



SAFETY DATA SHEET

▶ FONTECOAT EP 50 FAL, RAL 7035, RAL 9003

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

1.1 Product identifier

Product name : FONTECOAT EP 50 FAL, RAL 7035, RAL 9003
Product code : 688221|168R735|168R903
Product description : A two-component waterborne epoxy paint.

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

Recommended use: Painting work
Only for industrial and professional use. The product is not intended for consumer use.

1.3 Details of the supplier of the safety data sheet

Manufacturer or Distributor

Tikkurila Oyj
P.O. Box 53
FI-01301 VANTAA
FINLAND
Telephone +358 20 191 2000

e-mail address of person responsible for this SDS : Tikkurila Oyj,
Product Safety,
e-mail: productsafety@tikkurila.com

1.4 Emergency telephone number

Telephone number : 112
(24h)

Supplier or Manufacturer

Telephone number : Tikkurila Oyj
+358 20 191 2000 Mon-Fri 8-16

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

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

Skin Irrit. 2, H315
Eye Irrit. 2, H319
Skin Sens. 1, H317
Aquatic Chronic 3, H412

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

Classification according to Directive 1999/45/EC [DPD]

The product is classified as dangerous according to Directive 1999/45/EC and its amendments.

Classification : R43
R52/53

Human health hazards : May cause sensitization by skin contact.

Environmental hazards : Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

2.2 Label elements

Hazard pictograms

:



Signal word

: Warning

Hazard statements

: H319 - Causes serious eye irritation.
 H315 - Causes skin irritation.
 H317 - May cause an allergic skin reaction.
 H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements

General

: Not applicable.

Prevention

: P261 - Avoid breathing mist/vapors/spray.
 P280 - Wear protective gloves/clothing and eye/face protection.
 P285 - In case of inadequate ventilation wear respiratory protection.
 P273 - Avoid release to the environment.

Response

: P305 + P351 - IF IN EYES: Rinse cautiously with water for several minutes.
 P302 + P352 - IF ON SKIN: Wash with plenty of soap and water.

Storage

: Not applicable.

Disposal

: Not applicable.

Hazardous ingredients

: isophorone diamine
 m-phenylenebis(methylamine)

Supplemental label elements

: Not applicable.

2.3 Other hazards

Other hazards which do not result in classification : None known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

: Mixture

Product/ingredient name	Identifiers	%	Classification		Notes
			67/548/EEC	Regulation (EC) No. 1272/2008 [CLP]	
aliphatic polyamine adduct	CAS: 160192-66-5	≥5 - <10	N; R51/53	Aquatic Chronic 2, H411	-
1-methoxy-2-propanol	REACH #: 01-2119457435-35 EC: 203-539-1 CAS: 107-98-2 Index: 603-064-00-3	≥3 - <5	R10 R67	Flam. Liq. 3, H226 STOT SE 3, H336	-
isophorone diamine	EC: 220-666-8 CAS: 2855-13-2 Index: 612-067-00-9	≥1 - <3	Xn; R21/22 C; R34 R43 R52/53	Acute Tox. 4, H302 Acute Tox. 4, H312 Skin Corr. 1B, H314 Skin Sens. 1, H317 Aquatic Chronic 3, H412	-
			See Section 16 for the full text of the R-phrases declared above.	See Section 16 for the full text of the H statements declared above.	

There are no additional ingredients present which, within the current knowledge of the supplier, are classified and contribute to the classification of the substance and hence require reporting in this section.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs or vPvBs or have been assigned a workplace exposure limit and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Notes, if applicable, refer to Notes given in Annex VI of 1272/2008/EC.

