Conforms to Regulation	(EC) No. 1907/2006 (REA	CH), Annex II, as amended by Commission	n Regulation (EU)
2015/830 - Europe			
Date of issue/ Date of revision	: 8/8/2019	Date of previous issue	: 5/9/2018

TIKKURILA

SAFETY DATA SHEET

FONTEDUR CLEAR PLUS

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

1.1 Product identifier

Product name : FONTEDUR CLEAR PLUS

Product description

: A waterborne polyurethane lacquer.

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

Recommended use: Painting work

1.3 Details of the supplier of the safety data sheet

Manufacturer or DistributorTikkurila OyjP.O. Box 53FI-01301 VANTAAFINLANDTelephone +358 20 191 2000e-mail address of personresponsible 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 (GMT +2) 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 The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

2.2	Label	elements	

Hazard pictograms



Signal word	:	Warning
Hazard statements	:	▶ 319 - Causes serious eye irritation. H315 - Causes skin irritation.
Precautionary statements		
General	:	Not applicable.

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Prevention	:	P261 - Avoid breathing mist/spray P280 - Wear protective gloves.	<i>י</i> .	
Response	:	▶305 + P351 + P338 - IF IN EYES Remove contact lenses, if presen		
Storage	:	Not applicable.		
Disposal	:	Not applicable.		
Supplemental label elements	:	Not applicable.		

2.3 Other hazards

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

SECTION 3: Composition/information on ingredients

3.2 Mixtures	: Mixture			
			Classification	
Product/ingredient name	Identifiers	%	Regulation (EC) No. 1272/2008 [CLP]	Notes
✓ butoxyethanol	REACH #: 01-2119475108-36 EC: 203-905-0 CAS: 111-76-2 Index: 603-014-00-0	≤10	Acute Tox. 4, H302 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319	-
3-butoxypropan-2-ol	REACH #: 01-2119475527-28 EC: 225-878-4 CAS: 5131-66-8 Index: 603-052-00-8	≤5	Skin Irrit. 2, H315 Eye Irrit. 2, H319	-
2-Dimethylaminoethanol	REACH #: 01-2119492298-24 EC: 203-542-8 CAS: 108-01-0 Index: 603-047-00-0	≤0.3	Flam. Liq. 3, H226 Acute Tox. 4, H302 Acute Tox. 4, H312 Acute Tox. 3, H331 Skin Corr. 1B, H314 Eye Dam. 1, H318 STOT SE 3, H335	-
			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 firs	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.				
Skin contact	 Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners. 				
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. 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 combustion products	: When exposed to high temperatures, hazardous decomposition products may be produced, 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. Do not release runoff from fire to drains or watercourses.
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	:	Provide adequate ventilation. Avoid breathing vapor or mist. Avoid contact with skin and eyes. See Section 8 for information on appropriate personal protective equipment.
6.2 Environmental precautions	:	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
 is kin contact with the product and exposure to spray mist and vapor should be avoided. Avoid contact with skin and eyes. 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.

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7.2 Conditions for safe storage, including any incompatibilities	: Store away from direct sunlight in a incompatible materials (see Section that have been opened must be calleakage. Do not store in unlabeled is +5°C+25°C. Do not allow to f	n 10). Keep con arefully resealed a d containers. Re	tainer tightly closed. Containers and kept upright to prevent commended storage temperature
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
	EU OEL (Europe, 2/2017). Absorbed through skin. Notes: list of indicative occupational exposure limit values TWA: 20 ppm 8 hours. TWA: 98 mg/m ³ 8 hours. STEL: 50 ppm 15 minutes. STEL: 246 mg/m ³ 15 minutes.

procedures

Recommended monitoring : 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. 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	 Wear protective gloves. 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): > 8 hours (breakthrough time): nitrile rubber Not recommended: PVA 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 respirator with type P2 filter during sanding (EN149:2001). Be sure to use an approved/certified respirator or equivalent. Check that mask fits tightly and change filter regularly.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	
Physical state	: Liquid.
Color	: Clear.
Odor	: Mild.
Odor threshold	: Not relevant for the hazard assessment of the product.
рН	: Not relevant for the hazard assessment of the product.

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Melting point/freezing point Initial boiling point and boiling range	: Not available. : Not available.		
Flash point	: >100 °C		
Evaporation rate	: Not available.		
Flammability (solid, gas)	: Not applicable. Product is a	liquid.	
Upper/lower flammability or explosive limits	: Not available.		
Vapor pressure	: Not available.		
Vapor density	: Not available.		
Density	: 1.03 g/cm³		
Solubility(ies)	: Miscible in water.		
Partition coefficient: n-octanol/ water	: Not available.		
Auto-ignition temperature	: Not available.		
Decomposition temperature	: Not relevant for the hazard a	assessment of the	product.
Viscosity	: Not relevant for the hazard a	assessment of the	product.
Explosive properties	: No explosive ingredients pre	esent.	
Oxidizing properties	: No oxidizing ingredients pre-	sent.	

