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

1.1. Product identifier

PL-POX 25, Part B

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

Use of the substance/mixture

Chemical product for construction and industry.
For use in industrial installations and professional treatment only.

Uses advised against

The product is not intended for private use.

1.3. Details of the supplier of the safety data sheet

Company name:	Bodenbender GmbH
Street:	Goldbergstraße 32
Place:	D-35216 Biedenkopf
Telephone:	+49 (0)6461 98520
e-mail:	info@bodenbender.com
Internet:	www.bodenbender.com

1.4. Emergency telephone number:

+49 (0)6461 98520 (Mo-Fr 07:00 – 16:00 h (CET))

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories:
Acute toxicity: Acute Tox. 4
Acute toxicity: Acute Tox. 4
Skin corrosion/irritation: Skin Corr. 1A
Serious eye damage/eye irritation: Eye Dam. 1
Respiratory or skin sensitisation: Skin Sens. 1A
Hazardous to the aquatic environment: Aquatic Chronic 3
Hazard Statements:
Harmful if swallowed.
Harmful if inhaled.
Causes severe skin burns and eye damage.
Causes serious eye damage.
May cause an allergic skin reaction.
Harmful to aquatic life with long lasting effects.

2.2. Label elements

Regulation (EC) No. 1272/2008

Hazard components for labelling

m-phenylenebis(methylamine)
Phenol, styrenated
2,2,4(or 2,4,4)-trimethylhexane-1,6-diamine
2,4,6-Tris-(dimethylaminomethyl)phenol
3-aminopropyltriethoxysilane

Signal word: Danger

Pictograms:

Hazard statements

H302+H332	Harmful if swallowed or if inhaled.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and

easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
1477-55-0	m-phenylenebis(methylamine)			25 - < 50 %
	216-032-5		01-2119480150-50	
	Acute Tox. 4, Acute Tox. 4, Skin Corr. 1B, Skin Sens. 1, Aquatic Chronic 3; H332 H302 H314 H317 H412			
61788-44-1	Phenol, styrenated			10 - < 25 %
	262-975-0		01-2119980970-27	
	Skin Irrit. 2, Skin Sens. 1A, Aquatic Chronic 2; H315 H317 H411			
25513-64-8	2,2,4(or 2,4,4)-trimethylhexane-1,6-diamine			10 - < 25 %
	247-063-2		01-2119560598-25	
	Acute Tox. 4, Skin Corr. 1A, Eye Dam. 1, Skin Sens. 1A, Aquatic Chronic 3; H302 H314 H318 H317 H412			
90-72-2	2,4,6-Tris-(dimethylaminomethyl)phenol			1 - < 5 %
	202-013-9		01-2119560597-27	
	Skin Corr. 1B, Skin Sens. 1; H314 H317			
919-30-2	3-aminopropyltriethoxysilane			1 - < 5 %
	213-048-4	612-108-00-0	01-2119480479-24	
	Acute Tox. 4, Skin Corr. 1B, Eye Dam. 1, Skin Sens. 1; H302 H314 H318 H317			

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

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Move victim out of danger zone. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

After inhalation

Remove casualty to fresh air and keep warm and at rest. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

After contact with skin

After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water and soap. Immediate medical treatment required because injuries that are not treated are hard to cure.

After contact with eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical advice immediately.

After ingestion

If swallowed, rinse mouth with water (only if the person is conscious). Let water be drunken in little sips (dilution effect). Do NOT induce vomiting. Call a physician immediately.

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

- Causes severe skin burns and eye damage.
- Allergic reactions.
- gastro-intestinal ailment.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

- alcohol resistant foam.
- Water spray.
- Carbon dioxide (CO2).
- dry extinguishing powder.

Unsuitable extinguishing media

- High power water jet.

5.2. Special hazards arising from the substance or mixture

In case of fire may be liberated:
- Carbon monoxide
- Carbon dioxide.
- Nitrogen oxides (NOx).

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing.

Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment. See protective measures under point 7 and 8. Provide adequate ventilation as well as local exhaustion at critical locations.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Cover drains. Clean contaminated articles and floor according to the environmental legislation. In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Take up mechanically, placing in appropriate containers for disposal.

6.4. Reference to other sections

Personal protection equipment refer to chapter 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

People who suffer from skin sensitization problems, asthma, allergies, chronic or recurring respiratory illnesses should not be deployed in any process using this preparation.

Avoid contact with skin, eyes and clothes. Avoid breathing dust/fume/gas/mist/vapours/spray. When using do not eat, drink or smoke. Wear personal protection equipment.

Never use pressure to empty container. Keep/Store only in original container.

Do not allow to enter into surface water or drains.

Advice on protection against fire and explosion

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Further information on handling

Wash hands before breaks and after work. Used working clothes should not be worn outside the work area. Street clothing should be stored seperately from work clothing.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed in a cool, well-ventilated place. Keep/Store only in original container. Protect against direct sunlight.