SECTION 4: First aid measures

4.1 Description of first aid measures

- General** : In all cases of doubt, or when symptoms persist, seek medical attention. Show this safety data sheet or label to the doctor if possible.
- Eye contact** : Check for and remove any contact lenses. Immediately flush eyes with plenty of lukewarm water, keeping eyelids open. Continue to rinse for at least 15 minutes. Get medical attention if symptoms occur.
- Inhalation** : Remove to fresh air. Keep person warm and at rest.
- Skin contact** : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners. Get medical attention if symptoms occur.
- Ingestion** : If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Remove to fresh air and keep at rest in a position comfortable for breathing. Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

- Causes skin irritation.
Causes serious eye irritation.
May cause an allergic skin reaction.
See Section 11 for more detailed information on health effects and symptoms.

4.3 Indication of any immediate medical attention and special treatment needed

None.

SECTION 5: Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire. Recommended: Alcohol resistant foam, CO₂, powders or water spray/mist.
- Unsuitable extinguishing media** : Do not use a direct water jet that could spread the fire.

5.2 Special hazards arising from the substance or mixture

- Hazards from the substance or mixture** : This product is not classified as flammable. Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard.
- Hazardous thermal decomposition products** : When exposed to high temperatures, may produce hazardous decomposition products, such as carbon monoxide and dioxide, smoke, oxides of nitrogen etc.

5.3 Advice for firefighters

- Special protective actions for fire-fighters** : Use water spray to keep fire-exposed containers cool. This material is hazardous to aquatic organisms. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures** : Avoid direct skin contact with product. Avoid breathing vapor or mist. Provide adequate ventilation. See Section 8 for information on appropriate personal protective equipment.

- 6.2 Environmental precautions** : Hazardous to aquatic environment. Do not allow to enter drains, water courses or soil.

6.3 Methods and materials for containment and cleaning up : Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Preferably clean with water or detergent. Avoid using solvents.

6.4 Reference to other sections : See Section 1 for emergency contact information.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling : Skin contact with the product and exposure to spray mist and vapor should be avoided. Avoid inhalation of dust from sanding. See Section 8 for information on appropriate personal protective equipment. Eating, drinking and smoking should be prohibited in areas where this material is handled and stored. Wash hands before breaks and immediately after handling the product. Avoid release to the environment.

7.2 Conditions for safe storage, including any incompatibilities : Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Keep container tightly closed. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Recommended storage temperature is +5°C ...+25°C. Do not allow to freeze. Store in accordance with local regulations.

7.3 Specific end use(s) : None.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
1-methoxy-2-propanol	EU OEL (Europe, 12/2009). Absorbed through skin. Notes: list of indicative occupational exposure limit values TWA: 100 ppm 8 hours. TWA: 375 mg/m ³ 8 hours. STEL: 150 ppm 15 minutes. STEL: 568 mg/m ³ 15 minutes.

Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

DNELs/DMELs

No DNELs/DMELs available.

PNECs

No PNECs available.

8.2 Exposure controls

Appropriate engineering controls

Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapours below the OEL, suitable respiratory protection must be worn (see Personal protection for both components). Comply with the health and safety at work laws.

Individual protection measures

Eye/face protection : Use safety eyewear (EN166), especially during spray-application.

