

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)



Trade name : FT 300
Revision date : 09.09.2015
Print date : 19.04.2017

Version (Revision) : 3.1.0 (3.0.1)

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

1.1 Product identifier

FT 300

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

Relevant identified uses

Washing and cleaning products (including solvent based products)

1.3 Details of the supplier of the safety data sheet

Supplier (manufacturer/importer/only representative/downstream user/distributor)

Bio-Circle Surface Technology GmbH

Street : Berensweg 200

Postal code/city : 33334 Gütersloh

Telephone : +49 5241 9443 0

Telefax : +49 5241 9443 44

Information contact : labor@bio-circle.de

1.4 Emergency telephone number

+49 5241 9443 51 during normal office hours

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

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

None

2.2 Label elements

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

Special rules for supplemental label elements for certain mixtures

EUH210

Safety data sheet available on request.

2.3 Other hazards

None

SECTION 3: Composition / information on ingredients

3.2 Mixtures

Hazardous ingredients

ETHANOL ; REACH registration No. : 01-2119457610-43-XXXX ; EC No. : 200-578-6; CAS No. : 64-17-5

Weight fraction : $\geq 10 - < 15$ %

Classification 1272/2008 [CLP] : Flam. Liq. 2 ; H225 Eye Irrit. 2 ; H319

BUTYL CELLOSOLVE ; REACH registration No. : 01-2119475108-36-XXXX ; EC No. : 203-905-0; CAS No. : 111-76-2

Weight fraction : $\geq 1 - < 5$ %

Classification 1272/2008 [CLP] : Acute Tox. 4 ; H302 Acute Tox. 4 ; H312 Acute Tox. 4 ; H332 Skin Irrit. 2 ; H315 Eye Irrit. 2 ; H319

Additional information

Full text of H- and EUH-phrases: see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

When in doubt or if symptoms are observed, get medical advice.

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Following inhalation

In case of respiratory tract irritation, consult a physician. Remove casualty to fresh air and keep warm and at rest.

In case of skin contact

After contact with skin, wash immediately with plenty of water and soap. Rub greasy ointment into the skin.

After eye contact

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

After ingestion

Rinse mouth immediately and drink plenty of water. Call a physician immediately.

4.2 Most important symptoms and effects, both acute and delayed

None

4.3 Indication of any immediate medical attention and special treatment needed

None

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water Foam Extinguishing powder Carbon dioxide (CO₂) Sand Nitrogen Extinguishing blanket

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products

Nitrogen oxides (NO_x). Carbon dioxide (CO₂) Carbon monoxide.

5.3 Advice for firefighters

Apply foam in abundant quantities since some of it gets destroyed by the product. Wear a self-contained breathing apparatus and chemical protective clothing.

5.4 Additional information

Move undamaged containers from immediate hazard area if it can be done safely. Co-ordinate fire-fighting measures to the fire surroundings.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Special danger of slipping by leaking/spilling product.

6.2 Environmental precautions

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

6.3 Methods and material for containment and cleaning up

Clear spills immediately. Wipe up with absorbent material (eg. cloth, fleece). Wash with plenty of water. Treat the recovered material as prescribed in the section on waste disposal.

6.4 Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Keep container tightly closed.

7.2 Conditions for safe storage, including any incompatibilities

Keep/Store only in original container. Protect against Frost

Hints on joint storage

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Storage class (TRGS 510) : 12

7.3 Specific end use(s)

Observe technical data sheet. Observe instructions for use.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values

ETHANOL ; CAS No. : 64-17-5

Limit value type (country of origin) : TRGS 900 (D)
Limit value : 500 ppm / 960 mg/m³
Peak limitation : 2(II)
Remark : Y
Version : 02.04.2014

BUTYL CELLOSOLVE ; CAS No. : 111-76-2

Limit value type (country of origin) : TRGS 900 (D)
Limit value : 20 ppm / 98 mg/m³
Peak limitation : 4(II)
Remark : H,Y
Version : 02.04.2014

Limit value type (country of origin) : STEL (EC)

Limit value : 50 ppm / 246 mg/m³
Remark : H
Version : 08.06.2000

Limit value type (country of origin) : TWA (EC)

