

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Issue date: 2/26/2018 Revision date: 1/4/2024 Supersedes version of: 7/6/2020 Version: 5.0

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

1.1. Product identifier

Product form	: Substance
Trade name	: TRIMEBUTINE MALEATE
Chemical name	: 3,4,5-TRIMETHOXYBENZOIC ACID 2-(DIMETHYLAMINO)-2-PHENYLBUTYL ESTER MALEATE SALT
IUPAC name	: (Z)-but-2-enedioic acid;[2-(dimethylamino)-2-phenylbutyl] 3,4,5-trimethoxybenzoate
EC-No.	: 251-845-9
CAS-No.	: 34140-59-5
Product code	: 78510
Type of product	: Active Ingredient for Medicinal / Pharmaceutical Use
Formula	: C22H29NO5.C4H4O4
Synonyms	: (1-Ethyl-1-phenyl-2-(3,4,5-trimethoxybenzoyloxy)ethyl)dimethylammonium hydrogen maleate; 3,4,5-trimethoxy-benzoic acid beta-(dimethylamino)-beta-ethylphenethyl ester; Trimebutine Maleate
Product group	: Active Ingredient for Medicinal/Pharmaceutical Use
Other means of identification	: SMILES: CCC(COC(=O)c1cc(c(c(c1)OC)OC)OC)(c2ccccc2)N(C)C.C(=C\C(=O)O)\C(=O)O

1.2.1. Relevant identified uses	
Main use category	: API,Industrial use,Medicinal use
Industrial/Professional use spec	: Active Ingredient for Medicinal / Pharmaceutical Use
	For professional use only
	Industrial
Use of the substance/mixture	: Gastrointestinal tract regulator
Function or use category	: Pharmaceuticals

Manufacturer

08191 Rubi

Manufacturer

Zenc 12

Spain

MOEHS BCN S.L

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1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Head office

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Manufacturer

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1.4. Emergency telephone number

Emergency number

: +34 93 586 05 20 (9:00 - 17:00)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

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Adverse physicochemical, human health and environmental effects

To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice. Dust may form explosive mixture in air.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

No labelling applicable

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Substance type	: Mono-constituent
Oubblance type	. พอกอ ออกอสสนอกส

Name	Product identifier	%
_	CAS-No.: 34140-59-5 EC-No.: 251-845-9	100

3.2. Mixtures

Not applicable

SECTION 4: First aid measures			
4.1. Description of first aid measures			
First-aid measures general	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).		
First-aid measures after inhalation	: Allow affected person to breathe fresh air. Allow the victim to rest.		
First-aid measures after skin contact	: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.		
First-aid measures after eye contact	: Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists.		
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.		
4.2. Most important symptoms and effects, both acute and delayed			
Symptoms/effects	: Not expected to present a significant hazard under anticipated conditions of normal use.		

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 Unsuitable extinguishing media	Foam. Dry powder. Carbon dioxide. Water spray. Sand.Do not use a heavy water stream.		
5.2. Special hazards arising from the substance or mixture			
Hazardous decomposition products in case of fire	: Nitrogen oxides. Carbon monoxide. Carbon dioxide.		
5.3. Advice for firefighters			
Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.		

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Protection during firefighting

: Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures		
6.1. Personal precautions, protective equipment and emergency procedures		
6.1.1. For non-emergency personnel		
Emergency procedures	: Avoid breathing dust. Evacuate unnecessary personnel.	
6.1.2. For emergency responders		
Protective equipment Emergency procedures	: Use personal protective equipment as required. Equip cleanup crew with proper protection. : Ventilate area.	
6.2. Environmental precautions		
Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.		
6.3. Methods and material for containment and cleaning up		
Methods for cleaning up	: On land, sweep or shovel into suitable containers. Minimise generation of dust. Store away	

from other materials.

See Section 8. Exposure controls and personal protection.