Hand protection	: Always wear approved protective gloves against chemicals. Gloves should be replaced regularly and if there is any sign of damage to the glove material. The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed. Recommended glove material (EN374): < 1 hour (breakthrough time): nitrile rubber, butyl rubber > 8 hours (breakthrough time): laminated foil Not recommended: PVC or natural rubber (latex) gloves
Skin protection	: Wear suitable protective clothing.
Respiratory protection	: If ventilation during spray-application is inadequate, use respirators with combination filter AP, gas/dust filter (EN405:2001). Wear a half mask or full face respirator with gas and vapor filter A and dust filter P2 during sanding (EN140:1998, EN405:2001). During continuous and long-term work the use of motor-driven or air-fed respirators is recommended (EN12941:1998). Be sure to use an approved/certified respirator or equivalent. Check that mask fits tightly and change filter regularly.
Environmental exposure controls	: For information regarding environmental protection measures, please refer to section 13 for waste handling, section 7 for handling and storage and section 1.2 for relevant identified uses of the substance or mixture and uses advised against.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state	: Liquid.
Color	: Coloured
Odor	: Mild.
Odor threshold	: Not relevant for the hazard assessment of the product.
pH	: Not relevant for the hazard assessment of the product.
Melting point/freezing point	: 96°C (1-methoxy-2-propanol)
Initial boiling point and boiling range	: 120,17°C (1-methoxy-2-propanol)
Flash point	: >100°C
Evaporation rate	: 0,814 (butyl acetate = 1) (1-methoxy-2-propanol)
Flammability (solid, gas)	: Not applicable. Product is a liquid.
Upper/lower flammability or explosive limits	: Lower: 1,48% (1-methoxy-2-propanol) Upper: 13,74% (1-methoxy-2-propanol)
Vapor pressure	: 1,1 kPa [room temperature] (1-methoxy-2-propanol)
Vapor density	: 3,11 (1-methoxy-2-propanol)
Density	: 1,6 to 1,7 g/cm ³
Solubility(ies)	: Miscible in water.
Partition coefficient: n-octanol/water	: Not available.
Auto-ignition temperature	: 270°C (1-methoxy-2-propanol)
Decomposition temperature	: Not relevant for the hazard assessment of the product.
Viscosity	: Not relevant for the hazard assessment of the product.
Explosive properties	: No explosive ingredients present.
Oxidizing properties	: No oxidizing ingredients present.

9.2 Other information

No additional information.

SECTION 10: Stability and reactivity

- 10.1 Reactivity** : See Section 10.5.
- 10.2 Chemical stability** : Stable under recommended storage and handling conditions (see Section 7).
- 10.3 Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- 10.4 Conditions to avoid** : Avoid extreme heat and freezing.
- 10.5 Incompatible materials** : Keep away from the following materials to prevent strong exothermic reactions:
oxidizing agents
strong acids
strong alkalis
- 10.6 Hazardous decomposition products** : When exposed to high temperatures, hazardous decomposition products may be produced, such as carbon monoxide and dioxide, smoke, oxides of nitrogen etc.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

There is no testdata available on the product itself.

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

Long term exposure to spray mist may produce respiratory tract irritation. Repeated or prolonged skin contact may lead to allergic contact dermatitis.

Acute toxicity

Not classified.

Irritation/Corrosion

Causes skin irritation. Causes serious eye irritation.

Sensitization

May cause an allergic skin reaction.

Contains small amounts of sensitizing substances:
m-phenylenebis(methylamine)

Mutagenicity

Not classified.

Carcinogenicity

Not classified.

Reproductive toxicity

Not classified.

Teratogenicity

Not classified.

Specific target organ toxicity (single exposure)

Not classified.

Specific target organ toxicity (repeated exposure)

Not classified.

Aspiration hazard

Not classified.

SECTION 12: Ecological information

Ecological testing has not been conducted on this product.
Do not allow to enter drains, water courses or soil.

The product is classified as environmentally hazardous according to Regulation (EC) 1272/2008.
Harmful to aquatic life with long lasting effects.

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
Isophorone diamine	Acute EC50 17,4 mg/l Fresh water	Daphnia - Daphnia magna	48 hours

12.2 Persistence and degradability : No specific data.

12.3 Bioaccumulative potential

Product/ingredient name	LogP _{ow}	Bioconcentration factor [BCF]	Potential
Isophorone diamine	0,99	-	low

12.4 Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

PBT : Not applicable.

vPvB : Not applicable.

12.6 Other adverse effects : Not available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Methods of disposal : Gather residues into waste containers. Liquid residue and cleaning liquids are hazardous waste and must not be emptied into drains or sewage system, but handled in accordance with national regulations. Product residues should be left at special companies which have permission for gathering this kind of wastes.

European waste catalogue (EWC)

Waste code	Waste designation
08 01 11*	waste paint and varnish containing organic solvents or other dangerous substances
08 01 12	waste paint and varnish other than those mentioned in 08 01 11

If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned. For further information, contact your local waste authority.

