



# SAFETY DATA SHEET of: Epostyl B

Revision date: Friday, June 23, 2017

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

### 1.1 Product identifier:

Epostyl B

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

/

Concentration in use: /

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

**CERMIX**

Rue de la Belle Croix

62240 Desvres (France)

Phone: +33321101040 — Fax: +33321921982

E-mail: FDS\_Cermix@desvres.com — Website:

### 1.4 Emergency telephone number:

+33(0)145 425 959

## 2 SECTION 2: Hazards identification:

### 2.1 Classification of the substance or mixture:

Classification of the substance or mixture in accordance with regulation (EU) 1272/2008:

**H314 Skin Corr. 1B H317 Skin Sens. 1 H411 Aquatic Chronic 2**

### 2.2 Label elements:

Pictograms:



Signal word:

Danger

#### Hazard statements:

<b>H314 Skin Corr. 1B:</b>	Causes severe skin burns and eye damage.
<b>H317 Skin Sens. 1:</b>	May cause an allergic skin reaction.
<b>H411 Aquatic Chronic 2:</b>	Toxic to aquatic life with long lasting effects.

#### Precautionary statements:

<b>P272:</b>	Contaminated work clothing should not be allowed out of the workplace.
<b>P280:</b>	Wear protective gloves, protective clothing, eye protection, face protection.
<b>P302+P352:</b>	IF ON SKIN: Wash with plenty of soap and water.
<b>P304+P340:</b>	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
<b>P333+P313:</b>	If skin irritation or rash occurs: Get medical advice/attention.
<b>P362+P364:</b>	Take off contaminated clothing and wash it before reuse.

#### Contains:

Fatty acids, C18-unsatd., dimers, reaction products with polyethylenepolyamines    Trientine    Isophoronediamine

#### 2.3 Other hazards:

none

### 3 SECTION 3: Composition/information on ingredients:

Fatty acids, C18-unsatd., dimers, reaction products with polyethylenepolyamines	15% - 30%	CAS number: 68410-23-1 EINECS: 614-452-7 REACH Registration number: CLP Classification: <b>H315 Skin Irrit. 2</b> <b>H317 Skin Sens. 1</b> <b>H318 Eye Dam. 1</b> <b>H411 Aquatic Chronic 2</b>
Trientine	5% - 15%	CAS number: 90640-67-8 EINECS: 292-588-2 REACH Registration number: 01-2119487919-13 CLP Classification: <b>H312 Acute tox. 4</b> <b>H314 Skin Corr. 1B</b> <b>H317 Skin Sens. 1</b> <b>H412 Aquatic Chronic 3</b>
Isophoronediamine	5% - 15%	CAS number: 2855-13-2 EINECS: 220-666-8 REACH Registration number: 01-2119514687-32 CLP Classification: <b>H302+H312 Acute tox. 4</b> <b>H314 Skin Corr. 1B</b> <b>H317 Skin Sens. 1</b> <b>H412 Aquatic Chronic 3</b>
3,6,9-triazaundecamethylenediamine	< 5%	CAS number: 112-57-2 EINECS: 203-986-2 REACH Registration number: CLP Classification: <b>H302 Acute tox. 4</b> <b>H312 Acute tox. 4</b> <b>H314 Skin Corr. 1B</b> <b>H317 Skin Sens. 1</b> <b>H411 Aquatic Chronic 2</b>

