

Material Safety Data Sheet

SDS date: 04-05-2017

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

1.1. Product Identifier

Trade Name: EP-D 80 B-komp: Base Coat/Top coat

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

Recommended uses: Paint. After mixture with a-komp, both MSDS should be used.

1.2. Details of the supplier of the safety data sheet

Manufacturer:

Promal A/S
Joachim Wellersvej 27-29
7500 Holstebro
Tlf.: +45 96 10 50 80
www.promal.dk

Supplier:

DMS A/S
T: +45 7023 4343
F: +45 7023 4342
dms@dms-as.com
www.dms-as.com

Contact person and E-mail:

Erling Kristensen, info@promal.dk

The Safety data sheet is completed and validated by:

mediator A/S, Centervej 2, DK-6000 Kolding. Consultant: LW

1.3. Emergency telephone number

Use your national or local emergency number - See section 4 "First aid measures".

SECTION 2: Hazards identification

2.1. Classification of substance or mixture

CLP (1272/2008): Acute Tox. 4, Skin Corr. 1B, Skin Sens. 1, Resp. Sens. 1, Repr. 2; Aquatic Chronic 2; H302, H314, H317, H334, H361fd, H411.

See full text of H-phrases in section 16.

2.2. Label elements



Signal word:

Danger

According to EU regulation 1907/2006 (REACH)

Harmful if swallowed. (H302)

Causes severe skin burns and eye damage. (H314)

May cause an allergic skin reaction. (H317)

May cause allergy or asthma symptoms or breathing difficulties if inhaled. (H334)

Suspected of damaging fertility. Suspected of damaging the unborn child. (H361fd)

Toxic to aquatic life with long lasting effects . (H411)

If medical advice is needed, have product container or label at hand. (P101)

Keep out of reach of children. (P102)

Avoid release to the environment. (P273)

Wear protective gloves/protective clothing/eye protection/face protection. (P280)

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. (P301+P330+P331)

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

Immediately call a POISON CENTER/doctor (P303+P361+P353+P310)

IF INHALED: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER/doctor. (P304+P340+P342+P311)

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.. (P305+P351+ P338)

Dispose of contents/container in accordance with local regulation. (P501)

2.3. Other hazards

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Additional labelling:

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Additional warnings:

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SECTION 3: Composition/information on ingredients

3.1./3.2. Substances/Mixtures

Substance	EU-Index no.	CAS / EINECS no.	CLP-classification	w/w %	Note
Polyoxypropylendiamin	-	9046-10-0/-	Skin Corr. 1B;H314, Eye Dam. 1, H318, Aquatic Chronic 2;H411	55-65	-
3-aminomethyl-3,5,5-trimethylcyclohexylamin	612-067-00-0	2855-13-2/ 220-666-8	Acute Tox. 4, Skin Corr. 1B, Skin Sens. 1, Aquatic Chronic 3; H302, H312, H314, H317, H412	12-20	-
Benzylalkohol	603-057-00-5	100-51-6/ 202-859-9	Acute Tox. 4; H302, H332	5-15	-
Piperazine	612-057-00-4	110-85-0/ 203-808-3	Skin Corr. 1B, Skin Sens. 1, Resp. Sens. 1, Repr. 2; H314, H317, H334, H361df	<2,5	-
2-piperazin-1-ylethylamine	612-105-00-4	140-31-8/ 205-411-0	Acute Tox. 4, Skin Corr. 1B, Skin Sens. 1, Aquatic Chronic 3; H302, H312, H314, H317, H412	<1	-

For the wording of the listed risk phrases refer to section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation:	Seek fresh air. Keep victim under observation. Seek medical advice immediately.
Ingestion:	Wash out mouth thoroughly and drink 1-2 glasses of water in small sips. Do not induce vomiting. Seek medical advice immediately.
Skin contact:	Remove contaminated clothing. Wash skin with soap and water. Seek medical advice immediately.
Eye contact:	Open eye wide, remove any contact lenses and flush immediately with water (preferably using eye wash equipment). Seek medical advice immediately. Continue flushing until medical attention is obtained.
Additional information:	When obtaining medical advice, show the safety data sheet or label. Symptoms: See section 11.

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

Harmful if swallowed.

Tissue damaging effects: This product contains substances which are corrosive. If vapour or aerosols are inhaled, it can result in damage to lungs, irritation and burns in the respiratory organs as well as coughing. Corrosive substances cause irreversible damage to eyes and acid burns to skin.

Sensitivity effects: This product contains substances which can give an allergic reaction on contact with skin. The allergic reaction will typically set in 12-72 hours after exposure as the substance penetrates the skin and reacts with proteins in the outer skin. The body's immune system sees the chemically changed protein as a foreign body and will try to destroy it.