Packaging

Methods of disposal : Empty packaging should be recycled or disposed of in accordance with national regulations.

Special precautions : No additional information.

SECTION 14: Transport information

This product is not regulated for carriage according to ADR/RID, IMDG, IATA.

	ADR/RID	IMDG	IATA
14.1 UN number	Not regulated.	Not regulated.	Not regulated.
14.2 UN proper shipping name	-	-	-
14.3 Transport hazard class(es)	-	-	-
14.4 Packing group	-	-	-
14.5 Environmental hazards	No.	No.	No.
Additional information	-	-	The environmentally hazardous substance mark may appear if required by other transportation regulations.

14.6 Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code : Not available.

SECTION 15: Regulatory information

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

EU Regulation (EC) No. 1907/2006 (REACH)

Other EU regulations

Europe inventory : Not determined.

VOC Directive : This product is in scope of Directive 2004/42/CE.

15.2 Chemical Safety Assessment : This product contains substances for which Chemical Safety Assessments are still required.

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms :

- ATE = Acute Toxicity Estimate
- CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
- DMEL = Derived Minimal Effect Level
- DNEL = Derived No Effect Level
- EUH statement = CLP-specific Hazard statement
- PBT = Persistent, Bioaccumulative and Toxic
- PNEC = Predicted No Effect Concentration
- RRN = REACH Registration Number
- vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification**Justification**

Skin Irrit. 2, H315	Calculation method
Eye Irrit. 2, H319	Calculation method
Skin Sens. 1, H317	Calculation method
Aquatic Chronic 3, H412	Calculation method

Full text of abbreviated H statements	:	H226	Flammable liquid and vapor.
		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.
		H319	Causes serious eye irritation.
		H336	May cause drowsiness and dizziness.
		H411	Toxic to aquatic life with long lasting effects.
		H412	Harmful to aquatic life with long lasting effects.

Full text of classifications [CLP/GHS]	:	Acute Tox. 4, H302	ACUTE TOXICITY (oral) - Category 4
		Acute Tox. 4, H312	ACUTE TOXICITY (dermal) - Category 4
		Aquatic Chronic 2, H411	AQUATIC HAZARD (LONG-TERM) - Category 2
		Aquatic Chronic 3, H412	AQUATIC HAZARD (LONG-TERM) - Category 3
		Eye Irrit. 2, H319	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2
		Flam. Liq. 3, H226	FLAMMABLE LIQUIDS - Category 3
		Skin Corr. 1B, H314	SKIN CORROSION/IRRITATION - Category 1B
		Skin Irrit. 2, H315	SKIN CORROSION/IRRITATION - Category 2
		Skin Sens. 1, H317	SKIN SENSITIZATION - Category 1
		STOT SE 3, H336	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3

Full text of abbreviated R phrases	:	R10- Flammable.
		R21/22- Harmful in contact with skin and if swallowed.
		R34- Causes burns.
		R43- May cause sensitization by skin contact.
		R67- Vapors may cause drowsiness and dizziness.
		R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
	R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.	

Full text of classifications [DSD/DPD]	:	C - Corrosive
		Xn - Harmful
		N - Dangerous for the environment

Date of issue/ Date of revision : 09-06-2015.

Date of previous issue : 21-11-2014.

Version : 1.01

Notice to reader

This Safety Data Sheet is prepared in accordance with Annex II (EU) No 453/2010 to Regulation (EC) No 1907/2006 (REACH). The information contained in this Safety Data Sheet is based on the present state of knowledge and current EU and national legislation. It provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular applications.



SAFETY DATA SHEET

▀ FONTECOAT EP 50 FCH, BEIGE, ABB MOTORBLÅ,
PINK TVT 200J, NCS 2502-Y

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

1.1 Product identifier

Product name : FONTECOAT EP 50 FCH, BEIGE, ABB MOTORBLÅ, PINK TVT 200J, NCS 2502-Y
Product code : 688323|168722K|168696S|168200J|168C390
Product description : A two-component waterborne epoxy paint.