1,3-Cyclohexanebis(methylamine)	< 5%	CAS number: 2579-20-6 EINECS: 219-941-5 REACH Registration number: 01-2119543741-41 CLP Classification: <b>H302 Acute tox. 4</b> <b>H312 Acute tox. 4</b> <b>H314 Skin Corr. 1C</b> <b>H317 Skin Sens. 1</b> <b>H412 Aquatic Chronic 3</b>
Styrenated phenol	< 5%	CAS number: 61788-44-1 EINECS: 262-975-0 REACH Registration number: 01-2119980970-27 CLP Classification: <b>H315 Skin Irrit. 2</b> <b>H317 Skin Sens. 1</b> <b>H411 Aquatic Chronic 2</b>
salicylic acid	< 5%	CAS number: 69-72-7 EINECS: 200-712-3 REACH Registration number: 01-2119486984-17 CLP Classification: <b>H302 Acute tox. 4</b> <b>H318 Eye Dam. 1</b>
Modified cycloaliphatic polyamine adduct [4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3- epoxypropane, reaction products with m- phenylenebis(methylamine)]	< 5%	CAS number: 113930-69-1 EINECS: 500-302-7 REACH Registration number: CLP Classification: <b>H314 Skin Corr. 1B</b> <b>H317 Skin Sens. 1</b> <b>H411 Aquatic Chronic 2</b>
2,4,6-Tris(dimethyl amino methyl)phenol	< 5%	CAS number: 90-72-2 EINECS: 202-013-9 REACH Registration number: 01-2119560597-27 CLP Classification: <b>H314 Skin Corr. 1B</b> <b>H317 Skin Sens. 1</b> <b>H412 Aquatic Chronic 3</b>
Trimethyl hexamethylene diamine	< 5%	CAS number: 25513-64-8 EINECS: 247-063-2 REACH Registration number: CLP Classification: <b>H302 Acute tox. 4</b> <b>H314 Skin Corr. 1A</b> <b>H317 Skin Sens. 1</b> <b>H412 Aquatic Chronic 3</b>
N-(3-(trimethoxysilyl)propyl)ethylenediamine	< 5%	CAS number: 1760-24-3 EINECS: 217-164-6 REACH Registration number: CLP Classification: <b>H317 Skin Sens. 1</b> <b>H318 Eye Dam. 1</b>
Dodecan-1-ol	< 5%	CAS number: 112-53-8 EINECS: 203-982-0 REACH Registration number: 01-2119485976-15 CLP Classification: <b>H319 Eye Irrit. 2</b> <b>H400 Aquatic Acute 1</b> <b>H411 Aquatic Chronic 2</b>

m-phenylenebis(methylamine)	< 5%	CAS number: 1477-55-0 EINECS: 216-032-5 REACH Registration number: 01-2119480150-50 CLP Classification: <b>H302 Acute tox. 4</b> <b>H314 Skin Corr. 1B</b> <b>H317 Skin Sens. 1</b> <b>H332 Acute tox. 4</b> <b>H412 Aquatic Chronic 3</b>
Bis[(dimethylamino)methyl]fenol	< 5%	CAS number: 71074-89-0 EINECS: 275-162-0 REACH Registration number: CLP Classification: <b>H314 Skin Corr. 1B</b>

For the full text of the H & R phrases mentioned in this section, see section 16.

## 4 SECTION 4: First aid measures:

### 4.1 Description of first aid measures:

Always ask medical advice as soon as possible should serious or continuous disturbances occur.

<b>Skin contact:</b>	remove contaminated clothing, rinse skin with plenty of water and immediately transport to hospital.
<b>Eye contact:</b>	first prolonged rinsing with water (contact lenses to be removed if this is easily done) then take to physician.
<b>Ingestion:</b>	rinse mouth, do not induce vomiting, take to hospital immediately.
<b>Inhalation:</b>	let sit upright, fresh air, rest and take to hospital.

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

<b>Skin contact:</b>	caustic, redness, pain, serious burns
<b>Eye contact:</b>	caustic, redness, bad looking, pain
<b>Ingestion:</b>	caustic, lack of breath, vomiting, blisters on lips and tongue, burning pain in mouth and throat, gullet and stomach
<b>Inhalation:</b>	headache, dizziness, nausea, drowsiness, unconsciousness

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

none

## 5 SECTION 5: Fire-fighting measures:

### 5.1 Extinguishing media:

CO2, foam, powder, sprayed water

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

none

### 5.3 Advice for firefighters:

<b>Extinguishing agents to be avoided:</b>	none
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## 6 SECTION 6: Accidental release measures:

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

Do not walk into or touch spilled substances and avoid inhalation of fumes, smoke, dusts and vapours by staying up wind. Remove any contaminated clothing and used contaminated protective equipment and dispose of it safely.

### 6.2 Environmental precautions:

do not allow to flow into sewers or open water.

### 6.3 Methods and material for containment and cleaning up:

Contain released substance, store into suitable containers. If possible remove by using absorbent material.

### 6.4 Reference to other sections:

for further information check sections 8 & 13.

## 7 SECTION 7: Handling and storage:

### 7.1 Precautions for safe handling:

handle with care to avoid spillage.

### 7.2 Conditions for safe storage, including any incompatibilities:

keep in a sealed container in a closed, frost-free, ventilated room.