Hints on joint storage

Keep away from food, drink and animal feedingstuffs.

Further information on storage conditions

Protect against:
- frost.
- moisture.
- heat.

7.3. Specific end use(s)

No data available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

PNEC values

CAS No	Substance	
Environmental compartment		Value
1477-55-0	m-phenylenebis(methylamine)	
Freshwater		0,094 mg/l
Marine water		0,0094 mg/l
25513-64-8	2,2,4(or 2,4,4)-trimethylhexane-1,6-diamine	
Freshwater		0,0295 mg/l
Marine water		,00295 mg/l
Freshwater sediment		0,18 mg/kg
Marine sediment		0,018 mg/kg
Micro-organisms in sewage treatment plants (STP)		72 mg/l
Soil		0,019 mg/kg

Additional advice on limit values

To date, no national critical limit values exist.

8.2. Exposure controls

Appropriate engineering controls

Provide adequate ventilation. If handled uncovered, arrangements with local exhaust ventilation should be used if possible.

Protective and hygiene measures

Avoid contact with skin, eyes and clothes. Protect skin by using skin protective cream. Take off immediately all contaminated clothing. When using do not eat, drink, smoke, sniff. Wash hands before breaks and after work.

Eye/face protection

Wear eye/face protection.

Hand protection

Suitable material:
- NBR (Nitrile rubber).
- Butyl rubber.

German Industry Norms (DIN) / European Norms (EN): EN ISO 374

Protective gloves have to be replaced at the first sign of deterioration. Protect skin by using skin protective cream. See information supplied by the manufacturer.

Skin protection

For the protection against direct skin contact, body protective clothing is essential (in addition to the usual working clothes).

Respiratory protection

If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn. Observe the wear time limits according GefStoffV in combination with the rules for using respiratory protection apparatus (BGR 190).

Environmental exposure controls

Do not allow to enter into surface water or drains. In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	liquid
Colour:	transparent
Odour:	characteristic

Changes in the physical state

Melting point:	No data available
Initial boiling point and boiling range:	No data available
Sublimation point:	No data available
Softening point:	No data available
Pour point:	No data available
Flash point:	> 95 °C
Sustaining combustion:	No data available

Flammability

Solid:	No data available
Gas:	No data available
Lower explosion limits:	No data available
Upper explosion limits:	No data available
Ignition temperature:	No data available
Auto-ignition temperature	
Solid:	No data available
Gas:	No data available
Decomposition temperature:	No data available
Vapour pressure:	No data available
Vapour pressure:	No data available
Density (at 23 °C):	~ 1,0 g/cm³
Partition coefficient:	No data available
Viscosity / dynamic: (at 23 °C)	~ 1600 mPa·s
Viscosity / kinematic:	No data available
Flow time:	No data available
Vapour density:	No data available
Evaporation rate:	No data available

9.2. Other information

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions by handling and stock-keeping according to the guidelines.

10.2. Chemical stability

No decomposition by use according to the guideline.

10.3. Possibility of hazardous reactions

No data available

10.4. Conditions to avoid

No data available

10.5. Incompatible materials

No data available

10.6. Hazardous decomposition products

No data available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Harmful if swallowed.

Harmful if inhaled.

ATEmix calculated

ATE (oral) 1756,7 mg/kg; ATE (inhalation aerosol) 3,846 mg/l

CAS No	Chemical name					
	Exposure route	Dose		Species	Source	Method
1477-55-0	m-phenylenebis(methylamine)					
	oral	LD50	930 mg/kg	Rat		
	dermal	LD50 mg/kg	3100	Rabbit		
	inhalation vapour	ATE	11 mg/l			
	inhalation aerosol	ATE	1,5 mg/l			
61788-44-1	Phenol, styrenated					
	oral	LD50 mg/kg	> 2000	Rat		OECD 423
	dermal	LD50 mg/kg	> 2000	Rat		OECD 402
25513-64-8	2,2,4(or 2,4,4)-trimethylhexane-1,6-diamine					
	oral	LD50	910 mg/kg	Rat		
90-72-2	2,4,6-Tris-(dimethylaminomethyl)phenol					
	oral	LD50 mg/kg	2170	Rat		
919-30-2	3-aminopropyltriethoxysilane					
	oral	ATE	500 mg/kg			

Irritation and corrosivity

Causes severe skin burns and eye damage.

Causes serious eye damage.

Sensitising effects

May cause an allergic skin reaction. (m-phenylenebis(methylamine); Phenol, styrenated; 2,2,4(or 2,4,4)-trimethylhexane-1,6-diamine; 2,4,6-Tris-(dimethylaminomethyl)phenol; 3-aminopropyltriethoxysilane)

May cause heavy allergic reactions with chronic effects after a sensitization and a later exposure by very low amounts.

