

According to 1907/2006/EC (REACH), 2015/830/EU

MORAVIA - MORAMASTIC 8303 HARDENER (COMPONENT B) AS16-8303B

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier: MORAVIA - MORAMASTIC 8303 HARDENER (COMPONENT B)

AS16-8303B

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

Relevant uses: Hardener for coatings. For professional user/industrial user only. Uses advised against: All uses not specified in this section or in section 7.3

1.3 Details of the supplier of the safety data sheet:

MORAVİA BOYA VE KİMYA SAN.TİC.LTD.ŞTİ

FEVZİ ÇAKMAK CADDESİ NO:2 SEFAKÖY/ KÜÇÜKÇEKMECE

İSTANBUL - TURKEY

Phone.: +90 212 579 13 36 - Fax: +90 212 426 55 12

moravia@moravia.com.tr www.moravia.com.tr

1.4 Emergency telephone number:

SECTION 2: HAZARDS IDENTIFICATION **

2.1 Classification of the substance or mixture:

CLP Regulation (EC) No 1272/2008:

Classification of this product has been carried out in accordance with CLP Regulation (EC) No 1272/2008.

Acute Tox. 4: Acute toxicity, Category 4, H302+H312 Eye Dam. 1: Serious eye damage, Category 1, H318 Flam. Liq. 3: Flammable liquids, Category 3, H226

Resp. Sens. 1: Sensitisation, respiratory, Category 1, H334

Skin Irrit. 2: Skin irritation, Category 2, H315 Skin Sens. 1: Sensitisation, skin, Category 1, H317

2.2 Label elements:

CLP Regulation (EC) No 1272/2008:

Danger









Hazard statements:

Acute Tox. 4: H302+H312 - Harmful if swallowed or in contact with skin

Eye Dam. 1: H318 - Causes serious eye damage Flam. Liq. 3: H226 - Flammable liquid and vapour

Resp. Sens. 1: H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled

Skin Irrit. 2: H315 - Causes skin irritation

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

Precautionary statements:

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

P280: Wear protective gloves/protective clothing/eye protection/face protection

P302+P352: IF ON SKIN: Wash with plenty of water

P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing

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

P342+P311: If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician

P370+P378: In case of fire: Use ABC powder extinguisher to extinguish

P501: Dispose of contents/container in accordance with regulations on hazardous waste or packaging and packaging waste respectively

Supplementary information:

Contains Ethylenediamine

Substances that contribute to the classification

 $2,\!4,\!6\text{-tris}(dimethylaminomethyl) phenol; \ 2\text{-methylpropan-1-ol}; \ Xylene; \ 2,\!2\text{\'-iminodiethylamine}$

Date of compilation: 08/04/2016 Revised: 09/06/2020 Version: 5 (Replaced 4) **Page 1/13**

^{**} Changes with regards to the previous version

Moravia Marine Coatings

Safety data sheet According to 1907/2006/EC (REACH), 2015/830/EU

AS16-8303B

MORAVIA - MORAMASTIC 8303 HARDENER (COMPONENT B)

SECTION 2: HAZARDS IDENTIFICATION ** (continued)

2.3 Other hazards:

Product fails to meet PBT/vPvB criteria

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance:

Non-applicable

3.2 Mixture:

Chemical description: Miscellaneous products

Components:

In accordance with Annex II of Regulation (EC) No 1907/2006 (point 3), the product contains:

	Identification		Chemical name/Classification				
CAS:	90-72-2	2,4,6-tris(dimethyla	4,6-tris(dimethylaminomethyl)phenol ⁽¹⁾ ATP CLP00				
EC: Index: REACH:	202-013-9 603-069-00-0 : 01-2119560597-27- XXXX	Regulation 1272/2008	Acute Tox. 4: H302; Eye Irrit. 2: H319; Skin Irrit. 2: H315 - Warning	10 - <25 %			
CAS:	78-83-1	2-methylpropan-1-o	ATP CLP00				
EC: Index: REACH:	201-148-0 603-108-00-1 : 01-2119484609-23- XXXX	Regulation 1272/2008	Eye Dam. 1: H318; Flam. Liq. 3: H226; Skin Irrit. 2: H315; STOT SE 3: H335; STOT SE 3: H336 - Danger	2,5 - <10 %			
CAS:	1330-20-7 215-535-7 601-022-00-9 : 01-2119488216-32- XXXX	Xylene(1) ATP CLP00					
EC: Index: REACH:		Regulation 1272/2008	Acute Tox. 4: H312+H332; Flam. Liq. 3: H226; Skin Irrit. 2: H315 - Warning	2,5 - <10 %			
CAS:	111-40-0	2,2´-iminodiethylam	ine ⁽¹⁾ ATP CLP00				
EC: Index: REACH:	203-865-4 612-058-00-X : 01-2119473793-27- XXXX	Regulation 1272/2008	Acute Tox. 4: H302+H312; Skin Corr. 1B: H314; Skin Sens. 1: H317 - Danger	1 - <2,5 %			
CAS:	107-15-3	Ethylenediamine(1)	ATP CLP00				
EC: Index: REACH:	203-468-6 612-006-00-6 01-2119480383-37- XXXX	Regulation 1272/2008	Acute Tox. 4: H302+H312; Flam. Liq. 3: H226; Resp. Sens. 1: H334; Skin Corr. 1B: H314; Skin Sens. 1: H317 - Danger	1 - <2,5 %			

