

Printing date 28.05.2015 Version number 1 Revision: 28.05.2015

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

- · 1.1 Product identifier
- · Product name: Citalopram Impurity Standard
- · Part number: Cat 1154
- · 1.2 Relevant identified uses of the substance or mixture and uses advised against

No further relevant information available.

- · Application of the substance / the mixture Reference material for laboratory use only
- · Manufacturer/Supplier:

British Pharmacopoeia Commission Tel: +44 (0)20 3080 6561 **MHRA** eMail: bpcrs@mhra.gov.uk

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- · 1.4 Emergency telephone number: +44 (0) 20 3080 6561 (Monday Friday: 8am 5pm)

## SECTION 2: Hazards identification

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008



GHS07

Acute Tox. 4 H302 Harmful if swallowed.

Acute Tox. 4 H332 Harmful if inhaled.

· Classification according to Directive 67/548/EEC or Directive 1999/45/EC



Xn; Harmful

Harmful by inhalation and if swallowed.

· Information concerning particular hazards for human and environment:

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

· Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

· Hazard pictograms



- · Signal word Warning
- · Hazard-determining components of labelling:

Citalopram Impurity D

Citalopram Hydrobromide

(1RS) - 1 - [3 - (Dimethylamino)propyl] - 1 - (4 - fluorophenyl) - 1, 3 - dihydroisobenzofuran - 5 - carboxamide(Citalopram-Amide)

· Hazard statements

H302+H332 Harmful if swallowed or if inhaled.

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· Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

*P264* Wash thoroughly after handling.

P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for

breathing.

P312 Call a POISON CENTER/doctor if you feel unwell.

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

· 2.3 Other hazards

· Results of PBT and vPvB assessment

· **PBT**: Not applicable. · **vPvB**: Not applicable.

### SECTION 3: Composition/information on ingredients

- · 3.2 Chemical characterisation: Mixtures
- · Description: Mixture: consisting of the following components.

· Dangerous components:		
RTECS: -	Citalopram Impurity D  Xn R20/22   ♠ Acute Tox. 4, H302; Acute Tox. 4, H332	60-80%
EINECS: 261-890-6	Citalopram Hydrobromide  Xn R20/22  ♦ Acute Tox. 4, H302; Acute Tox. 4, H332	10 - 25%
CAS: 64372-56-1 RTECS: -	(1RS)-1-[3-(Dimethylamino)propyl]-1-(4-fluorophenyl)-1,3-dihydroisobenzofuran-5-carboxamide (Citalopram-Amide)  Xn R22  ♠ Acute Tox. 4, H302	10 - 25%

<sup>·</sup> Additional information: For the wording of the listed risk phrases refer to section 16.

### SECTION 4: First aid measures

- · 4.1 Description of first aid measures
- · General information:

Symptoms of poisoning may occur even after several hours; therefore medical observation for at least 48 hours after the accident is recommended.

· After inhalation:

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

In case of unconsciousness place patient in recovery position for transport.

- · After skin contact: Immediately wash with water and soap and rinse thoroughly.
- · After eye contact: Rinse opened eye for several minutes under running water.
- · After swallowing:

Rinse mouth. Do not induce vomiting.

Call for a doctor immediately.

- · 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.
- 4.3 Indication of any immediate medical attention and special treatment needed No further relevant information available.

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## SECTION 5: Firefighting measures

- · 5.1 Extinguishing media
- · Suitable extinguishing agents:

CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

· 5.2 Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

- · 5.3 Advice for firefighters
- · Protective equipment:

Mouth respiratory protective device.

Wear self-contained respiratory protective device.

#### SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures Avoid formation of dust.
- 6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- · 6.3 Methods and material for containment and cleaning up:

Dispose of contaminated material as waste according to item 13.

Ensure adequate ventilation.

· 6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

### SECTION 7: Handling and storage

· 7.1 Precautions for safe handling

Ensure good ventilation/extraction at the workplace.

Remove dust thoroughly.

Store in cool, dry place in tightly closed receptacles.

- · Information about fire and explosion protection: No special measures required.
- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles:

Store in a cool location.

Please refer to the manufacturer's certificate for specific storage and transport temperature conditions.

Store only in the original receptacle.

Keep container in a well-ventilated place. Keep away from sources of ignition and heat.

- · Information about storage in one common storage facility: Store away from foodstuffs.
- · Further information about storage conditions: Keep container tightly sealed.
- · 7.3 Specific end use(s) No further relevant information available.

## SECTION 8: Exposure controls/personal protection

- · Additional information about design of technical facilities: No further data; see item 7.
- · 8.1 Control parameters
- · Ingredients with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

· Additional information: Lists used were valid at the time of SDS preparation.