Carcinogenic/mutagenic/toxic effects for reproduction

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

STOT-single exposure

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

STOT-repeated exposure

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

Aspiration hazard

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

Observations relevant to classification

Respiratory or skin sensitisation/Irritant effect on the respiratory tract: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

SECTION 12: Ecological information

12.1. Toxicity

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h] | [d]	Species	Source	Method
1477-55-0	m-phenylenebis(methylamine)						
	Acute fish toxicity	LC50	> 100 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)		
	Acute algae toxicity	ErC50	20,3 mg/l	72 h	Selenastrum capricornutum		
	Acute crustacea toxicity	EC50	15,2 mg/l	48 h	Daphnia magna		
61788-44-1	Phenol, styrenated						
	Acute fish toxicity	LC50	14,8 mg/l	96 h	fish		OECD 203
	Acute algae toxicity	ErC50	3,14 mg/l	72 h	algae		OECD 201
	Acute crustacea toxicity	EC50	< 10 mg/l	48 h	Daphnia magna		OECD 202
	Crustacea toxicity	NOEC	0,115 mg/l	21 d	Daphnia magna		OECD 211
919-30-2	3-aminopropyltriethoxysilane						
	Acute fish toxicity	LC50	> 934 mg/l	96 h	Brachydanio rerio (zebra-fish)		
	Acute crustacea toxicity	EC50	331 mg/l	48 h	Daphnia magna		

12.3. Bioaccumulative potential

No information available.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
919-30-2	3-aminopropyltriethoxysilane	0,31

BCF

CAS No	Chemical name	BCF	Species	Source
61788-44-1	Phenol, styrenated	69-190		

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

This substance does not meet the criteria for classification as PBT or vPvB.

Further information

Harmful to aquatic life with long lasting effects. Do not allow to enter into surface water or drains.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

The waste have to be allocated source-related according to the actual disposal guidelines.

Contaminated packaging

Containers emptied of residues have to be recycled. Containers emptied of residues may still contain hazardous residues and containers not emptied should be removed harmlessly according to the actual disposal guidelines.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number:	UN 2735
14.2. UN proper shipping name:	AMINES, LIQUID, CORROSIVE, N.O.S. (m-phenylenebis(methylamine); Trimethylhexamethylenediamines)
14.3. Transport hazard class(es):	8
14.4. Packing group:	II
Hazard label:	8
Classification code:	C7
Special Provisions:	274
Limited quantity:	1 L
Excepted quantity:	E2
Transport category:	2
Hazard No:	80
Tunnel restriction code:	E

Inland waterways transport (ADN)

14.1. UN number:	UN 2735
14.2. UN proper shipping name:	AMINES, LIQUID, CORROSIVE, N.O.S. (m-phenylenebis(methylamine); Trimethylhexamethylenediamines)
14.3. Transport hazard class(es):	8
14.4. Packing group:	II
Hazard label:	8
Classification code:	C7
Special Provisions:	274
Limited quantity:	1 L
Excepted quantity:	E2

Marine transport (IMDG)

14.1. UN number:	UN 2735
14.2. UN proper shipping name:	AMINES, LIQUID, CORROSIVE, N.O.S. (m-phenylenebis(methylamine); Trimethylhexamethylenediamines)
14.3. Transport hazard class(es):	8
14.4. Packing group:	II
Hazard label:	8
Marine pollutant:	no
Special Provisions:	274
Limited quantity:	1 L
Excepted quantity:	E2
EmS:	F-A, S-B

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number:	UN 2735
14.2. UN proper shipping name:	AMINES, LIQUID, CORROSIVE, N.O.S. (m-phenylenebis(methylamine); Trimethylhexamethylenediamines)
14.3. Transport hazard class(es):	8
14.4. Packing group:	II
Hazard label:	8
Special Provisions:	A3 A803
Limited quantity Passenger:	0.5 L
Passenger LQ:	Y840
Excepted quantity:	E2
IATA-packing instructions - Passenger:	851
IATA-max. quantity - Passenger:	1 L
IATA-packing instructions - Cargo:	855
IATA-max. quantity - Cargo:	30 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS:	no

SECTION 15: Regulatory information

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

National regulatory information

Water hazard class (D):	2 - obviously hazardous to water

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 2,3,7,9,11,14,15.

Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]

Classification	Classification procedure
Acute Tox. 4; H302	Calculation method
Acute Tox. 4; H332	Calculation method
Skin Corr. 1A; H314	Calculation method
Eye Dam. 1; H318	Calculation method
Skin Sens. 1A; H317	Calculation method
Aquatic Chronic 3; H412	Calculation method

Relevant H and EUH statements (number and full text)

H302	Harmful if swallowed.
H302+H332	Harmful if swallowed or if inhaled.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H332	Harmful if inhaled.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material. The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)