⁽¹⁾ Substances presenting a health or environmental hazard which meet criteria laid down in Regulation (EU) No. 2015/830

To obtain more information on the hazards of the substances consult sections 11, 12 and 16.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures:

The symptoms resulting from intoxication can appear after exposure, therefore, in case of doubt, seek medical attention for direct exposure to the chemical product or persistent discomfort, showing the SDS of this product.

By inhalation

Remove the person affected from the area of exposure, provide with fresh air and keep at rest. In serious cases such as cardiorespiratory failure, artificial resuscitation techniques will be necessary (mouth to mouth resuscitation, cardiac massage, oxygen supply, etc.) requiring immediate medical assistance.

By skin contact:

Remove contaminated clothing and footwear, rinse skin or shower the person affected if appropriate with plenty of cold water and neutral soap. In serious cases see a doctor. If the product causes burns or freezing, clothing should not be removed as this could worsen the injury caused if it is stuck to the skin. If blisters form on the skin, these should never be burst as this will increase the risk of infection.

By eye contact:

Rinse eyes thoroughly with lukewarm water for at least 15 minutes. Do not allow the person affected to rub or close their eyes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, in which case this could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS of the product.

Date of compilation: 08/04/2016 Revised: 09/06/2020 Version: 5 (Replaced 4) Page 2/13

^{**} Changes with regards to the previous version



According to 1907/2006/EC (REACH), 2015/830/EU

MORAVIA - MORAMASTIC 8303 HARDENER (COMPONENT B) AS16-8303B

SECTION 4: FIRST AID MEASURES (continued)

By ingestion/aspiration:

Request medical assistance immediately, showing the SDS of this product. Do not induce vomiting, but if it does happen keep the head down to avoid aspiration. In the case of loss of consciousness do not administer anything orally unless supervised by a doctor. Rinse out the mouth and throat, as they may have been affected during ingestion. Keep the person affected at rest.

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

Acute and delayed effects are indicated in sections 2 and 11.

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

Non-applicable

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media:

If possible use polyvalent powder fire extinguishers (ABC powder), alternatively use foam or carbon dioxide extinguishers (CO₂). IT IS RECOMMENDED NOT to use full jet water as an extinguishing agent.

5.2 Special hazards arising from the substance or mixture:

As a result of combustion or thermal decomposition reactive sub-products are created that can become highly toxic and, consequently, can present a serious health risk.

5.3 Advice for firefighters:

Depending on the magnitude of the fire it may be necessary to use full protective clothing and self-contained breathing apparatus (SCBA). Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...) in accordance with Directive 89/654/EC.

Additional provisions:

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Eliminate all sources of ignition. In case of fire, cool the storage containers and tanks for products susceptible to combustion, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:

Isolate leaks provided that there is no additional risk for the people performing this task. Evacuate the area and keep out those without protection. Personal protection equipment must be used against potential contact with the spilt product (See section 8). Above all prevent the formation of any vapour-air flammable mixtures, through either ventilation or the use of an inert medium. Destroy any source of ignition. Eliminate electrostatic charges by interconnecting all the conductive surfaces on which static electricity could form, and also ensuring that all surfaces are connected to the ground.

6.2 Environmental precautions:

This product is not classified as hazardous to the environment. Keep product away from drains, surface and underground water.

6.3 Methods and material for containment and cleaning up:

It is recommended:

Absorb the spillage using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. For any concern related to disposal consult section 13.

6.4 Reference to other sections:

See sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling:

A.- Precautions for safe manipulation

Comply with the current legislation concerning the prevention of industrial risks. Keep containers hermetically sealed. Control spills and residues, destroying them with safe methods (section 6). Avoid leakages from the container. Maintain order and cleanliness where dangerous products are used.