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- · 8.2 Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

· Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

· Protection of hands:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

The protective gloves to be used must comply with the specifications of EC Directive 89/686/EEC and the related standard EN374



#### Protective gloves

- · Material of gloves Only use chemical-protective gloves with CE-labelling of category III.
- · Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection: Safety glasses

## SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical a	and chemical properties
· General Information · Appearance:	
Form:	Solid
Colour:	White
· Odour:	Odourless
· Odour threshold:	Not determined.
· pH-value:	Not applicable.
· Change in condition	
Melting point/Melting range:	Not determined.
Boiling point/Boiling range:	Not determined.
· Flash point:	Not applicable.
· Flammability (solid, gaseous):	Not determined.
· Ignition temperature:	
Decomposition temperature:	Not determined.
· Self-igniting:	Product is not selfigniting.
· Danger of explosion:	Not determined.
· Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
· Vapour pressure:	Not applicable.

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Density: Not determined.
Relative density Not determined.
Vapour density Not applicable.
Evaporation rate Not applicable.

· Solubility in / Miscibility with

water: Soluble.

· Partition coefficient (n-octanol/water): Not determined.

· Viscosity:

**Dynamic:** Not applicable. **Kinematic:** Not applicable.

• 9.2 Other information No further relevant information available.

### SECTION 10: Stability and reactivity

- · 10.1 Reactivity Stable under normal conditions.
- · 10.2 Chemical stability Stable under normal conditions.
- · Thermal decomposition / conditions to be avoided:

Formation of toxic gases is possible during heating or in case of fire.

- · 10.3 Possibility of hazardous reactions No dangerous reactions known.
- · 10.4 Conditions to avoid Heat.
- · 10.5 Incompatible materials: Strong oxidizing agents.
- · 10.6 Hazardous decomposition products:

Formation of toxic gases is possible during heating or in case of fire.

#### SECTION 11: Toxicological information

- · 11.1 Information on toxicological effects
- · Acute toxicity:
- · LD/LC50 values relevant for classification:

#### 59729-32-7 Citalopram Hydrobromide

Oral LD0 10 mg/kg (rat) (Behavioral - alteration of classical conditioning)

LD50 800 mg/kg (rat)

- · Primary irritant effect:
- · on the skin: No irritating effect.
- · on the eye: No irritating effect.
- · Sensitisation: No sensitising effects known.
- · Additional toxicological information:

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version: Harmful

## SECTION 12: Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity:

59729-32-7 Citalopram Hydrobromide

LC50/24 3.9 mg/L (daphnia)

· 12.2 Persistence and degradability No further relevant information available.

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- · 12.3 Bioaccumulative potential No further relevant information available.
- · 12.4 Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water Do not allow undiluted product to reach ground water, water course or sewage system.

- · 12.5 Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- · vPvB: Not applicable.
- · 12.6 Other adverse effects No further relevant information available.

## SECTION 13: Disposal considerations

- · 13.1 Waste treatment methods
- · Recommendation

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

· European waste catalogue

Waste disposal key numbers from EWC have to be assigned depending on origin and processing.

- · Uncleaned packaging:
- · Recommendation: Dispose of in accordance with national regulations.
- · Recommended cleansing agents: Water, if necessary together with cleansing agents.

SECTION 14: Transport informat	w	
14.1 UN-Number		
ADR, ADN, IMDG, IATA	Not applicable	
ADR, ADN, IMDG, IATA	Not applicable	
14.3 Transport hazard class(es)		
ADR, ADN, IMDG, IATA		
Class	Not applicable	
14.4 Packing group		
ADR, IMDG, IATA	Not applicable	
14.5 Environmental hazards:		
Marine pollutant:	No	
14.6 Special precautions for user	Not applicable.	
14.7 Transport in bulk according to Anne	ex II of	
MARPOL73/78 and the IBC Code	Not applicable.	
UN "Model Regulation":	-	

## SECTION 15: Regulatory information

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Philippines Inventory of Chemicals and Chemical Substances

None of the ingredients is listed.

· Australian Inventory of Chemical Substances

None of the ingredients is listed.

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#### · Standard for the Uniform Scheduling of Medicines and Poisons

None of the ingredients is listed.

· 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

#### SECTION 16: Other information

The information in this safety data sheet (SDS) has been prepared with due care and is true and accurate to the best of our knowledge. The user must determine the suitability of the information for its particular purpose, ensure compliance with existing laws and regulations, and be aware that other or additional safety or performance considerations may arise when using, handling and/or storing the material. The information in this SDS does not purport to be all inclusive or a guarantee as to the properties of the material supplied, and should be used only as a guide. British Pharmacopoeia Commission Office makes no warranties or representations as to the accuracy and completeness of the information contained herein, shall not be held responsible for the suitability of this information for the user's intended purposes or the consequences of such use, and shall not be liable for any damage or loss, howsoever arising, direct or otherwise.

#### · Relevant phrases

H302 Harmful if swallowed.

H332 Harmful if inhaled.

R20/22 Harmful by inhalation and if swallowed.

R22 Harmful if swallowed.

#### · Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Acute Tox. 4: Acute toxicity, Hazard Category 4

#### · Sources

Tables 3.1 and 3.2 from Annex 6 of EC 1272/2008, EC 1907/2006, EH40/2005 as amended 2011, Registry of Toxic Effects of Chemical Substances (RTECS), The Dictionary of Substances and their Effects, 1st Edition, IUCLID.

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