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

Recommended use: Painting work
Only for industrial and professional use. The product is not intended for consumer use.

1.3 Details of the supplier of the safety data sheet

Manufacturer or Distributor

Tikkurila Oyj
P.O. Box 53
FI-01301 VANTAA
FINLAND
Telephone +358 20 191 2000

e-mail address of person responsible for this SDS : Tikkurila Oyj,
Product Safety,
e-mail: productsafety@tikkurila.com

1.4 Emergency telephone number

Telephone number : 112
(24h)

Supplier or Manufacturer

Telephone number : Tikkurila Oyj
+358 20 191 2000 Mon-Fri 8-16

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

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

Skin Irrit. 2, H315
Eye Irrit. 2, H319
Skin Sens. 1, H317
Aquatic Chronic 2, H411

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

Classification according to Directive 1999/45/EC [DPD]

The product is classified as dangerous according to Directive 1999/45/EC and its amendments.

Classification : R43
N; R51/53

Human health hazards : May cause sensitization by skin contact.

Environmental hazards : Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

2.2 Label elements

Hazard pictograms



Signal word

: Warning

Hazard statements

: H319 - Causes serious eye irritation.
 H315 - Causes skin irritation.
 H317 - May cause an allergic skin reaction.
 H411 - Toxic to aquatic life with long lasting effects.

Precautionary statements

General

: Not applicable.

Prevention

: P261 - Avoid breathing mist/vapors/spray.
 P280 - Wear protective gloves/clothing and eye/face protection.
 P285 - In case of inadequate ventilation wear respiratory protection.
 P273 - Avoid release to the environment.

Response

: P305 + P351 - IF IN EYES: Rinse cautiously with water for several minutes.
 P302 + P352 - IF ON SKIN: Wash with plenty of soap and water.

Storage

: Not applicable.

Disposal

: Not applicable.

Hazardous ingredients

: isophorone diamine
 m-phenylenebis(methylamine)

Supplemental label elements

: Not applicable.

2.3 Other hazards

Other hazards which do not result in classification : None known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

: Mixture

Product/ingredient name	Identifiers	%	Classification		Notes
			67/548/EEC	Regulation (EC) No. 1272/2008 [CLP]	
aliphatic polyamine adduct	CAS: 160192-66-5	≥5 - <10	N; R51/53	Aquatic Chronic 2, H411	-
trizinc bis(orthophosphate)	REACH #: 01-2119485044-40 EC: 231-944-3 CAS: 7779-90-0 Index: 030-011-00-6	≥3 - <5	N; R50/53	Aquatic Acute 1, H400 Aquatic Chronic 1, H410	-
1-methoxy-2-propanol	REACH #: 01-2119457435-35 EC: 203-539-1 CAS: 107-98-2 Index: 603-064-00-3	≥3 - <5	R10 R67	Flam. Liq. 3, H226 STOT SE 3, H336	-
isophorone diamine	EC: 220-666-8 CAS: 2855-13-2 Index: 612-067-00-9	≥1 - <3	Xn; R21/22 C; R34 R43 R52/53	Acute Tox. 4, H302 Acute Tox. 4, H312 Skin Corr. 1B, H314 Skin Sens. 1, H317 Aquatic Chronic 3, H412	-
			See Section 16 for the full text of the R-phrases declared above.	See Section 16 for the full text of the H statements declared above.	

There are no additional ingredients present which, within the current knowledge of the supplier, are classified and contribute to the classification of the substance and hence require reporting in this section.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs or vPvBs or have been assigned a workplace exposure limit and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Notes, if applicable, refer to Notes given in Annex VI of 1272/2008/EC.