B.- Technical recommendations for the prevention of fires and explosions

- CONTINUED ON NEXT PAGE -



According to 1907/2006/EC (REACH), 2015/830/EU

MORAVIA - MORAMASTIC 8303 HARDENER (COMPONENT B) AS16-8303B

SECTION 7: HANDLING AND STORAGE (continued)

Transfer in well ventilated areas, preferably through localized extraction. Fully control sources of ignition (mobile phones, sparks,...) and ventilate during cleaning operations. Avoid the existence of dangerous atmospheres inside containers, applying inertization systems where possible. Transfer at a slow speed to avoid the creation of electrostatic charges. Against the possibility of electrostatic charges: ensure a perfect equipotential connection, always use groundings, do not wear work clothes made of acrylic fibres, preferably wearing cotton clothing and conductive footwear. Comply with the essential security requirements for equipment and systems defined in Directive 2014/34/EC (ATEX 100) and with the minimum requirements for protecting the security and health of workers under the selection criteria of Directive 1999/92/EC (ATEX 137). Consult section 10 for conditions and materials that should be avoided.

C.- Technical recommendations to prevent ergonomic and toxicological risks

Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

D.- Technical recommendations to prevent environmental risks

It is recommended to have absorbent material available at close proximity to the product (See subsection 6.3)

7.2 Conditions for safe storage, including any incompatibilities:

A.- Technical measures for storage

Minimum Temp.: 5 °C

Maximum Temp.: 30 °C

Maximum time: 6 Months

B.- General conditions for storage

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

7.3 Specific end use(s):

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters:

Substances whose occupational exposure limits have to be monitored in the workplace

Identification	Occupational exposure limits		
Xylene	IOELV (8h)	50 ppm	221 mg/m ³
CAS: 1330-20-7 EC: 215-535-7	IOELV (STEL)	100 ppm	442 mg/m ³

DNEL (Workers):

		Short exposure		Long exposure	
Identification		Systemic	Local	Systemic	Local
2,4,6-tris(dimethylaminomethyl)phenol	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 90-72-2	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
EC: 202-013-9	Inhalation	Non-applicable	Non-applicable	0,31 mg/m ³	Non-applicable
2-methylpropan-1-ol	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 78-83-1	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
EC: 201-148-0	Inhalation	Non-applicable	Non-applicable	Non-applicable	310 mg/m ³
Xylene	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 1330-20-7	Dermal	Non-applicable	Non-applicable	180 mg/kg	Non-applicable
EC: 215-535-7	Inhalation	289 mg/m ³	289 mg/m ³	77 mg/m³	Non-applicable
2,2´-iminodiethylamine	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 111-40-0	Dermal	Non-applicable	Non-applicable	11,4 mg/kg	Non-applicable
EC: 203-865-4	Inhalation	92,1 mg/m ³	2,6 mg/m ³	15,4 mg/m ³	0,87 mg/m ³

DNEL (General population):

		Short exposure		Long exposure	
Identification		Systemic	Local	Systemic	Local
2-methylpropan-1-ol	Oral	Non-applicable	Non-applicable	25 mg/kg	Non-applicable
CAS: 78-83-1	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
EC: 201-148-0	Inhalation	Non-applicable	Non-applicable	Non-applicable	55 mg/m ³

Date of compilation: 08/04/2016 Revised: 09/06/2020 Version: 5 (Replaced 4) **Page 4/13**

Moravia Marine Coatings

Safety data sheet

According to 1907/2006/EC (REACH), 2015/830/EU

MORAVIA - MORAMASTIC 8303 HARDENER (COMPONENT B) AS16-8303B

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

		Short exposure		Long exposure	
Identification		Systemic	Local	Systemic	Local
Xylene	Oral	Non-applicable	Non-applicable	1,6 mg/kg	Non-applicable
CAS: 1330-20-7	Dermal	Non-applicable	Non-applicable	108 mg/kg	Non-applicable
EC: 215-535-7	Inhalation	Non-applicable	Non-applicable	14,8 mg/m ³	Non-applicable
2,2´-iminodiethylamine	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 111-40-0	Dermal	4,88 mg/kg	Non-applicable	4,88 mg/kg	Non-applicable
EC: 203-865-4	Inhalation	27,5 mg/m ³	Non-applicable	4,6 mg/m ³	Non-applicable

PNEC:

Identification				
2,4,6-tris(dimethylaminomethyl)phenol	STP	0,2 mg/L	Fresh water	0,084 mg/L
CAS: 90-72-2	Soil	Non-applicable	Marine water	0,0084 mg/L
EC: 202-013-9	Intermittent	0,84 mg/L	Sediment (Fresh water)	Non-applicable
	Oral	Non-applicable	Sediment (Marine water)	Non-applicable
2-methylpropan-1-ol	STP	10 mg/L	Fresh water	0,4 mg/L
CAS: 78-83-1	Soil	0,0699 mg/kg	Marine water	0,04 mg/L
EC: 201-148-0	Intermittent	11 mg/L	Sediment (Fresh water)	1,52 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0,152 mg/kg
Xylene	STP	6,58 mg/L	Fresh water	0,327 mg/L
CAS: 1330-20-7	Soil	2,31 mg/kg	Marine water	0,327 mg/L
EC: 215-535-7	Intermittent	0,327 mg/L	Sediment (Fresh water)	12,46 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	12,46 mg/kg
2,2´-iminodiethylamine	STP	6 mg/L	Fresh water	0,56 mg/L
CAS: 111-40-0	Soil	214 mg/kg	Marine water	0,056 mg/L
EC: 203-865-4	Intermittent	0,32 mg/L	Sediment (Fresh water)	1072 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	107,2 mg/kg

8.2 Exposure controls:

A.- General security and hygiene measures in the work place

As a preventative measure it is recommended to use basic Personal Protective Equipment, with the corresponding <<CE marking>> in accordance with Directive 89/686/EC. For more information on Personal Protective Equipment (storage, use, cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For more information see subsection 7.1.

All information contained herein is a recommendation which needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal.

B.- Respiratory protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
Mandatory respiratory tract protection	Filter mask for gases and vapours	CAT III	EN 405:2001+A1:2009	Replace when there is a taste or smell of the contaminant inside the face mask. If the contaminant comes with warnings it is recommended to use isolation equipment.

C.- Specific protection for the hands

Pictogram	PPE	Labelling	CEN Standard	Remarks
Mandatory hand protection	NON-disposable chemical protective gloves	CAT III	EN ISO 374-1:2016 EN 16523-1:2015 EN 420:2003+A1:2009	The Breakthrough Time indicated by the manufacturer must exceed the period during which the product is being used. Do not use protective creams after the product has come into contact with skin.

[&]quot;As the product is a mixture of several substances, the resistance of the glove material can not be predicted in advance with total reliability and has therefore to be checked prior to the application"

D.- Ocular and facial protection



According to 1907/2006/EC (REACH), 2015/830/EU

MORAVIA - MORAMASTIC 8303 HARDENER (COMPONENT B) AS16-8303B

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Pictogram	PPE	Labelling	CEN Standard	Remarks
Mandatory face protection	Face shield	CATII	EN 166:2001 EN 167:2001 EN 168:2001 EN ISO 4007:2018	Clean daily and disinfect periodically according to the manufacturer's instructions. Use if there is a risk of splashing.

E.- Body protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
Mandatory complete body protection	Disposable clothing for protection against chemical risks, with antistatic and fireproof properties	CAT III	EN 1149-1,2,3 EN 13034:2005+A1:2009 EN ISO 13982- 1:2004/A1:2010 EN ISO 6529:2013 EN ISO 6530:2005 EN ISO 13688:2013 EN 464:1994	For professional use only. Clean periodically according to the manufacturer's instructions.
Mandatory foot protection	Safety footwear for protection against chemical risk, with antistatic and heat resistant properties	CAT III	EN ISO 13287:2012 EN ISO 20345:2011 EN 13832-1:2019	Replace boots at any sign of deterioration.

F.- Additional emergency measures

Emergency measure	Standards	Emergency measure	Standards
-3:	ANSI Z358-1 ISO 3864-1:2011, ISO 3864-4:2011	*	DIN 12 899 ISO 3864-1:2011, ISO 3864-4:2011
Emergency shower		Eyewash stations	

Environmental exposure controls:

In accordance with the community legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container. For additional information see subsection 7.1.D

Volatile organic compounds:

With regard to Directive 2010/75/EU, this product has the following characteristics:

V.O.C. (Supply): 17,33 % weight

V.O.C. density at 20 °C: 164,59 kg/m³ (164,59 g/L)

Average carbon number: 5,32

Average molecular weight: 88,76 g/mol

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

For complete information see the product datasheet.

Appearance:

Physical state at 20 °C:

Appearance:

Not available

Colour:

Not available

Odour:

Not available

Not available

Non-applicable *

Volatility:

Boiling point at atmospheric pressure: 127 °C Vapour pressure at 20 °C: 1013 Pa

Vapour pressure at 50 °C: 6014,58 Pa (6,01 kPa) Evaporation rate at 20 °C: Non-applicable *

*Not relevant due to the nature of the product, not providing information property of its hazards.

