.

**Acute toxicity****Numerical measures of toxicity**

No information available

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral)	5,263.20 mg/kg
ATEmix (dermal)	21,052.60 mg/kg
ATEmix (inhalation-dust/mist)	15.80 mg/l

**Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Acetonitrile	-	> 2000 mg/kg ( Rabbit )	= 26.8 mg/L ( Rat ) 4 h
Citric acid	= 3 g/kg ( Rat )	> 2000 mg/kg ( Rat )	-

**Delayed and immediate effects as well as chronic effects from short and long-term exposure****Skin corrosion/irritation**

No information available.

**Serious eye damage/eye irritation**

No information available.

**Respiratory or skin sensitisation**

No information available.

**Germ cell mutagenicity**

No information available.

**Carcinogenicity**

No information available.

**Reproductive toxicity**

No information available.

**STOT - single exposure**

No information available.

**STOT - repeated exposure**

No information available.

**Aspiration hazard**

No information available.

**11.2. Information on other hazards****11.2.1. Endocrine disrupting properties****Endocrine disrupting properties**

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

**11.2.2. Other information****Other adverse effects**

No information available.

## SECTION 12: Ecological information

### 12.1. Toxicity

#### Ecotoxicity

The environmental impact of this product has not been fully investigated.

#### Unknown aquatic toxicity

Contains 0 % of components with unknown hazards to the aquatic environment.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Acetonitrile	-	LC50: 1600 - 1690mg/L (96h, Pimephales promelas) LC50: =1000mg/L (96h, Pimephales promelas) LC50: =1850mg/L (96h, Lepomis macrochirus) LC50: =1650mg/L (96h, Poecilia reticulata)	-	-
Citric acid	-	LC50: =1516mg/L (96h, Lepomis macrochirus)	-	-

### 12.2. Persistence and degradability

#### Persistence and degradability

No information available.

### 12.3. Bioaccumulative potential

#### Bioaccumulation

#### Component Information

Chemical name	Partition coefficient
Acetonitrile	-0.34
Citric acid	-1.72

### 12.4. Mobility in soil

#### Mobility in soil

No information available.

### 12.5. Results of PBT and vPvB assessment

#### PBT and vPvB assessment

Chemical name	PBT and vPvB assessment
Acetonitrile	The substance is not PBT / vPvB
Citric acid	The substance is not PBT / vPvB

### 12.6. Endocrine disrupting properties

#### Endocrine disrupting properties

No information available.

### 12.7. Other adverse effects

No information available.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

#### Waste from residues/unused products

Should not be released into the environment. Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation. Dispose of in

accordance with local regulations. Dispose of waste in accordance with environmental legislation.

**Contaminated packaging**

Empty containers pose a potential fire and explosion hazard. Do not cut, puncture or weld containers.

## SECTION 14: Transport information

**IATA**

14.1 UN number or ID number	UN1648
14.2 UN proper shipping name	Acetonitrile
14.3 Transport hazard class(es)	3
14.4 Packing group	II
Description	UN1648, Acetonitrile, 3, II
14.5 Environmental hazards	Not applicable
14.6 Special Precautions for Users	
Special Provisions	None

**IMDG**

14.1 UN number or ID number	UN1648
14.2 UN proper shipping name	ACETONITRILE
14.3 Transport hazard class(es)	3
14.4 Packing group	II
Description	UN1648, ACETONITRILE, 3, II, (28°C C.C.)
14.5 Environmental hazards	Not applicable
14.6 Special Precautions for Users	
Special Provisions	None
EmS-No	F-E, S-D
14.7 Maritime transport in bulk according to IMO instruments	No information available

**RID**

14.1 UN number	UN1648
14.2 UN proper shipping name	ACETONITRILE
14.3 Transport hazard class(es)	3
14.4 Packing group	II
Description	UN1648, ACETONITRILE, 3, II
14.5 Environmental hazards	Not applicable
14.6 Special Precautions for Users	
Special Provisions	None
Classification code	F1

**ADR**

14.1 UN number or ID number	1648
14.2 UN proper shipping name	ACETONITRILE
14.3 Transport hazard class(es)	3
14.4 Packing group	II
Description	1648, ACETONITRILE, 3, II
14.5 Environmental hazards	Not applicable
14.6 Special Precautions for Users	
Special Provisions	None
Classification code	F1
Tunnel restriction code	(D/E)