Sensitivity effects: This product contains substances which can give an allergic reaction when inhaled. The allergic reaction allergy will typically set in an hour after exposure and give an inflammatory reaction in the lungs.

Reproductive toxicity: This product contains teratogenic substances which can do long-term damage to human offspring. The effects on the child can be: death, deformity, delayed development, and functional disorders.

Reproductive toxicity: This product contains substances which can do damage to reproductive capacity, e.g. damage to germ cells or hormonal regulation. The effects can be: sterility, reduced fertility, menstruation disorders, etc.

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

If symptoms such as eczema, dyspnoea, burns or damage to eyes occurs, consult a doctor.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Extinguish with powder, foam, carbon dioxide or water mist. Do not use water stream, as it may spread the fire.

5.2. Special hazards arising from the substance or mixture

Avoid inhalation of vapour and fumes – seek fresh air. Hazardous fumes are formed in fire conditions.

5.3. Advice for firefighters

Send contaminated extinguishing water for destruction. Extinguishing water which has been in contact with the product may be corrosive.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

See section 8 for type of protective equipment. Avoid breathing and contact with skin and eyes.

Environmental precautions

Avoid unnecessary release to the environment. Notify proper authorities in case of contamination of soil or aquatic environment or discharge to drains.

6.3. Methods and material for containment and cleaning up

Contain and absorb spill with sand or other absorbent material and transfer to suitable waste containers. Caution! Causes burns. See section 13 for instructions on disposal.

6.4. Reference to other sections

See section 8 for type of protective equipment. See section 13 for instructions on disposal.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

See section 8 for information about precautions for use and personal protective equipment. Running water and eye wash equipment must be available. The product should be used under well-ventilated conditions and preferably under process ventilation.

7.2. Conditions for safe storage, including any incompatibilities

The product should be stored safely, out of reach of children and away from food, animal feeding stuffs, medicines, etc. Store frost free. Keep in tightly closed original packaging.

7.3. Specific end use(s)

See section 1.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits according to EH40/2005 Workplace exposure limits (Second edition, 2011): -

DNEL and PNEC values:

DNEL – Benzylalkohol:

Dermal	Short term	Systemic effects	Workers	47 mg/kg bw/day
Inhalation	Short term	Systemic effects	Workers	450 mg/m ³
Dermal	Long Term	Systemic effects	Workers	9.5 mg/kg bw/day
Inhalation	Long Term	Systemic effects	Workers	90 mg/m ³
Oral	Short term	Systemic effects	General population	25 mg/kg bw/day
Dermal	Short term	Systemic effects	General population	28.5 mg/kg bw/day
Inhalation	Short term	Systemic effects	General population	40.55 mg/m ³
Oral	Long Term	Systemic effects	General population	5 mg/kg bw/day
Dermal	Long Term	Systemic effects	General population	5.7 mg/kg bw/day
Inhalation	Long Term	Systemic effects	General population	8.11 mg/m ³

DNEL - 3-Aminomethyl-3,5,5-trimethylcyclohexylamin:

Oral	Long Term	Systemic effects	General population	0.526 mg/kg bw/day
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DNEL – Piperazine:

Dermal	Short term	Systemic effects	Workers	0.042 mg/kg bw/day
Inhalation	Short term	Systemic effects	Workers	0.3 mg/m ³
Dermal	Short term	Local effects	Workers	2 % in mixture (weight basis)
Inhalation	Short term	Local effects	Workers	0.3 mg/m ³
Dermal	Long Term	Systemic effects	Workers	0.014 mg/kg bw/day
Inhalation	Long Term	Systemic effects	Workers	0.1 mg/m ³
Inhalation	Long Term	Local effects	Workers	0.3 mg/m ³
Oral	Long Term	Systemic effects	General population	1.5 mg/kg bw/day

DNEL – 2-piperazin-1-ylethylamine:

Inhalation	Short term	Systemic effects	Workers	20 mg/kg bw/day
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According to EU regulation 1907/2006 (REACH)

