



CONSEIL DE L'EUROP

Ambroxol hydrochloride

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Issue date: 01/04/2023 Version: 1.0

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

1.1. Product identifier Product form : Substance Substance name : Ambroxol hydrochloride : Ambroxol hydrochloride Chemical name 201600041 Product code 1.2. Relevant identified uses of the substance or mixture and uses advised against 1.2.1. Relevant identified uses : The product is intended for research, analysis and scientific education. Main use category Use of the substance/mixture : For professional use only Function or use category : Laboratory chemicals 1.2.2. Uses advised against Restrictions on use : Do not use : Ingestion, Inhalation, Dermal 1.3. Details of the supplier of the safety data sheet European Directorate for the Quality of Medicines & Healthcare EDQM, Council of Europe 7, Allée Kastner, CS30026 F-67081 Strasbourg France T +33(0)388412035 - F +33(0)388412771 sds@edqm.eu - www.edqm.eu 1.4. Emergency telephone number Emergency number : +33(0)390215608 **SECTION 2: Hazards identification** 2.1. Classification of the substance or mixture Classification according to Regulation (EC) No. 1272/2008 [CLP] Hazardous to the aquatic environment - Chronic Hazard, Category 2 H411 Full text of H- and EUH-statements: see section 16 Adverse physicochemical, human health and environmental effects Expert judgement and weight of evidence determination. 2.2. Label elements Labelling according to Regulation (EC) No. 1272/2008 [CLP] Hazard pictograms (CLP) GHS09 Signal word (CLP) • Hazard statements (CLP) : H411 - Toxic to aquatic life with long lasting effects. Precautionary statements (CLP) P273 - Avoid release to the environment. P391 - Collect spillage. P501 - Dispose of contents/container to hazardous or special waste collection point, in

accordance with local, regional, national and/or international regulation.

Labelling according to: exemption for inner packaging where the contents do not exceed 10ml

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No labelling required

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Name	Product identifier		Classification according to Regulation (EC) No. 1272/2008 [CLP]
Ambroxol hydrochloride	-	≤ 100	Aquatic Chronic 2, H411

Full text of H- and EUH-statements: see section 16

3.2. Mixtures

Not applicable

SECTION 4: First aid measures 4.1. Description of first aid measures First-aid measures after skin contact : Wipe off as much as possible (using a clean, soft, absorbent material). First-aid measures after eye contact Rinse eyes with water as a precaution.

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

No additional information available

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

:

No additional information available

SECTION 5: Firefighting measures		
5.1. Extinguishing media		
Suitable extinguishing media	: Extinguishing blanket.	
5.2. Special hazards arising from the subs	stance or mixture	
Fire hazard	: See Heading 2.2.	
5.3. Advice for firefighters		
Firefighting instructions	: Use extinguishing media appropriate for surrounding fire.	

SECTION 6: Accidental release measures		
6.1. Personal precautions, prote	ctive equipment and emergency procedures	
6.1.1. For non-emergency personne		
Emergency procedures	: Avoid all unnecessary exposure.	

6.1.2. For emergency responders

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6.2. Environmental precautions

No additional information available

6.3. Methods and material for containment and cleaning up

No additional information available

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

No additional information available

7.2. Conditions for safe storage, including any incompatibilities

No additional information available

7.3. Specific end use(s)

See Heading 1.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

No additional information available

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Keep in a well-ventilated room. Both local exhaust and general room ventilation are usually required.

8.2.2. Personal protection equipment

8.2.2.1. Eye and face protection

No additional information available

8.2.2.2. Skin protection

Skin and body protection: Lab coat

Hand protection: Protective gloves

8.2.2.3. Respiratory protection

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8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

No additional information available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	· Solid
Colour	: Not available
Appearance	· Powder
Odour	: Not available
Odour threshold	Not available
Melting point	: Not available
Freezing point	Not available
Boiling point	Not available
Flammability	Not available
Explosive limits	: Not applicable
Lower explosion limit	: Not applicable
Upper explosion limit	: Not applicable
Flash point	: Not applicable
Auto-ignition temperature	: Not applicable
Decomposition temperature	: Not available
рН	: Not available
pH solution	: Not available
Viscosity, kinematic	: Not applicable
Solubility	: Water: 10 – 33,3 g/l
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50°C	: Not available
Density	: Not available
Relative density	: Not available
Relative vapour density at 20°C	: Not applicable
Particle size	Not available

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions.

