



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 code : 0055655
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 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 (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 : H319 - Causes serious eye irritation.
H315 - Causes skin irritation.

Precautionary statements

General : Not applicable.

Prevention : P261 - Avoid breathing mist/spray.
P280 - Wear protective gloves.

Response	: P305 + P351 - IF IN EYES: Rinse cautiously with water for several minutes.
Storage	: Not applicable.
Disposal	: Not applicable.
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 Regulation (EC) No. 1272/2008 [CLP]	Notes
2-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 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 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 direct skin contact with product. 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 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.

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
2-butoxyethanol	EU OEL (Europe, 12/2009). 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.

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. 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.
- pH** : Not relevant for the hazard assessment of the product.
- Melting point/freezing point** : Not available.
- Initial boiling point and boiling range** : 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 g/cm ³
Solubility(ies)	: Miscible in water.
Partition coefficient: n-octanol/ water	: Not available.
Auto-ignition temperature	: Not available.
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. Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
2-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 degradability : No specific data.

12.3 Bioaccumulative potential

Product/ingredient name	LogP _{ow}	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

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 hazardous 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 : **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.
Additional information	-	-	-

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 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.

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
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. 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, H332 Eye Irrit. 2, H319 Flam. Liq. 3, H226 Skin Corr. 1B, H314 Skin Irrit. 2, H315 STOT SE 3, H335	ACUTE TOXICITY (inhalation) - Category 3 ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (dermal) - Category 4 ACUTE TOXICITY (inhalation) - Category 4 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2 FLAMMABLE LIQUIDS - Category 3 SKIN CORROSION/IRRITATION - Category 1B SKIN CORROSION/IRRITATION - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
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Notice to reader

This Safety Data Sheet is prepared in accordance with Annex II 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.