## SECTION 15: Regulatory information

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

**National regulations**

France

**Occupational Illnesses (R-463-3, France)**

Chemical name	French RG number	Title
Acetonitrile 75-05-8	RG 84	-

**European Union**

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

**Authorisations and/or restrictions on use:**

This product contains one or more substance(s) subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Chemical name	Restricted substance per REACH Annex XVII	Substance subject to authorisation per REACH Annex XIV
Acetonitrile - 75-05-8	Use restricted. See entry 75.	-
Citric acid - 77-92-9	Use restricted. See entry 75.	-

**Persistent Organic Pollutants**

Not applicable

**Dangerous substance category per Seveso Directive (2012/18/EU)**

P5a - FLAMMABLE LIQUIDS

P5b - FLAMMABLE LIQUIDS

P5c - FLAMMABLE LIQUIDS

**Ozone-depleting substances (ODS) regulation (EC) 1005/2009**

Not applicable

**Biocidal Products Regulation (EU) No 528/2012 (BPR)**

Chemical name	Biocidal Products Regulation (EU) No 528/2012 (BPR)
Citric acid - 77-92-9	Product-type 2: Disinfectants and algicides not intended for direct application to humans or animals Product-type 6: Preservatives for products during storage

**International Inventories**

Contact supplier for inventory compliance status

**15.2. Chemical safety assessment****Chemical Safety Report**

No information available

**SECTION 16: Other information****Key or legend to abbreviations and acronyms used in the safety data sheet****Full text of H-Statements referred to under section 3**

H225 - Highly flammable liquid and vapour

H302 - Harmful if swallowed

H312 - Harmful in contact with skin

H319 - Causes serious eye irritation

H332 - Harmful if inhaled

**Legend**

SVHC: Substances of Very High Concern for Authorisation:

**Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

TWA Ceiling	TWA (time-weighted average) Maximum limit value	STEL *	STEL (Short Term Exposure Limit) Skin designation
----------------	--	-----------	--

Classification procedure	
Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used
Acute oral toxicity	Calculation method
Acute dermal toxicity	Calculation method
Acute inhalation toxicity - gas	Calculation method
Acute inhalation toxicity - vapour	Calculation method
Acute inhalation toxicity - dust/mist	Calculation method
Skin corrosion/irritation	Calculation method
Serious eye damage/eye irritation	Calculation method
Respiratory sensitisation	Calculation method
Skin sensitisation	Calculation method
Mutagenicity	Calculation method
Carcinogenicity	Calculation method
Reproductive toxicity	Calculation method
STOT - single exposure	Calculation method
STOT - repeated exposure	Calculation method
Acute aquatic toxicity	Calculation method
Chronic aquatic toxicity	Calculation method
Aspiration hazard	Calculation method
Ozone	Calculation method

**Key literature references and sources for data used to compile the SDS**

Agency for Toxic Substances and Disease Registry (ATSDR)  
 U.S. Environmental Protection Agency ChemView Database  
 European Food Safety Authority (EFSA)  
 European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA\_RAC)  
 European Chemicals Agency (ECHA) (ECHA\_API)  
 EPA (Environmental Protection Agency)  
 Acute Exposure Guideline Level(s) (AEGL(s))  
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act  
 U.S. Environmental Protection Agency High Production Volume Chemicals  
 Food Research Journal  
 Hazardous Substance Database  
 International Uniform Chemical Information Database (IUCLID)  
 National Institute of Technology and Evaluation (NITE)  
 Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)  
 NIOSH (National Institute for Occupational Safety and Health)  
 National Library of Medicine's ChemID Plus (NLM CIP)  
 National Library of Medicine's PubMed database (NLM PUBMED)  
 National Toxicology Program (NTP)  
 New Zealand's Chemical Classification and Information Database (CCID)  
 Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications  
 Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme  
 Organisation for Economic Co-operation and Development Screening Information Data Set  
 World Health Organization

**Revision Note** Significant changes throughout SDS. Review all sections.

**Revision date** 05-Mar-2024

**This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006**

**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, 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**