### 7.3 Specific end use(s):

/





## 8 SECTION 8: Exposure controls/personal protection:

### 8.1 Control parameters:

Listing of the hazardous ingredients in section 3, of which the TLV value is known

/

### 8.2 Exposure controls:

<b>Inhalation protection:</b>	use with sufficient exhaust ventilation. If necessary, use an air-purifying face mask in case of respiratory hazards. Use the ABEK type as protection against these troublesome levels.	
<b>Skin protection:</b>	handling with nitril-gloves (EN 374). Breakthrough time: >480'. Material thickness: 0,35 mm. Thoroughly check gloves before use. Take off the gloves properly without touching the outside with your bare hands. The manufacturer of the protective gloves has to be consulted about the suitability for a specific work station. Wash and dry your hands.	
<b>Eye protection:</b>	keep an eye-rinse bottle within reach. Tight-fitting safety goggles. Wear a face shield and protective suit in case of exceptional processing problems.	
<b>Other protection:</b>	impermeable clothing. The type of protective equipment depends on the concentration and amount of hazardous substances at the work station in question.	

## 9 SECTION 9: Physical and chemical properties:

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

<b>Melting point/melting range:</b>	/
<b>Boiling point/Boiling range:</b>	211 °C — 272 °C
<b>pH:</b>	9.0
<b>pH 1% diluted in water:</b>	/
<b>Vapour pressure/20°C,:</b>	/
<b>Vapour density:</b>	not applicable
<b>Relative density, 20°C:</b>	0.9900 kg/l
<b>Appearance/20°C:</b>	liquid
<b>Flash point:</b>	/
<b>Flammability (solid, gas):</b>	not applicable
<b>Auto-ignition temperature:</b>	/
<b>Upper flammability or explosive limit, (Vol %):</b>	/
<b>Lower flammability or explosive limit, (Vol %):</b>	/
<b>Explosive properties:</b>	not applicable
<b>Oxidising properties:</b>	not applicable
<b>Decomposition temperature:</b>	/
<b>Solubility in water:</b>	not soluble
<b>Partition coefficient: n-octanol/water:</b>	not applicable
<b>Odour:</b>	characteristic
<b>Odour threshold:</b>	not applicable
<b>Dynamic viscosity, 20°C:</b>	150 mPa.s
<b>Kinematic viscosity, 40°C:</b>	152 mm²/s
<b>Evaporation rate (n-BuAc = 1):</b>	/

### 9.2 Other information:

<b>Volatile organic component (VOC):</b>	/
<b>Volatile organic component (VOC):</b>	47.520 g/l
<b>Sustained combustion test :</b>	/

## 10 SECTION 10: Stability and reactivity:

### 10.1 Reactivity:

stable under normal conditions.

### 10.2 Chemical stability:

extremely high or low temperatures.

### 10.3 Possibility of hazardous reactions:

none

### 10.4 Conditions to avoid:

protect from sunlight and do not expose to temperatures exceeding + 50°C.