Date of compilation: 08/04/2016 Revised: 09/06/2020 Version: 5 (Replaced 4) **Page 6/13**

Safety data sheet According to 1907/2006/EC (REACH), 2015/830/EU



MORAVIA - MORAMASTIC 8303 HARDENER (COMPONENT B) AS16-8303B

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)

Product description:

Density at 20 °C: 920 - 980 kg/m³ 0,92 - 0,98 Relative density at 20 °C: Dynamic viscosity at 20 °C: Non-applicable * Kinematic viscosity at 20 °C: Non-applicable * Kinematic viscosity at 40 °C: Non-applicable * Concentration: Non-applicable * pH: Non-applicable * Vapour density at 20 °C: Non-applicable * Partition coefficient n-octanol/water 20 °C: Non-applicable * Solubility in water at 20 °C: Non-applicable * Solubility properties: Non-applicable * Decomposition temperature: Non-applicable * Melting point/freezing point: Non-applicable * Explosive properties: Non-applicable *

Flammability:

Oxidising properties:

Flash Point: 28 °C

Flammability (solid, gas): Non-applicable *

Autoignition temperature: 358 °C

Lower flammability limit: Not available

Upper flammability limit: Not available

Explosive:

Lower explosive limit:

Upper explosive limit:

Non-applicable *

Non-applicable *

9.2 Other information:

Surface tension at 20 °C:

Refraction index:

Non-applicable *

Non-applicable *

*Not relevant due to the nature of the product, not providing information property of its hazards.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity:

No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7.

Non-applicable *

10.2 Chemical stability:

Chemically stable under the conditions of storage, handling and use.

10.3 Possibility of hazardous reactions:

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

10.4 Conditions to avoid:

Applicable for handling and storage at room temperature:

Shock and friction	Contact with air	Increase in temperature	Sunlight	Humidity
Not applicable	Not applicable	Risk of combustion	Avoid direct impact	Not applicable

10.5 Incompatible materials:

Acids	Water	Oxidising materials	Combustible materials	Others	
Avoid strong acids	Not applicable	Avoid direct impact	Not applicable	Avoid alkalis or strong bases	

10.6 Hazardous decomposition products:

Date of compilation: 08/04/2016 Revised: 09/06/2020 Version: 5 (Replaced 4) Page 7/13



According to 1907/2006/EC (REACH), 2015/830/EU

MORAVIA - MORAMASTIC 8303 HARDENER (COMPONENT B) AS16-8303B

SECTION 10: STABILITY AND REACTIVITY (continued)

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO2), carbon monoxide and other organic compounds.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects:

The experimental information related to the toxicological properties of the product itself is not available

Dangerous health implications:

In case of exposure that is repetitive, prolonged or at concentrations higher than the recommended occupational exposure limits, adverse effects on health may result, depending on the means of exposure:

- A- Ingestion (acute effect):
 - Acute toxicity: The consumption of a considerable dose can cause irritation in the throat, abdominal pain, nausea and vomiting.
 - Corrosivity/Irritability: The consumption of a considerable dose can cause irritation in the throat, abdominal pain, nausea and vomiting.
- B- Inhalation (acute effect):
 - Acute toxicity: Based on available data, the classification criteria are not met. However, it contains substances classified as dangerous for inhalation. For more information see section 3.
 - Corrosivity/Irritability: Based on available data, the classification criteria are not met. However, it does contain substances classified as dangerous for this effect. For more information see section 3.
- C- Contact with the skin and the eyes (acute effect):
 - Contact with the skin: Produces skin inflammation.
 - Contact with the eyes: Produces serious eye damage after contact.
- D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):
 - Carcinogenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for the effects mentioned. For more information see section 3.

 IARC: Xylene (3)
 - Mutagénicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
 - Reproductive toxicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
- E- Sensitizing effects:
 - Respiratory: Prolonged exposure can result in specific respiratory hypersensitivity.
 - Cutaneous: Prolonged contact with the skin can result in episodes of allergic contact dermatitis.
- F- Specific target organ toxicity (STOT) single exposure:

Based on available data, the classification criteria are not met. However, it contains substances classified as dangerous for inhalation. For more information see section 3.