10.2. Chemical stability

No additional information available

10.3. Possibility of hazardous reactions

None known.

10.4. Conditions to avoid

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10.5. Incompatible materials

None under normal use. See Section 7.

10.6. Hazardous decomposition products

When heated to decomposition, emits dangerous fumes.

SECTION 11: Toxicological information		
11.1. Information on hazard classes as	defined in Regulation (EC) No 1272/2008	
Acute toxicity (oral) Acute toxicity (dermal) Acute toxicity (inhalation)	 Not classified (Based on available data, the classification criteria are not met) Not classified (Lack of data) Not classified (Lack of data) 	
Ambroxol hydrochloride		
LD50 oral rat	4203 mg/kg (RTECS No GV8425000)	
Skin corrosion/irritation	Not classified (Lack of data)	
Serious eye damage/irritation	: Not classified (Lack of data)	
Respiratory or skin sensitisation	: Not classified (Lack of data)	
Germ cell mutagenicity	: Not classified (Lack of data)	
Carcinogenicity	: Not classified (Lack of data)	
Reproductive toxicity	: Not classified (Lack of data)	
STOT-single exposure	: Not classified (Lack of data)	
STOT-repeated exposure	: Not classified (Lack of data)	
Aspiration hazard	: Not classified (Technical impossibility to obtain the data)	

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity	
(acute)	Not classified (Lack of data) Toxic to aquatic life with long lasting effects.
Ambroxol hydrochloride	
LC50 - Fish [1]	22,8 mg/l (96h, Brachydanio rerio (zebra-fish), (OECD 203 method))
EC50 - Crustacea [1]	25,6 mg/l (48h, Daphnia magna (Water flea), (OECD 202 method))
EC50 72h - Algae [1]	9,5 mg/l (72h, Scenedesmus subspicatus, (OECD 201 method))
NOEC chronic fish	10 mg/l (96h, Brachydanio rerio (zebra-fish), (OECD 203 method))
NOEC chronic crustacea	4,6 mg/l (48h, Daphnia magna (Water flea) (OECD 202 method))
NOEC chronic algae	0,46 mg/l (72h, Scenedesmus subspicatus, (OECD 201 method))

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

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12.5. Results of PBT and vPvB assessment	
No additional information available	
12.6. Endocrine disrupting properties	
No additional information available	
12.7. Other adverse effects	
No additional information available	

SECTION 13: Disposal considerations

13.1. Waste treatment methods

No additional information available

accordance with ADR / IM	DG / IATA	
ADR	IMDG	ΙΑΤΑ
14.1. UN number or ID r	number	
UN 3077	UN 3077	UN 3077
14.2. UN proper shippin	ig name	
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.	Environmentally hazardous substance, solid, n.o.s.
Transport document desc	ription	
UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., 9, III, (-)	UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., 9, III, MARINE POLLUTANT	UN 3077 Environmentally hazardous substance, solid, n.o.s., 9, III
14.3. Transport hazard	class(es)	
9	9	9
14.4. Packing group	· · ·	
III	III	Ш
14.5. Environmental ha	zards	
Dangerous for the environment: Yes	Dangerous for the environment: Yes Marine pollutant: Yes	Dangerous for the environment: Yes

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14.6. Special precautions for user