9.2 Other information

No additional information.

SECTION 10: Stability and reactivity

10.1 Reactivity	ee Section 10.5.	
10.2 Chemical stability	table under recommended storage and handling conditions (see Section	on 7).
10.3 Possibility of hazardous reactions	nder normal conditions of storage and use, hazardous reactions will no	ot occur.
10.4 Conditions to avoid	void extreme heat and freezing.	
10.5 Incompatible materials	eep away from the following materials to prevent strong exothermic rea xidizing agents rrong acids rrong alkalis	actions:
10.6 Hazardous decomposition products	/hen exposed to high temperatures, hazardous decomposition product roduced, such as carbon monoxide and dioxide, smoke, oxides of nitro	

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. Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

Acute toxicity

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Product/ingredient name	Result	Species	Dose	Exposure
-butoxyethanol	LC50 Inhalation Dusts and mists	Rat - Female	2.2 mg/l	4 hours
	LD50 Dermal	Guinea pig	230 uL/kg	-
	LD50 Oral	Rat	917 mg/kg	-
2-Dimethylaminoethanol	LC50 Inhalation Vapor	Rat	5.9 mg/l	4 hours
	LD50 Dermal	Rabbit	1220 mg/kg	-
	LD50 Oral	Rat	1183 mg/kg	-

Not classified.

Irritation/Corrosion

Causes skin irritation. Causes serious eye irritation.

Sensitization

Not classified.

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 not classified as environmentally hazardous according to Regulation (EC) 1272/2008.

12.1 Toxicity

: No specific data.

Not available.

12.2 Persistence and : No specific data.

degradability

12.3 Bioaccumulative potential

Product/ingredient name	LogPow	Bioconcentration factor [BCF]	Potential
2-Dimethylaminoethanol	-0.55	-	low
3-butoxypropan-2-ol	1.2	-	low
2-butoxyethanol	0.81	-	low

12.4 Mobility in soil

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Soil/water partition coefficient (Koc)	: Not available.			
Mobility	: Not available.			

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Other adverse effects	: Not available.
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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* 08 01 12	waste paint and varnish containing organic solvents or other hazardous substances 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

. aonaging	
Methods of disposal	 Empty packaging should be recycled or disposed of in accordance with national regulations.
Special precautions	: Note! The hardener reacts with water resulting in evolution of carbon dioxide (CO2). The ready for use mixture of paint and hardener will form carbon dioxide which in closed containers can result in pressurisation.

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.

user

14.6 Special precautions for : 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.

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14.7 Transport in bulk: Not available.according to Annex II ofMARPOL and the IBC Code

SECTION 15: Regulatory information

	15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture		
EU Regulation (EC) No. 190			
Other EU regulations			
Europe inventory	: Not determined.		
15.2 Chemical Safety Assessment	: This product contains substances for which Chemical Safety Assessments a required.	ire still	
SECTION 16: Other i	nformation		
Indicates information that I	nas changed from previously issued version.		
Abbreviations and	: ATE = Acute Toxicity Estimate		
acronyms	CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) N 1272/2008] DMEL = Derived Minimal Effect Level	No.	
	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	e classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]		
Classif	ication Justification		
Skin Irrit. 2, H315	Calculation method		
Eye Irrit. 2, H319	Calculation method		
Full text of abbreviated H	: F226 Flammable liquid and vapor.		
statements	H302 Harmful is sentect with skin		
	H312 Harmful in contact with skin.H314 Causes severe skin burns and eye damage.		
	H315 Causes skin irritation.		
	H318 Causes serious eye damage.		
	H319 Causes serious eye irritation.		
	H331 Toxic if inhaled.		
	H332 Harmful if inhaled.		
	H335 May cause respiratory irritation.		
Full text of classifications [CLP/GHS]	: Acute Tox. 3, H331 Acute Tox. 4, H302 Acute Tox. 4, H312 Acute Tox. 4, H312 Acute Tox. 4, H332 Acute Tox. 4, H332		
	Eye Dam. 1, H318 SERIOUS EYE DAMAGE/ EYE IRRITATION - Ca	tegory 1	
	Eye Irrit. 2, H319 SERIOUS EYE DAMAGE/ EYE IRRITATION - Ca	tegory 2	
	Flam. Liq. 3, H226 FLAMMABLE LIQUIDS - Category 3		
	Skin Corr. 1B, H314SKIN CORROSION/IRRITATION - Category 1BSkin Irrit. 2, H315SKIN CORROSION/IRRITATION - Category 2		
	STOT SE 3, H335 SERIE CORROSION/RETATION - Category 2 STOT SE 3, H335 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Catego		
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revision	: 5/9/2018 : 2		

This Safety Data Sheet is prepared in accordance with Annex II (EU) No 830/2015 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.

09.05.2018.