Inhalation	Short term	Local effects	Workers	0.04 mg/cm ²
Inhalation	Long Term	Systemic effects	Workers	3.3 mg/kg bw/day
Inhalation	Long Term	Local effects	Workers	0.006 mg/cm ²
Oral	Short term	Systemic effects	General population	1.5 mg/kg bw/day
Dermal	Short term	Systemic effects	General population	10 mg/kg bw/day
Inhalation	Short term	Systemic effects	General population	5.3 mg/m ³
Dermal	Short term	Local effects	General population	0.02 mg/cm ²
Oral	Long Term	Systemic effects	General population	0.3 mg/kg bw/day
Dermal	Long Term	Systemic effects	General population	1.7 mg/kg bw/day
Inhalation	Long Term	Systemic effects	General population	0.9 mg/m ³
Dermal	Long Term	Local effects	General population	0.003 mg/cm ²
PNEC – Benzylalkohol:				
Water	Fresh		1 mg/L	
Water	Marine		0.1 mg/L	
Water	Intermittent releases		2.3 mg/L	
Soil	-		0.456 mg/kg soil dw	
PNEC - 3-Aminomethyl-3,5,5-trimethylcyclohexylamin:				
Water	Fresh		0.06 mg/L	
Water	Marine		0.006 mg/L	
Water	Intermittent releases		0.23 mg/L	
Soil	-		1.121 mg/kg soil dw	
PNEC – Piperazine:				
Water	Fresh		1.25 mg/L	
Water	Marine		0.125 mg/L	
Water	Intermittent releases		1.25 mg/L	
Soil	-		11.5 mg/kg soil dw	
PNEC – 2-piperazin-1-ylethylamine				
Water	Fresh		0.058 mg/L	
Water	Marine		0.006 mg/L	
Water	Intermittent releases		0.58 mg/L	
Soil	-		42.9 mg/kg soil dw	

8.2. Exposure controls

There are no exposure scenarios for this product.

Appropriate engineering controls:

Wash hands before breaks, before using restroom facilities, and at the end of the work. Wear personal protective equipment specified in below section.

Personal protective equipment:



Breathing equipment:	In case of insufficient ventilation, wear respiratory protective equipment with filter A2
Hand protection:	Recommended: Nitrile rubber., PVC or Neoprene rubber
Eye protection:	Wear safety goggles/face protection..
Body and skin protection:	Special work clothing should be used.

Environmental exposure controls:

Ensure compliance with local regulations for emissions.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance:	Clear fluid
Odour:	Amine
Odour threshold:	-
pH:	-
Melting point/ Freezing Point (°C):	-
Initial boiling point and boiling range (°C):	-
Flash point (°C):	-
Evaporation rate:	-
Flammability (solid, gas)	-
Upper / lower Flammability or Explosion limits (vol-%):	-
Vapour pressure (mbar, 25 °C):	-
Vapour density (air=1)	-
Relative density:	-
Solubility(ies)	-
Partition coefficient : n-octanol/water:	-
Auto-ignition temperature (°C):	-
Decomposition temperature (°C):	-
Viscosity (cPs):	-
Explosive properties:	-
Oxidising properties:	-

9.2. Other information

VOC (W/W%):	-
VOC (g/l):	-

SECTION 10: Stability and reactivity

10.1. Reactivity

Non-reactive.

10.2. Chemical stability

The product is stable when used in accordance with the supplier's directions.

10.3. Possibility of hazardous reactions

No risks of hazardous reactions.

10.4. Conditions to avoid

None known.

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

No special precautions regarding contact with other materials at the recommended storage conditions.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Substance	Route of exposure	Species	Test	Result
Benzylalkohol	Oral	Rat	LD50	ca. 1620 mg/kg bw
Benzylalkohol	Dermal	Rabbit	LD50	2000 mg/kg bw
Benzylalkohol	Inhalation	Rat	LC50	> 4178 mg/L air/4 h
3-Aminomethyl-3,5,5-trimethylcyclohexylamin	Oral	Rat	LD50	1030 mg/kg bw
3-Aminomethyl-3,5,5-trimethylcyclohexylamin	Inhalation	Rat	LC50 / 4 h	>= 1.07 <= 5.01 mg/L air
3-Aminomethyl-3,5,5-trimethylcyclohexylamin	Dermal	Rat	LD50	> 2000 mg/kg bw
Piperazine	Oral	Rat	LD50	ca. 2600 mg/kg bw
Piperazine	Dermal	Rabbit	LD50	8300 mg/kg bw
2-piperazin-1-ylethylamine	Oral	Rat	LD50	> 1 000 mg/kg bw
2-piperazin-1-ylethylamine	Dermal	Rabbit	LD50	866 mg/kg bw

Symptoms:

Inhalation: Inhalation is corrosive to the upper airways. Causes a burning sensation in the nose, mouth and throat, together with sneezing, coughing, breathing difficulties and chest pain.

Ingestion: Harmful if swallowed. May cause burns to mouth, gullet and stomach. Pains in mouth, throat and stomach. Difficulty in swallowing, indisposition and bloody vomit. Brown spots and burns may appear in and around the mouth.

Skin contact: Has a corrosive effect and causes burning pain, reddening, blisters and burns.