Overland transport

Overland transport	
Classification code (ADR)	: M7
Special provisions (ADR)	: 274, 335, 375, 601
Limited quantities (ADR)	5kg
Excepted quantities (ADR)	: E1
Packing instructions (ADR)	: P002, IBC08, LP02, R001
Special packing provisions (ADR)	: PP12, B3
Mixed packing provisions (ADR)	: MP10
Portable tank and bulk container instructions (ADR)	T1, BK1, BK2, BK3
Portable tank and bulk container special provisions	: TP33
(ADR)	. 11 00
Tank code (ADR)	: SGAV, LGBV
Vehicle for tank carriage	: AT
Transport category (ADR)	: 3
Special provisions for carriage - Packages (ADR)	: V13
Special provisions for carriage - Bulk (ADR)	: VC1, VC2
Special provisions for carriage - Loading, unloading	: CV13
and handling (ADR)	
Hazard identification number (Kemler No.)	: 90
Orange plates	² 90
	70
	3077
	3077
Tunnel restriction code (ADR)	: -
Transport by sea	
Special provisions (IMDG)	: 274, 335, 966, 967, 969
Limited quantities (IMDG)	: 5 kg
Excepted quantities (IMDG)	: E1
Packing instructions (IMDG)	: LP02, P002
	: PP12
Special packing provisions (IMDG)	. FF12
IBC packing instructions (IMDG)	
	: IBC08
IBC special provisions (IMDG)	: IBC08 : B3
Tank instructions (IMDG)	: IBC08 : B3 : BK1, BK2, BK3, T1
Tank instructions (IMDG) Tank special provisions (IMDG)	: IBC08 : B3 : BK1, BK2, BK3, T1 : TP33
Tank instructions (IMDG) Tank special provisions (IMDG) EmS-No. (Fire)	: IBC08 : B3 : BK1, BK2, BK3, T1 : TP33 : F-A
Tank instructions (IMDG) Tank special provisions (IMDG) EmS-No. (Fire) EmS-No. (Spillage)	: IBC08 : B3 : BK1, BK2, BK3, T1 : TP33
Tank instructions (IMDG) Tank special provisions (IMDG) EmS-No. (Fire)	: IBC08 : B3 : BK1, BK2, BK3, T1 : TP33 : F-A : S-F : A
Tank instructions (IMDG) Tank special provisions (IMDG) EmS-No. (Fire) EmS-No. (Spillage)	: IBC08 : B3 : BK1, BK2, BK3, T1 : TP33 : F-A : S-F
Tank instructions (IMDG) Tank special provisions (IMDG) EmS-No. (Fire) EmS-No. (Spillage) Stowage category (IMDG)	: IBC08 : B3 : BK1, BK2, BK3, T1 : TP33 : F-A : S-F : A
Tank instructions (IMDG) Tank special provisions (IMDG) EmS-No. (Fire) EmS-No. (Spillage) Stowage category (IMDG)	: IBC08 : B3 : BK1, BK2, BK3, T1 : TP33 : F-A : S-F : A
Tank instructions (IMDG) Tank special provisions (IMDG) EmS-No. (Fire) EmS-No. (Spillage) Stowage category (IMDG) Stowage and handling (IMDG)	: IBC08 : B3 : BK1, BK2, BK3, T1 : TP33 : F-A : S-F : A
Tank instructions (IMDG) Tank special provisions (IMDG) EmS-No. (Fire) EmS-No. (Spillage) Stowage category (IMDG) Stowage and handling (IMDG) Air transport	 IBC08 B3 BK1, BK2, BK3, T1 TP33 F-A S-F A SW23
Tank instructions (IMDG) Tank special provisions (IMDG) EmS-No. (Fire) EmS-No. (Spillage) Stowage category (IMDG) Stowage and handling (IMDG) Air transport PCA Excepted quantities (IATA)	 : IBC08 : B3 : BK1, BK2, BK3, T1 : TP33 : F-A : S-F : A : SW23
Tank instructions (IMDG) Tank special provisions (IMDG) EmS-No. (Fire) EmS-No. (Spillage) Stowage category (IMDG) Stowage and handling (IMDG) Air transport PCA Excepted quantities (IATA) PCA Limited quantities (IATA) PCA limited quantity max net quantity (IATA)	 : IBC08 : B3 : BK1, BK2, BK3, T1 : TP33 : F-A : S-F : A : SW23
Tank instructions (IMDG) Tank special provisions (IMDG) EmS-No. (Fire) EmS-No. (Spillage) Stowage category (IMDG) Stowage and handling (IMDG) Air transport PCA Excepted quantities (IATA) PCA Limited quantities (IATA) PCA limited quantity max net quantity (IATA) PCA packing instructions (IATA)	 IBC08 B3 BK1, BK2, BK3, T1 TP33 F-A S-F A SW23 E1 Y956 30kgG 956