6.4. Reference to other sections

SECTION 7: Handling and storage			
7.1. Precautions for safe handling			
Additional hazards when processed Precautions for safe handling Hygiene measures	 Not expected to present a significant hazard under anticipated conditions of normal use. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Do not get in eyes, on skin, or on clothing. Take all necessary technical measures to avoid or minimize the release of the product on the workplace. Eliminate all ignition sources if safe to do so. Avoid dust formation. Do not eat, drink or smoke when using this product. Always wash hands after handling the product. 		
7.2. Conditions for safe storage, including any incompatibilities			
Technical measures Storage conditions Incompatible products Incompatible materials	 Provide local exhaust or general room ventilation. Store at room temperature. Keep only in the original container in a cool, well ventilated place away from : Heat sources, Direct sunlight. Keep container closed when not in use. Strong bases. Strong acids. Oxidizing agent. Sources of ignition. Direct sunlight. 		
7.3. Specific end use(s)			

No additional information available

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

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8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

Control banding

: MOEHS occupational exposure band: 1 (> 1 mg/m3)

8.2. Exposure controls

8.2.1. Appropriate engineering controls

No additional information available

8.2.2. Personal protection equipment

Personal protective equipment:

Safety glasses. Gloves. Dust/aerosol mask with filter type P3.

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:

Chemical goggles or safety glasses

Eye protection		
Туре	Field of application	Standard
Safety glasses	Dust	EN 166

8.2.2.2. Skin protection

Hand protection:

Wear protective gloves.

Hand protection		
Туре	Material	Standard
Disposable gloves	Natural rubber, Nitrile rubber (NBR), Latex, Fluoroelastomer (FKM), Neoprene rubber (HNBR), Butyl rubber	EN 374-2

8.2.2.3. Respiratory protection

Respiratory protection:

Wear appropriate mask

Respiratory protection			
Device	Filter type	Condition	Standard
Dust mask	Туре РЗ	High dust protection	EN 143

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Other information:

Do not eat, drink or smoke during use.

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SECTION 9: Physical and chemical properties 9.1. Information on basic physical and chemical properties		
Colour	: white.	
Appearance	: Dust.	
Molecular mass	: 503.54 g/mol	
Odour	: characteristic.	
Odour threshold	: Not available	
Melting point	: 129 – 133 °C (According ACD/LABS)	
Freezing point	: Not available	
Boiling point	: 458 °C 760 mmHg (Acording ACD/LABS)	
Flammability	: Non flammable.	
Explosive properties	: May form combustible dust concentrations in air.	
Explosive limits	: Not applicable	
Lower explosion limit	: Not applicable	
Upper explosion limit	: Not applicable	
Flash point	: 230.8 °C (According ACD Labs)	
Auto-ignition temperature	: Not applicable	
Decomposition temperature	: Not available	
рН	: 4 (1% aq. sol)	
pH solution	: Not available	
Viscosity, kinematic	: Not applicable	
Solubility	: Soluble in ethanol. Moderately soluble in water.	
	Organic solvent:2.1 g/100ml DMSO (MEDCHEM EXPRESS)	
Partition coefficient n-octanol/water (Log Kow)	: 3.62 estimated by KOWWIN v1.67. Trimebutine base	
Vapour pressure	: Not available	
Vapour pressure at 50°C	: Not available	
Density	: 1.104 g/cm ³ (According ACD/LABS)	
Relative density	: Not available	
Relative vapour density at 20°C	: Not applicable	
Particle size	: Not available	
Particle size distribution	: Not available	
Particle shape	: Not available	
Particle aspect ratio	: Not available	
Particle aggregation state	: Not available	
Particle agglomeration state	: Not available	
Particle specific surface area	: Not available	
Particle dustiness	: 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

Minimum ignition energy	:	≈ 3-4 mJ
Dust Cloud minimum Flammability Temperature	:	380 °C
Explosion Class	:	St3
Explosion Severity Factor Kmax (bar.m/s)	:	332
Explosivity Pmax	:	9.2 bar.g
Layer Minimum flammability Temperature	:	>400 °C

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

The product is stable at normal handling and storage conditions.

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10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid dust formation. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide. Nitrogen oxides.