SECTION 4: First aid measures

4.1 Description of first aid measures

General	: In all cases of doubt, or when symptoms persist, seek medical attention. Show this safety data sheet or label to the doctor if possible.
Eye contact	: Check for and remove any contact lenses. Immediately flush eyes with plenty of lukewarm water, keeping eyelids open. Continue to rinse for at least 15 minutes. Get medical attention if symptoms occur.
Inhalation	: Remove to fresh air. Keep person warm and at rest.
Skin contact	: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners. Get medical attention if symptoms occur.
Ingestion	: If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Remove to fresh air and keep at rest in a position comfortable for breathing. Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

Causes skin irritation.
Causes serious eye irritation.
May cause an allergic skin reaction.
See Section 11 for more detailed information on health effects and symptoms.

4.3 Indication of any immediate medical attention and special treatment needed

None.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media	: Use an extinguishing agent suitable for the surrounding fire. Recommended: Alcohol resistant foam, CO ₂ , powders or water spray/mist.
Unsuitable extinguishing media	: Do not use a direct water jet that could spread the fire.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture	: This product is not classified as flammable. Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard.
Hazardous thermal decomposition products	: When exposed to high temperatures, may produce hazardous decomposition products, such as carbon monoxide and dioxide, smoke, oxides of nitrogen etc.

5.3 Advice for firefighters

Special protective actions for fire-fighters	: Use water spray to keep fire-exposed containers cool. This material is hazardous to aquatic organisms. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures : Avoid direct skin contact with product. Avoid breathing vapor or mist. Provide adequate ventilation. See Section 8 for information on appropriate personal protective equipment.

6.2 Environmental precautions : Hazardous to aquatic environment. Do not allow to enter drains, water courses or soil.

6.3 Methods and materials for containment and cleaning up : Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Preferably clean with water or detergent. Avoid using solvents.

6.4 Reference to other sections : See Section 1 for emergency contact information.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling : Skin contact with the product and exposure to spray mist and vapor should be avoided. Avoid inhalation of dust from sanding. See Section 8 for information on appropriate personal protective equipment. Eating, drinking and smoking should be prohibited in areas where this material is handled and stored. Wash hands before breaks and immediately after handling the product. Avoid release to the environment.

7.2 Conditions for safe storage, including any incompatibilities : Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Keep container tightly closed. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Recommended storage temperature is +5°C ...+25°C. Do not allow to freeze. Store in accordance with local regulations.

7.3 Specific end use(s) : None.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
1-methoxy-2-propanol	EU OEL (Europe, 12/2009). Absorbed through skin. Notes: list of indicative occupational exposure limit values TWA: 100 ppm 8 hours. TWA: 375 mg/m ³ 8 hours. STEL: 150 ppm 15 minutes. STEL: 568 mg/m ³ 15 minutes.

Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

DNELs/DMELs

No DNELs/DMELs available.

PNECs

No PNECs available.

8.2 Exposure controls

Appropriate engineering controls

Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapours below the OEL, suitable respiratory protection must be worn (see Personal protection for both components). Comply with the health and safety at work laws.

Individual protection measures

Eye/face protection : Use safety eyewear (EN166), especially during spray-application.