Tank instructions (IMDG) Tank special provisions (IMDG) EmS-No. (Fire) EmS-No. (Spillage) Stowage category (IMDG) Stowage and handling (IMDG) Air transport PCA Excepted quantities (IATA) PCA Limited quantities (IATA) PCA limited quantity max net quantity (IATA) PCA packing instructions (IATA) PCA max net quantity (IATA)	 IBC08 B3 BK1, BK2, BK3, T1 TP33 F-A S-F A SW23 E1 Y956 30kgG 956 400kg
Tank instructions (IMDG) Tank special provisions (IMDG) EmS-No. (Fire) EmS-No. (Spillage) Stowage category (IMDG) Stowage and handling (IMDG) Air transport PCA Excepted quantities (IATA) PCA Limited quantities (IATA) PCA limited quantity max net quantity (IATA) PCA packing instructions (IATA) PCA max net quantity (IATA) CAO packing instructions (IATA)	 IBC08 B3 BK1, BK2, BK3, T1 TP33 F-A S-F A SW23 E1 Y956 30kgG 956 400kg 956
Tank instructions (IMDG) Tank special provisions (IMDG) EmS-No. (Fire) EmS-No. (Spillage) Stowage category (IMDG) Stowage and handling (IMDG) Air transport PCA Excepted quantities (IATA) PCA Limited quantities (IATA) PCA limited quantity max net quantity (IATA) PCA packing instructions (IATA) PCA max net quantity (IATA) CAO packing instructions (IATA) CAO max net quantity (IATA)	 IBC08 B3 BK1, BK2, BK3, T1 TP33 F-A S-F A SW23 E1 Y956 30kgG 956 400kg 956 400kg
Tank instructions (IMDG) Tank special provisions (IMDG) EmS-No. (Fire) EmS-No. (Spillage) Stowage category (IMDG) Stowage and handling (IMDG) Air transport PCA Excepted quantities (IATA) PCA Limited quantities (IATA) PCA limited quantity max net quantity (IATA) PCA packing instructions (IATA) PCA max net quantity (IATA) CAO packing instructions (IATA)	 IBC08 B3 BK1, BK2, BK3, T1 TP33 F-A S-F A SW23 E1 Y956 30kgG 956 400kg 956

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

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SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

Not listed on REACH Annex XVII

REACH Annex XIV (Authorisation List)

Not listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Not listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Not applicable.

POP Regulation (Persistent Organic Pollutants) Not applicable.

Ozone Regulation (1005/2009)

Not listed on the Ozone Depletion list (Regulation EU 1005/2009)

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Full text of H- and EUH-statements:	
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2
H411	Toxic to aquatic life with long lasting effects.

Safety Data Sheet (SDS), EU

DISCLAIMER OF LIABILITY The EDQM has created this SDS as a downstream user for regulatory compliance to rules applicable to chemicals only. This article is intended only for small-volume laboratory analysis and other routine testing prescribed in the pharmacopoeia or EDQM study protocol, under controlled conditions and by professionals only. Any other use of this article or the SDS information is the sole responsibility of the user. This substance is present in articles in quantities totalling under 10 kg per year. There is no human or environmental exposure under intended and foreseeable conditions of use. The user has the responsibility for handling, storage, use conditions and disposal of this article and for any use of the information in this SDS. The information has been obtained from suppliers and is without any warranty, express or implied, regarding its correctness. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the article.