Eye contact: May cause severe burns, pain, tearing and cramp of the eyelids. Risk of serious damage to eyes and loss of vision.

Long term effects: May cause sensitization by inhalation and skin contact. Symptoms include cold, sneezing, breathing difficulties and hives. Reddening, swelling, blistering and ulceration may develop on the skin – often slowly. May damage fertility or the unborn child.

SECTION 12: Ecological information

12.1. Toxicity

Substance	Test duration	Species	Test	Result
Benzylalkohol	96 h	Fish	LC50	460 mg/L
Benzylalkohol	48 h	Daphnia	EC50	230 mg/L
Benzylalkohol	72 h	Algae	EC50	770 mg/L
3-Aminomethyl-3,5,5-	96 h	Fish	LC50	110 mg/L
3-Aminomethyl-3,5,5-	48 h	Daphnia	LC50	388 mg/L
3-Aminomethyl-3,5,5-	72 h	Algae	EC50	37 mg/L
Piperazine	96 h	Fish	LC50	> 1800 mg/L
Piperazine	48 h	Dafnia	EC50	21 mg/L
2-piperazin-1-ylethylamine	96 h	Fish	LC50	2190 mg/L
2-piperazin-1-ylethylamine	48 h	Daphnia	LC50	58 mg/L
2-piperazin-1-ylethylamine	72 h	Algae	EC50	> 1 000 mg/L

12.2. Persistence and degradability

Substance	Biodegradability	Test	Result
Benzylalkohol	Yes	OECD Guideline 301 C	92-96% after 14 days
3-Aminomethyl-3,5,5-	No	EU Method C.4-A	8% after 28 days
Piperazine	No	OECD Guideline 301 F	65% after 28 days
2-piperazin-1-ylethylamine	No	OECD Guideline 301 F	0 % after 28 days

12.3. Bioaccumulative potential

Substance	Potential bioaccumulation	LogPow	BCF
Benzylalkohol	No	1,06	-
3-Aminomethyl-3,5,5-	No	0,99	-
Piperazine	No	-0,79	-
2-piperazin-1-ylethylamine	No	-1,57	-

12.4. Mobility in soil

-

12.5. Results of PBT and vPvB assessment

The mixture does not meet the criteria for PBT or vPvB.

12.6. Other adverse effects

Toxic to aquatic life with long lasting effects.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Collect spills and waste in closed, leak-proof containers for disposal at the local hazardous waste site.

EWC Code

08 01 12

Specific labelling

-

Contaminated packaging:

Uncleansed packaging is to be disposed of via the local waste-removal scheme.

SECTION 14: Transport information

The product is covered by the rules for transport of dangerous goods.

14.1 -14.4.

ADR

UN number	UN proper shipping name	Transport hazard class(es)	Packing group
2735	POLYAMINES, LIQUID, CORROSIVE, N.O.S. (3-Aminomethyl-3,5,5-trimethylcyclohexylamin , Polyoxypropylendiamin)	8	II

IMDG

UN number	UN proper shipping name	Transport hazard class(es)	Packing group
2735	POLYAMINES, LIQUID, CORROSIVE, N.O.S. (3-Aminomethyl-3,5,5-trimethylcyclohexylamin , Polyoxypropylendiamin)	8	II

14.5. Environmental hazards

-

14.6. Special precautions for user

-

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not relevant.

SECTION 15: Regulatory information

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

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Restrictions for application:

Special care should be applied for employees under the age of 18. Young people under the age of 18 may not carry out any work causing harmful exposure to this product. Young people above 15 years are exempted this rule, if the product is a part of an education/training.

Demands for specific education:

-

Additional labelling:

-

15.2. Chemical safety assessment

Chemical safety assessment has not been performed.

SECTION 16: Other information

Other information:**Sources:**

EC regulation 1907/2006 (REACH)

Directive 2000/532/EC

EC Regulation 1272/2008 (CLP)

EH40/2005 WELs (United Kingdom (UK), 8/2007).

Full text of H-phrases as mentioned in section 2+3:

H302 - Harmful if swallowed.

H312 - Harmful in contact with skin.

H314 - Causes severe skin burns and eye damage.

H315 - Causes skin irritation.

H317- May cause an allergic skin reaction.

H318- Causes serious eye damage

H319 - Causes serious eye irritation.

H332 - Harmful if inhaled.

H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H361fd - Suspected of damaging fertility. Suspected of damaging the unborn child

H411 - Toxic to aquatic life with long lasting effects.

H412 - Harmful to aquatic life with long lasting effects.

Other

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Minor changes have been made in following sections:

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This material safety data sheet replaces version:

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