Limit value : 20 ppm / 98 mg/m³
Remark : H
Version : 08.06.2000

Biological limit values

BUTYL CELLOSOLVE ; CAS No. : 111-76-2

Limit value type (country of origin) : TRGS 903 (D)
Parameter : Butoxy acetic acid / Urine (U) / At long term exposure: after several previous shifts
Limit value : 100 mg/l
Version : 31.03.2004

DNEL/DMEL and PNEC values

DNEL/DMEL

Limit value type : DNEL worker (local) (BUTYL CELLOSOLVE ; CAS No. : 111-76-2)

Exposure route : Inhalation
Exposure frequency : Short-term (acute)
Limit value : 246 mg/m³

Limit value type : DNEL worker (local) (ETHANOL ; CAS No. : 64-17-5)

Exposure route : Inhalation
Exposure frequency : Short-term (acute)
Limit value : 1900 mg/m³

Limit value type : DNEL worker (systemic) (ETHANOL ; CAS No. : 64-17-5)

Exposure route : Inhalation
Exposure frequency : Long-term (repeated)
Limit value : 950 mg/m³

Limit value type : DNEL worker (systemic) (BUTYL CELLOSOLVE ; CAS No. : 111-76-2)

Exposure route : Inhalation
Exposure frequency : Long-term (repeated)
Limit value : 98 mg/m³

Limit value type : DNEL worker (systemic) (BUTYL CELLOSOLVE ; CAS No. : 111-76-2)

Exposure route : Inhalation

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Exposure frequency :	Short-term (acute)
Limit value :	663 mg/m ³
Limit value type :	DNEL worker (systemic) (ETHANOL ; CAS No. : 64-17-5)
Exposure route :	Dermal
Exposure frequency :	Long-term (repeated)
Limit value :	343 mg/kg
Limit value type :	DNEL worker (systemic) (BUTYL CELLOSOLVE ; CAS No. : 111-76-2)
Exposure route :	Dermal
Exposure frequency :	Long-term (repeated)
Limit value :	75 mg/kg
Limit value type :	DNEL worker (systemic) (BUTYL CELLOSOLVE ; CAS No. : 111-76-2)
Exposure route :	Dermal
Exposure frequency :	Short-term (acute)
Limit value :	89 mg/kg

8.2 Exposure controls

Personal protection equipment

Eye/face protection



Wear suitable safety goggles in case of splash.

Suitable eye protection
EN 166.

Skin protection

Hand protection



Wear protective gloves in case of longer lasting skin contact.

Suitable gloves type : EN 374.

Suitable material : NBR (Nitrile rubber)

Breakthrough time (maximum wearing time) : 480 min.

Thickness of the glove material : 0.4 mm

Remark : The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Respiratory protection



Respiratory protection necessary at: exceeding exposure limit values

Suitable respiratory protection apparatus

Combination filtering device (EN 14387)

Type : A

Remark

Observe the wear time limits according GefStoffV in combination with the rules for using respiratory protection apparatus (BGR 190).

General health and safety measures

Do not put any product-impregnated cleaning rags into your trouser pockets. Do not put any product-impregnated cleaning rags into your trouser pockets. When using do not eat, drink, smoke, sniff. Avoid contact with skin, eyes and clothes. P362+P364 - Take off contaminated clothing and wash it before reuse. P264 - Wash hands thoroughly after handling.

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8.3 Additional information

No tests have been performed. Selection made for preparations according to the best available knowledge and information on ingredients. In the case of preparations the resistance of glove materials cannot be calculated in advance so it has to be tested before use.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : liquid

Colour : transparent

Odour : characteristic

Safety relevant basis data

Solidifying point :	(1013 hPa)	ca.	-8,5	°C	
Initial boiling point and boiling range :	(1013 hPa)		72	°C	
Flash point :			40	°C	
Lower explosion limit :			not relevant		
Upper explosion limit :			not relevant		
Vapour pressure :	(50 °C)	<	1000	hPa	
Density :	(20 °C)	ca.	0,97	g/cm ³	
pH :		ca.	10,8		
Flow time :	(20 °C)	ca.	19	s	DIN-cup 4 mm
Maximum VOC content (EC) :			18,9	Wt %	
Maximum VOC content (Switzerland) :			18,9	Wt %	

9.2 Other information

Not sustaining combustion

SECTION 10: Stability and reactivity

10.1 Reactivity

No information available.