#### 10.5 Incompatible materials:

keep away from acids

#### 10.6 Hazardous decomposition products:

doesn't decompose with normal use

## 11 SECTION 11: Toxicological information:

### 11.1 Information on toxicological effects:

**H314 Skin Corr. 1B:** Causes severe skin burns and eye damage.

**H317 Skin Sens. 1:** May cause an allergic skin reaction.

**Calculated acute toxicity, ATE oral:** /

**Calculated acute toxicity, ATE dermal:** /

Fatty acids, C18-unsatd., dimers, reaction products with polyethylenepolyamines	LD50 oral, rat: ≥ 5,000 mg/kg LD50 dermal, rabbit: ≥ 5,000 mg/kg LC50, Inhalation, rat, 4h: ≥ 50 mg/l
Trientine	LD50 oral, rat: ≥ 5,000 mg/kg LD50 dermal, rabbit: 1,465 mg/kg LC50, Inhalation, rat, 4h: ≥ 50 mg/l
Isophoronediamine	LD50 oral, rat: 1,030 mg/kg LD50 dermal, rabbit: 1,100 mg/kg LC50, Inhalation, rat, 4h: ≥ 50 mg/l
3,6,9-triazaundecamethylenediamine	LD50 oral, rat: ≥ 5,000 mg/kg LD50 dermal, rabbit: ≥ 5,000 mg/kg LC50, Inhalation, rat, 4h: ≥ 50 mg/l
1,3-Cyclohexanebis(methylamine)	LD50 oral, rat: 700 mg/kg LD50 dermal, rabbit: 1,700 mg/kg LC50, Inhalation, rat, 4h: ≥ 50 mg/l
Styrenated phenol	LD50 oral, rat: ≥ 5,000 mg/kg LD50 dermal, rabbit: ≥ 5,000 mg/kg LC50, Inhalation, rat, 4h: ≥ 50 mg/l
salicylic acid	LD50 oral, rat: 891 mg/kg LD50 dermal, rabbit: ≥ 5,000 mg/kg LC50, Inhalation, rat, 4h: ≥ 50 mg/l
Modified cycloaliphatic polyamine adduct [4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with m-phenylenebis(methylamine)]	LD50 oral, rat: ≥ 5,000 mg/kg LD50 dermal, rabbit: ≥ 5,000 mg/kg LC50, Inhalation, rat, 4h: ≥ 50 mg/l
2,4,6-Tris(dimethyl amino methyl)phenol	LD50 oral, rat: ≥ 5,000 mg/kg LD50 dermal, rabbit: ≥ 5,000 mg/kg LC50, Inhalation, rat, 4h: ≥ 50 mg/l

Trimethyl hexamethylene diamine	LD50 oral, rat: 930 mg/kg LD50 dermal, rabbit: ≥ 5,000 mg/kg LC50, Inhalation, rat, 4h: ≥ 50 mg/l
N-(3-(trimethoxysilyl)propyl)ethylenediamine	LD50 oral, rat: ≥ 5,000 mg/kg LD50 dermal, rabbit: ≥ 5,000 mg/kg LC50, Inhalation, rat, 4h: ≥ 50 mg/l
Dodecan-1-ol	LD50 oral, rat: ≥ 5,000 mg/kg LD50 dermal, rabbit: ≥ 5,000 mg/kg LC50, Inhalation, rat, 4h: ≥ 50 mg/l
m-phenylenebis(methylamine)	LD50 oral, rat: 980 mg/kg LD50 dermal, rabbit: 3,100 mg/kg LC50, Inhalation, rat, 4h: 11 mg/l
Bis[(dimethylamino)methyl]fenol	LD50 oral, rat: ≥ 5,000 mg/kg LD50 dermal, rabbit: ≥ 5,000 mg/kg LC50, Inhalation, rat, 4h: ≥ 50 mg/l

## 12 SECTION 12: Ecological information:

### 12.1 Toxicity:

Trientine	LC50 (Fish): 330 mg/L (96h) EC50 (Daphnia): 31,1 mg/L (48h) NOEC (Daphnia): 18 mg/L (48h) EC50 (Algae): 20 mg/L (72h) NOEC (Algae): < 2.5 mg/L (72h) EC50 (soil microorganisms): 800 mg/L (30 min)
Isophoronediamine	EC50 (Algae): 12 mg/L (Scenedesmus)(72h)
1,3-Cyclohexanebis(methylamine)	LC50 (Fish): 130 mg/L (96h) EC50 (Daphnia): 65,4 mg/L (48h) NOEC (Daphnia): 43,9 mg/L (48h) EC50 (Algae): 56,7 mg/L (72h) NOEC (Algae): 13,7 mg/L (72h) EC50 (soil microorganisms): > 1000 mg/L (3h)
Styrenated phenol	LC50 (Fish): 5.6 mg/L (4d) NOEC (Fish): 1.9 mg/L (14d) EC50 (Daphnia): 1.44 - 4.6 mg/L (45h) EC50 (Algae): 1.5 mg/L (21d) NOEC (Algae): 115 - 200 µg/L (21d)
salicylic acid	EC50 (Daphnia): 870 mg/L (48h) EC50 (Algae): > 100 mg/L (72h)
2,4,6-Tris(dimethyl amino methyl)phenol	EC50 (Algae): 84 mg/L (72h)
Trimethyl hexamethylene diamine	LC50 (Fish): 174 mg/l (48h) EC50 (Daphnia): 31,5 mg/l (24h) EC50 (Algae): 29,5 mg/l (72h) EC50 (soil microorganisms): 89 mg/l (17h)(pseudomonas putida)



Dodecan-1-ol	LC50 (Fish): 1.01 mg/L (96h) EC50 (Daphnia): 0.765 mg/L (48h) NOEC (Daphnia): 0.316 mg/L (48h) EC50 (Algae): 0.33 mg/L (72h) NOEC (Algae): 0.085 mg/L (72h)
m-phenylenebis(methylamine)	LC50 (Fish): 87.6 mg/L (96h) EC50 (Daphnia): 87.6 mg/L (96h) EC50 (Algae): 20.3 mg/L (72h) EC50 (soil microorganisms): > 1000 mg/L (30min)