Hand protection	: Always wear approved protective gloves against chemicals. Gloves should be replaced regularly and if there is any sign of damage to the glove material. The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed. Recommended glove material (EN374): < 1 hour (breakthrough time): nitrile rubber, butyl rubber > 8 hours (breakthrough time): laminated foil Not recommended: PVC or natural rubber (latex) gloves
Skin protection	: Wear suitable protective clothing.
Respiratory protection	: If ventilation during spray-application is inadequate, use respirators with combination filter AP, gas/dust filter (EN405:2001). Wear a half mask or full face respirator with gas and vapor filter A and dust filter P2 during sanding (EN140:1998, EN405:2001). During continuous and long-term work the use of motor-driven or air-fed respirators is recommended (EN12941:1998). Be sure to use an approved/certified respirator or equivalent. Check that mask fits tightly and change filter regularly.
Environmental exposure controls	: For information regarding environmental protection measures, please refer to section 13 for waste handling, section 7 for handling and storage and section 1.2 for relevant identified uses of the substance or mixture and uses advised against.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state	: Liquid.
Color	: Coloured
Odor	: Mild.
Odor threshold	: Not relevant for the hazard assessment of the product.
pH	: Not relevant for the hazard assessment of the product.
Melting point/freezing point	: 96°C (1-methoxy-2-propanol)
Initial boiling point and boiling range	: 70,17°C (1-methoxy-2-propanol)
Flash point	: >100°C
Evaporation rate	: 0,814 (butyl acetate = 1) (1-methoxy-2-propanol)
Flammability (solid, gas)	: Not applicable. Product is a liquid.
Upper/lower flammability or explosive limits	: Lower: 1,48% (1-methoxy-2-propanol) Upper: 13,74% (1-methoxy-2-propanol)
Vapor pressure	: 1,1 kPa [room temperature] (1-methoxy-2-propanol)
Vapor density	: 3,11 (1-methoxy-2-propanol)
Density	: 1,6 to 1,7 g/cm ³
Solubility(ies)	: Miscible in water.
Partition coefficient: n-octanol/water	: Not available.
Auto-ignition temperature	: 270°C (1-methoxy-2-propanol)
Decomposition temperature	: Not relevant for the hazard assessment of the product.
Viscosity	: Not relevant for the hazard assessment of the product.
Explosive properties	: No explosive ingredients present.
Oxidizing properties	: No oxidizing ingredients present.

9.2 Other information

No additional information.

SECTION 10: Stability and reactivity

- 10.1 Reactivity** : See Section 10.5.
- 10.2 Chemical stability** : Stable under recommended storage and handling conditions (see Section 7).
- 10.3 Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- 10.4 Conditions to avoid** : Avoid extreme heat and freezing.
- 10.5 Incompatible materials** : Keep away from the following materials to prevent strong exothermic reactions:
oxidizing agents
strong acids
strong alkalis
- 10.6 Hazardous decomposition products** : When exposed to high temperatures, hazardous decomposition products may be produced, such as carbon monoxide and dioxide, smoke, oxides of nitrogen etc.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

There is no testdata available on the product itself.

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

Long term exposure to spray mist may produce respiratory tract irritation. Repeated or prolonged skin contact may lead to allergic contact dermatitis.

Acute toxicity

Not classified.

Irritation/Corrosion

Causes skin irritation. Causes serious eye irritation.

Sensitization

May cause an allergic skin reaction.

Contains small amounts of sensitizing substances:

m-phenylenebis(methylamine)

Mutagenicity

Not classified.

Carcinogenicity

Not classified.

Reproductive toxicity

Not classified.

Teratogenicity

Not classified.

Specific target organ toxicity (single exposure)

Not classified.

Specific target organ toxicity (repeated exposure)

Not classified.

Aspiration hazard

Not classified.

SECTION 12: Ecological information

Ecological testing has not been conducted on this product.
Do not allow to enter drains, water courses or soil.

The product is classified as environmentally hazardous according to Regulation (EC) 1272/2008.
Toxic to aquatic life with long lasting effects.

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
Zinc bis(orthophosphate) isophorone diamine	Acute EC50 0,8 mg/l	Algae	72 hours
	Acute EC50 17,4 mg/l Fresh water	Daphnia - Daphnia magna	48 hours

12.2 Persistence and degradability : No specific data.

12.3 Bioaccumulative potential

Product/ingredient name	LogP _{ow}	Bioconcentration factor [BCF]	Potential
Zinc bis(orthophosphate) isophorone diamine	-	60960	high
	0,99	-	low

12.4 Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

PBT : Not applicable.

vPvB : Not applicable.