- G- Specific target organ toxicity (STOT)-repeated exposure:
 - Specific target organ toxicity (STOT)-repeated exposure: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
 - Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
- H- Aspiration hazard:

Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

Other information:

Non-applicable

Specific toxicology information on the substances:



According to 1907/2006/EC (REACH), 2015/830/EU

MORAVIA - MORAMASTIC 8303 HARDENER (COMPONENT B) AS16-8303B

SECTION 11: TOXICOLOGICAL INFORMATION (continued)

Identification	A	Acute toxicity	
2,2´-iminodiethylamine	LD50 oral	500 mg/kg (ATEi)	
CAS: 111-40-0	LD50 dermal	1100 mg/kg	
EC: 203-865-4	LC50 inhalation	Non-applicable	
Ethylenediamine	LD50 oral	500 mg/kg (ATEi)	
CAS: 107-15-3	LD50 dermal	1100 mg/kg	
EC: 203-468-6	LC50 inhalation	Non-applicable	
Xylene	LD50 oral	2100 mg/kg	Rat
CAS: 1330-20-7	LD50 dermal	1100 mg/kg (ATEi)	Rat
EC: 215-535-7	LC50 inhalation	11 mg/L (4 h) (ATEi)	
2-methylpropan-1-ol	LD50 oral	3350 mg/kg	Rat
CAS: 78-83-1	LD50 dermal	2460 mg/kg	Rabbit
EC: 201-148-0	LC50 inhalation	24,6 mg/L (4 h)	Rat
2,4,6-tris(dimethylaminomethyl)phenol	LD50 oral	1200 mg/kg	Rat
CAS: 90-72-2	LD50 dermal	Non-applicable	
EC: 202-013-9	LC50 inhalation	Non-applicable	

SECTION 12: ECOLOGICAL INFORMATION

The experimental information related to the eco-toxicological properties of the product itself is not available

12.1 Toxicity:

Identification		Acute toxicity	Species	Genus
2,4,6-tris(dimethylaminomethyl)phenol	LC50	345 mg/L (96 h)	QSAR	Fish
CAS: 90-72-2	EC50	Non-applicable		
EC: 202-013-9	EC50	Non-applicable		
2-methylpropan-1-ol	LC50	2030 mg/L (96 h)	Carassius auratus	Fish
CAS: 78-83-1	EC50	1439 mg/L (48 h)	Daphnia magna	Crustacean
EC: 201-148-0	EC50	1250 mg/L (48 h)	Scenedesmus subspicatus	Algae
Xylene	LC50	13.5 mg/L (96 h)	Oncorhynchus mykiss	Fish
CAS: 1330-20-7	EC50	3.4 mg/L (48 h)	Ceriodaphnia dubia	Crustacean
EC: 215-535-7	EC50	10 mg/L (72 h)	Skeletonema costatum	Algae

12.2 Persistence and degradability:

Identification	Degradability		Biodegradability	
2-methylpropan-1-ol	BOD5	0.4 g O2/g	Concentration	100 mg/L
CAS: 78-83-1	COD	2.41 g O2/g	Period	14 days
EC: 201-148-0	BOD5/COD	0.17	% Biodegradable	90 %
Xylene	BOD5	Non-applicable	Concentration	Non-applicable
CAS: 1330-20-7	COD	Non-applicable	Period	28 days
EC: 215-535-7	BOD5/COD	Non-applicable	% Biodegradable	88 %

12.3 Bioaccumulative potential:

Identification Bioaccumulation		nulation potential
2,4,6-tris(dimethylaminomethyl)phenol	BCF	3
CAS: 90-72-2	Pow Log	0.77
EC: 202-013-9	Potential	Low
2-methylpropan-1-ol	BCF	3
CAS: 78-83-1	Pow Log	0.76
EC: 201-148-0	Potential	Low
Xylene	BCF	9
CAS: 1330-20-7	Pow Log	2.77
EC: 215-535-7	Potential	Low

- CONTINUED ON NEXT PAGE -

12.4 Mobility in soil:

Moravia Marine Coatings

Safety data sheet

According to 1907/2006/EC (REACH), 2015/830/EU

MORAVIA - MORAMASTIC 8303 HARDENER (COMPONENT B) AS16-8303B

SECTION 12: ECOLOGICAL INFORMATION (continued)