#### 12.2 Persistence and degradability:

No additional data available

#### 12.3 Bioaccumulative potential:

No additional data available

#### 12.4 Mobility in soil:

**Water hazard class, WGK:** 3  
**Solubility in water:** not soluble

#### 12.5 Results of PBT and vPvB assessment:

No additional data available

#### 12.6 Other adverse effects:

No additional data available

### 13 SECTION 13: Disposal considerations:

#### 13.1 Waste treatment methods:

Draining into the sewers is not permitted. Removal should be carried out by licensed services. Possible restrictive regulations by local authority should always be adhered to.

### 14 SECTION 14: Transport information:

#### 14.1 UN number:

2735

#### 14.2 UN proper shipping name:

UN 2735 Amines, liquid, corrosive, n.o.s. (mixture with 1,3-Cyclohexanebis(methylamine); m-phenylenebis(methylamine)), 8, II, (E)

#### 14.3 Transport hazard class(es):

**Class(es):** 8  
**Identification number of the hazard:** 80

#### 14.4 Packing group:

II

#### 14.5 Environmental hazards:

environmentally hazardous

#### 14.6 Special precautions for user:

##### Hazard characteristics:

Risk of burns. Risk to the aquatic environment and the sewerage system.

##### Additional guidance:



## 15 SECTION 15: Regulatory information:

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

**Water hazard class, WGK:** 3

**Volatile organic component (VOC):** /

**Volatile organic component (VOC):** 47.520 g/l

**Composition by regulation (EC 648/2004):** Preservatives (Salicylic Acid)

### 15.2 Chemical Safety Assessment:

No data available

## 16 SECTION 16: Other information:

### Legend to abbreviations used in the safety data sheet:

<b>ADR:</b>	The European Agreement concerning the International Carriage of Dangerous Goods by Road
<b>BCF:</b>	Bioconcentration factor
<b>CAS:</b>	Chemical Abstracts Service
<b>CLP:</b>	Classification, Labelling and Packaging of chemicals
<b>EINECS:</b>	European INventory of Existing Commercial chemical Substances
<b>Nr.:</b>	number
<b>PTB:</b>	persistent, toxic, bioaccumulative
<b>TLV:</b>	Threshold Limit Value
<b>vPvB:</b>	very persistent and very bioaccumulative substances
<b>WGK:</b>	Water hazard class
<b>WGK 1:</b>	slightly hazardous for water
<b>WGK 2:</b>	hazardous for water
<b>WGK 3:</b>	extremely hazardous for water

### Legend to the H Phrases used in the safety data sheet:

**H302 Acute tox. 4:** Harmful if swallowed. **H302+H312 Acute tox. 4:** Harmful if swallowed or in contact with skin.  
**H312 Acute tox. 4:** Harmful in contact with skin. **H314 Skin Corr. 1A:** Causes severe skin burns and eye damage.  
**H314 Skin Corr. 1B:** Causes severe skin burns and eye damage. **H314 Skin Corr. 1C:** Causes severe skin burns and eye damage.  
**H315 Skin Irrit. 2:** Causes skin irritation. **H317 Skin Sens. 1:** May cause an allergic skin reaction.  
**H318 Eye Dam. 1:** Causes serious eye damage. **H319 Eye Irrit. 2:** Causes serious eye irritation.  
**H332 Acute tox. 4:** Harmful if inhaled. **H400 Aquatic Acute 1:** Very toxic to aquatic life.  
**H411 Aquatic Chronic 2:** Toxic to aquatic life with long lasting effects. **H412 Aquatic Chronic 3:** Harmful to aquatic life with long lasting effects.

**Reason of revision, changes of following items:**

not applicable

**MSDS reference number:**

ECM-109581,01

*This safety information sheet has been compiled in accordance with annex II/A of the regulation (EU) No 2015/830. Classification has been calculated in accordance with European regulation 1272/2008 with their respective amendments. It has been compiled with the utmost care. We cannot, however, accept responsibility for damage, of any kind, that may be caused by using these data or the product concerned. To use this preparation for an experiment or a new application, the user must carry out a material suitability and safety study himself.*