12.6 Other adverse effects : Not available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Methods of disposal : Gather residues into waste containers. Liquid residue and cleaning liquids are hazardous waste and must not be emptied into drains or sewage system, but handled in accordance with national regulations. Product residues should be left at special companies which have permission for gathering this kind of wastes.

European waste catalogue (EWC)

Waste code	Waste designation
08 01 11*	waste paint and varnish containing organic solvents or other dangerous substances
08 01 12	waste paint and varnish other than those mentioned in 08 01 11

If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned. For further information, contact your local waste authority.

Packaging

Methods of disposal : Empty packaging should be disposed of in accordance with national regulations.

Special precautions : No additional information.

SECTION 14: Transport information

	ADR/RID	IMDG	IATA
14.1 UN number	UN3082	UN3082	UN3082
14.2 UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (trizinc bis (orthophosphate))	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (trizinc bis (orthophosphate))	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (trizinc bis (orthophosphate))
14.3 Transport hazard class(es)	9	9	9
14.4 Packing group	III	III	III
14.5 Environmental hazards	Yes.	Yes.	Yes.
Additional information	<u>Tunnel code</u> (E)	The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg. <u>Emergency schedules (EmS)</u> F-A,S-F	The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg.

14.6 Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code : Not available.

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

EU Regulation (EC) No. 1907/2006 (REACH)

Other EU regulations

Europe inventory : Not determined.

VOC Directive : This product is in scope of Directive 2004/42/CE.

15.2 Chemical Safety Assessment : This product contains substances for which Chemical Safety Assessments are still required.

SECTION 16: Other information

✔ Indicates information that has changed from previously issued version.

Abbreviations and acronyms : ATE = Acute Toxicity Estimate
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
EUH statement = CLP-specific Hazard statement
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
RRN = REACH Registration Number
vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

	Classification	Justification
Skin Irrit. 2, H315		Calculation method
Eye Irrit. 2, H319		Calculation method
Skin Sens. 1, H317		Calculation method
Aquatic Chronic 2, H411		Calculation method
Full text of abbreviated H statements	✔ H226 Flammable liquid and vapor. 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. H319 Causes serious eye irritation. H336 May cause drowsiness and dizziness. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects. H411 Toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects.	
Full text of classifications [CLP/GHS]	✔ Acute Tox. 4, H302 ACUTE TOXICITY (oral) - Category 4 Acute Tox. 4, H312 ACUTE TOXICITY (dermal) - Category 4 Aquatic Acute 1, H400 AQUATIC HAZARD (ACUTE) - Category 1 Aquatic Chronic 1, H410 AQUATIC HAZARD (LONG-TERM) - Category 1 Aquatic Chronic 2, H411 AQUATIC HAZARD (LONG-TERM) - Category 2 Aquatic Chronic 3, H412 AQUATIC HAZARD (LONG-TERM) - Category 3 Eye Irrit. 2, H319 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2 Flam. Liq. 3, H226 FLAMMABLE LIQUIDS - Category 3 Skin Corr. 1B, H314 SKIN CORROSION/IRRITATION - Category 1B Skin Irrit. 2, H315 SKIN CORROSION/IRRITATION - Category 2 Skin Sens. 1, H317 SKIN SENSITIZATION - Category 1 STOT SE 3, H336 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3	
Full text of abbreviated R phrases	: R10- Flammable. R21/22- Harmful in contact with skin and if swallowed. R34- Causes burns. R43- May cause sensitization by skin contact. R67- Vapors may cause drowsiness and dizziness. R50/53- Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.	
Full text of classifications [DSD/DPD]	: C - Corrosive Xn - Harmful N - Dangerous for the environment	
Date of issue/ Date of revision	: 09-06-2015.	

Date of previous issue : 21-11-2014.**Version** : 1.01**Notice to reader**

This Safety Data Sheet is prepared in accordance with Annex II (EU) No 453/2010 to Regulation (EC) No 1907/2006 (REACH). The information contained in this Safety Data Sheet is based on the present state of knowledge and current EU and national legislation. It provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular applications.