Identification	Absorp	tion/desorption	Volat	ility
2,4,6-tris(dimethylaminomethyl)phenol	Koc	15130	Henry	9,312E-12 Pa·m³/mol
CAS: 90-72-2	Conclusion	Immobile	Dry soil	No
EC: 202-013-9	Surface tension	Non-applicable	Moist soil	No
2-methylpropan-1-ol	Koc	Non-applicable	Henry	Non-applicable
CAS: 78-83-1	Conclusion	Non-applicable	Dry soil	Non-applicable
EC: 201-148-0	Surface tension	2,378E-2 N/m (25 °C)	Moist soil	Non-applicable
Xylene	Koc	202	Henry	524,86 Pa·m³/mol
CAS: 1330-20-7	Conclusion	Moderate	Dry soil	Yes
EC: 215-535-7	Surface tension	Non-applicable	Moist soil	Yes
2,2 '-iminodiethylamine	Koc	Non-applicable	Henry	Non-applicable
CAS: 111-40-0	Conclusion	Non-applicable	Dry soil	Non-applicable
EC: 203-865-4	Surface tension	4,164E-2 N/m (25 °C)	Moist soil	Non-applicable
Ethylenediamine	Koc	Non-applicable	Henry	Non-applicable
CAS: 107-15-3	Conclusion	Non-applicable	Dry soil	Non-applicable
EC: 203-468-6	Surface tension	4,188E-2 N/m (25 °C)	Moist soil	Non-applicable

12.5 Results of PBT and vPvB assessment:

Product fails to meet PBT/vPvB criteria

12.6 Other adverse effects:

Not described

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods:

Code	Description	Waste class (Regulation (EU) No 1357/2014)
08 01 11*	waste paint and varnish containing organic solvents or other hazardous substances	Dangerous

Type of waste (Regulation (EU) No 1357/2014):

HP3 Flammable, HP4 Irritant — skin irritation and eye damage

Waste management (disposal and evaluation):

Consult the authorized waste service manager on the assessment and disposal operations in accordance with Annex 1 and Annex 2 (Directive 2008/98/EC). As under 15 01 (2014/955/EC) of the code and in case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-dangerous residue. We do not recommended disposal down the drain. See paragraph 6.2.

Regulations related to waste management:

In accordance with Annex II of Regulation (EC) No 1907/2006 (REACH) the community or state provisions related to waste management are stated

Community legislation: Directive 2008/98/EC, 2014/955/EU, Regulation (EU) No 1357/2014

SECTION 14: TRANSPORT INFORMATION

Transport of dangerous goods by land:

With regard to ADR 2019 and RID 2019:



According to 1907/2006/EC (REACH), 2015/830/EU

MORAVIA - MORAMASTIC 8303 HARDENER (COMPONENT B) AS16-8303B

Non-applicable

SECTION 14: TRANSPORT INFORMATION (continued)



14.1 UN number: UN1263

14.2 UN proper shipping name: PAINT RELATED MATERIAL

14.3 Transport hazard class(es): 3

Labels: 3

14.4 Packing group: III **14.5 Environmental hazards:** No

14.6 Special precautions for user

Special regulations: 163, 367, 650

Tunnel restriction code: D/E

Physico-Chemical properties: see section 9

Limited quantities: 5 L

14.7 Transport in bulk according to Annex II of Marpol and

to Annex II of Marpol and the IBC Code:

Transport of dangerous goods by sea:

With regard to IMDG 39-18:

14.1 UN number: UN1263

14.2 UN proper shipping name: PAINT RELATED MATERIAL

14.3 Transport hazard class(es): 3 Labels: 3

14.4 Packing group: III14.5 Environmental hazards: No

14.6 Special precautions for user

Special regulations: 163, 223, 955, 367

EmS Codes: F-E, S-E Physico-Chemical properties: see section 9

Limited quantities: 5 L

Segregation group: Non-applicable **14.7 Transport in bulk according** Non-applicable

to Annex II of Marpol and the IBC Code:

Transport of dangerous goods by air:

With regard to IATA/ICAO 2020:



14.1 UN number: UN1263

14.2 UN proper shipping name: PAINT RELATED MATERIAL

14.3 Transport hazard class(es): 3 Labels: 3 14.4 Packing group: III

14.4 Packing group: III **14.5 Environmental hazards:** No

14.6 Special precautions for user

Physico-Chemical properties: see section 9 **14.7 Transport in bulk according** Non-applicable

to Annex II of Marpol and

the IBC Code:

SECTION 15: REGULATORY INFORMATION

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

Candidate substances for authorisation under the Regulation (EC) No 1907/2006 (REACH): Ethylenediamine

Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: Non-applicable

Regulation (EC) No 1005/2009, about substances that deplete the ozone layer: Non-applicable

Article 95, REGULATION (EU) No 528/2012: Non-applicable

REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Non-applicable

Seveso III:

Date of compilation: 08/04/2016 Revised: 09/06/2020 Version: 5 (Replaced 4) **Page 11/13**



According to 1907/2006/EC (REACH), 2015/830/EU

MORAVIA - MORAMASTIC 8303 HARDENER (COMPONENT B) AS16-8303B

SECTION 15: REGULATORY INFORMATION (continued)

Section	Description	Lower-tier requirements	Upper-tier requirements
P5c		5000	50000

Limitations to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII REACH, etc):

Shall not be used, as substance or as mixtures in aerosol dispensers where these aerosol dispensers are intended for supply to the general public for entertainment and decorative purposes such as the following:

- metallic glitter intended mainly for decoration,
- artificial snow and frost,
- "whoopee" cushions,
- silly string aerosols,
- imitation excrement,
- horns for parties,
- decorative flakes and foams,
- artificial cobwebs,
- stink bombs.