SECTION 11: Toxicological information 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008 : Not classified Acute toxicity (oral) : Not classified Acute toxicity (dermal) Not classified Acute toxicity (inhalation) : **TRIMEBUTINE MALEATE (34140-59-5)** > 5000 mg/kg Drugs in Japan, -(752), 1990 [Pubchem: I D50 oral rat https://pubchem.ncbi.nlm.nih.gov/compound/5388977#section=Toxicity] LD50 oral 3230 mg/kg oral mouse, Drugs in Japan, -(752), 1990 [Pubchem: https://pubchem.ncbi.nlm.nih.gov/compound/5388977#section=Toxicity] LD50, intraperitoneal, rat 365 mg/kg (Iyakuhin Kenkyu. Study of Medical Supplies, 15(688), 1984) LD50, subcutaneous, rat mg/kg (Iyakuhin Kenkyu. Study of Medical Supplies, 15(688), 1984) LD50, intravenous, rat 23400 mg/kg (Drugs in Japan, -(752), 1990) Skin corrosion/irritation : Not classified pH: 4 (1% aq. sol) Additional information Based on available data, the classification criteria are not met Serious eye damage/irritation : Not classified pH: 4 (1% aq. sol) Additional information : Based on available data, the classification criteria are not met Respiratory or skin sensitisation : Not classified Additional information Based on available data, the classification criteria are not met . Germ cell mutagenicity : Not classified Additional information : Based on available data, the classification criteria are not met Carcinogenicity : Not classified : Based on available data, the classification criteria are not met Additional information Reproductive toxicity Not classified (Based on available data, the classification criteria are not met) : Additional information Based on available data, the classification criteria are not met **TRIMEBUTINE MALEATE (34140-59-5)** NOAEL (animal/male, F0/P) 1000 mg/kg/day via oral . Rat. Reprodductive and fertility maximum dose (No effects at maximum dose) NOAEL (animal/male, F1) 200 mg/kg/day via oral .Rabbit. Reprodductive and fertility maximum dose (No effects at maximum dose) STOT-single exposure Not classified ÷ Additional information Based on available data, the classification criteria are not met STOT-repeated exposure Not classified

: Based on available data, the classification criteria are not met

: Not classified

: Based on available data, the classification criteria are not met

Additional information

Additional information

Aspiration hazard

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11.2. Information on other hazards	
11.2.1. Endocrine disrupting properties	
Adverse health effects caused by endocrine disrupting properties	: The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605
11.2.2. Other information	
Potential adverse human health effects and symptoms	: Based on available data, the classification criteria are not met

SECTION 12: Ecological information			
12.1. Toxicity			
Hazardous to the aquatic environment, short-term : (acute)	Not classified		
Hazardous to the aquatic environment, long-term : (chronic)	Not classified		
12.2. Persistence and degradability			
TRIMEBUTINE MALEATE (34140-59-5)			
Persistence and degradability	Not readily biodegradable. Not established.		
12.3. Bioaccumulative potential			
TRIMEBUTINE MALEATE (34140-59-5)			
Bioconcentration factor (BCF REACH)	121.3 estimated by BCFWIN v.2.17. Trimebutine base		
Partition coefficient n-octanol/water (Log Kow)	3.62 estimated by KOWWIN v1.67. Trimebutine base		
Bioaccumulative potential	Not established.		
12.4. Mobility in soil			
TRIMEBUTINE MALEATE (34140-59-5)			
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	4.795 estimated by PCKOCWIN v. 1.66. Trimebutine base		
12.5. Results of PBT and vPvB assessment			
No additional information available			
12.6. Endocrine disrupting properties			
Adverse effects on the environment caused by : endocrine disrupting properties	The substance/mixture has no endocrine disrupting properties.		
12.7. Other adverse effects			
Additional information :	Avoid release to the environment.		
SECTION 13: Disposal considerations			
13.1. Waste treatment methods			
Product/Packaging disposal recommendations :	Dispose in a safe manner in accordance with local/national regulations.		

Ecology - waste materials

: Avoid release to the environment.

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Overland transport Not applicable

Transport by sea Not applicable

Air transport Not applicable

Inland waterway transport Not applicable

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Rail transport

Not applicable

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

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 listed on the PIC list (Regulation EU 649/2012)

POP Regulation (Persistent Organic Pollutants)

Not listed on the POP list (Regulation EU 2019/1021)

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

Germany

Water hazard class (WGK) Hazardous Incident Ordinance (12. BlmSchV)	 Not classified according to Regulation Governing Systems for Handling Substances Hazardous to Waters (AwSV). Is not subject of the Hazardous Incident Ordinance (12. BImSchV)
Netherlands	
SZW-lijst van kankerverwekkende stoffen SZW-lijst van mutagene stoffen SZW-lijst van reprotoxische stoffen – Borstvoeding SZW-lijst van reprotoxische stoffen – Vruchtbaarheid SZW-lijst van reprotoxische stoffen – Ontwikkeling	 The substance is not listed
Switzerland Storage class (LK)	: NG - Non-hazardous
15.2. Chemical safety assessment	

No chemical safety assessment has been carried out

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SECTION 16: Other information	
Data sources	: REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.
Other information	: None.
Safety Data Sheet (SDS), EU	

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.