Without prejudice to the application of other Community provisions on the classification, packaging and labelling of substances, suppliers shall ensure before the placing on the market that the packaging of aerosol dispensers referred to above is marked visibly, legibly and indelibly with:

'For professional users only'.

Shall not be used in:

- —ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,
- -tricks and jokes,
- —games for one or more participants, or any article intended to be used as such, even with ornamental aspects.

Specific provisions in terms of protecting people or the environment:

It is recommended to use the information included in this safety data sheet as a basis for conducting workplace-specific risk assessments in order to establish the necessary risk prevention measures for the handling, use, storage and disposal of this product.

Other legislation:

The product could be affected by sectorial legislation

15.2 Chemical safety assessment:

The supplier has not carried out evaluation of chemical safety.

SECTION 16: OTHER INFORMATION

Legislation related to safety data sheets:

This safety data sheet has been designed in accordance with ANNEX II-Guide to the compilation of safety data sheets of Regulation (EC) No 1907/2006 (Regulation (EC) No 2015/830)

Modifications related to the previous Safety Data Sheet which concerns the ways of managing risks.:

CLP Regulation (EC) No 1272/2008 (SECTION 2, SECTION 16):

· Supplementary information

Texts of the legislative phrases mentioned in section 2:

H315: Causes skin irritation

H318: Causes serious eye damage

H317: May cause an allergic skin reaction

H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled

H302+H312: Harmful if swallowed or in contact with skin

H226: Flammable liquid and vapour

Texts of the legislative phrases mentioned in section 3:

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3

CLP Regulation (EC) No 1272/2008:



According to 1907/2006/EC (REACH), 2015/830/EU

MORAVIA - MORAMASTIC 8303 HARDENER (COMPONENT B) AS16-8303B

SECTION 16: OTHER INFORMATION (continued)

Acute Tox. 4: H302 - Harmful if swallowed

Acute Tox. 4: H302+H312 - Harmful if swallowed or in contact with skin Acute Tox. 4: H312+H332 - Harmful in contact with skin or if inhaled

Eye Dam. 1: H318 - Causes serious eye damage Eye Irrit. 2: H319 - Causes serious eye irritation Flam. Liq. 3: H226 - Flammable liquid and vapour

Resp. Sens. 1: H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled

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

Skin Irrit. 2: H315 - Causes skin irritation

Skin Sens. 1: H317 - May cause an allergic skin reaction STOT SE 3: H335 - May cause respiratory irritation STOT SE 3: H336 - May cause drowsiness or dizziness

Classification procedure:

Skin Irrit. 2: Calculation method Eye Dam. 1: Calculation method Skin Sens. 1: Calculation method Resp. Sens. 1: Calculation method Acute Tox. 4: Calculation method

Flam. Liq. 3: Calculation method (2.6.4.3)

Advice related to training:

Minimal training is recommended in order to prevent industrial risks for staff using this product and to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

Principal bibliographical sources:

http://echa.europa.eu http://eur-lex.europa.eu

Abbreviations and acronyms:

ADR: European agreement concerning the international carriage of dangerous goods by road

IMDG: International maritime dangerous goods code

IATA: International Air Transport Association ICAO: International Civil Aviation Organisation

COD: Chemical Oxygen Demand

BOD5: 5-day biochemical oxygen demand

BCF: Bioconcentration factor LD50: Lethal Dose 50 LC50: Lethal Concentration 50 EC50: Effective concentration 50

Log-POW: Octanol-water partition coefficient Koc: Partition coefficient of organic carbon

The information contained in this safety data sheet is based on sources, technical knowledge and current legislation at European and state level, without being able to guarantee its accuracy. This information cannot be considered a guarantee of the properties of the product, it is simply a description of the security requirements. The occupational methodology and conditions for users of this product are not within our awareness or control, and it is ultimately the responsibility of the user to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information on this safety data sheet only refers to this product, which should not be used for needs other than those specified.

- END OF SAFETY DATA SHEET -Date of compilation: 08/04/2016 Revised: 09/06/2020 Version: 5 (Replaced 4) Page 13/13