10.2 Chemical stability

Under normal pressure: distillation without decomposition.

10.3 Possibility of hazardous reactions

Do not spray on naked flames or any incandescent material.

10.4 Conditions to avoid

No information available.

10.5 Incompatible materials

No information available.

10.6 Hazardous decomposition products

Nitrogen oxides (NO_x). Carbon dioxide. Carbon monoxide.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute effects

Acute oral toxicity

Parameter :	ATEmix calculated
Exposure route :	Oral
Effective dose :	> 2000 mg/kg
Parameter :	LD50 (ETHANOL ; CAS No. : 64-17-5)

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Exposure route : Oral
Species : Rat
Effective dose : 10470 mg/kg
Method : OECD 401
Parameter : LD50 (BUTYL CELLOSOLVE ; CAS No. : 111-76-2)
Exposure route : Oral
Species : Rat
Effective dose : 1250 - 1490 mg/kg
Method : OECD 401

Acute dermal toxicity

Parameter : ATEmix calculated
Exposure route : Dermal
Effective dose : > 2000 mg/kg
Parameter : LD50 (BUTYL CELLOSOLVE ; CAS No. : 111-76-2)
Exposure route : Dermal
Species : Rabbit
Effective dose : 841 mg/kg
Method : OECD 402
Parameter : LD50 (ETHANOL ; CAS No. : 64-17-5)
Exposure route : Dermal
Species : Rabbit
Effective dose : 20 g/kg

Acute inhalation toxicity

Parameter : ATEmix calculated
Exposure route : Inhalation
Effective dose : > 20 mg/l
Parameter : LC50 (ETHANOL ; CAS No. : 64-17-5)
Exposure route : Inhalation
Species : Rat
Effective dose : 116,9 - 133,8 mg/l
Exposure time : 4 h
Method : OECD 403
Parameter : LC50 (BUTYL CELLOSOLVE ; CAS No. : 111-76-2)
Exposure route : Inhalation
Species : Rat
Effective dose : 2 - 20 mg/l
Exposure time : 4 h

11.2 Toxicokinetics, metabolism and distribution

There are no data available on the preparation/mixture itself.

11.3 Other adverse effects

Frequently or prolonged contact with skin may cause dermal irritation. Has degreasing effect on the skin. May be absorbed through the skin.

11.4 Additional information

Preparation not tested. The statement is derived from the properties of the single components.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity

Acute (short-term) fish toxicity

Parameter : LC50 (ETHANOL ; CAS No. : 64-17-5)
Species : Pimephales promelas (fathead minnow)
Evaluation parameter : Acute (short-term) fish toxicity
Effective dose : 14,2 g/l
Exposure time : 96 h

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Parameter : LC50 (BUTYL CELLOSOLVE ; CAS No. : 111-76-2)
Species : Oncorhynchus mykiss (Rainbow trout)
Evaluation parameter : Acute (short-term) fish toxicity
Effective dose : 1474 mg/l
Exposure time : 96 h
Method : OECD 203
Parameter : LC50 (BUTYL CELLOSOLVE ; CAS No. : 111-76-2)
Species : Daphnia magna (Big water flea)
Evaluation parameter : Acute (short-term) daphnia toxicity
Effective dose : 1815 mg/l
Exposure time : 24 h
Method : DIN 38412 / part 11
Parameter : LC50 (ETHANOL ; CAS No. : 64-17-5)
Species : Fish
Evaluation parameter : Chronic (long-term) fish toxicity
Effective dose : 9164 - 14536 mg/l
Exposure time : 200 h
Parameter : LC50 (ETHANOL ; CAS No. : 64-17-5)
Species : Daphnia
Evaluation parameter : Chronic (long-term) daphnia toxicity
Effective dose : 1806 mg/l
Exposure time : 10 d
Parameter : LC50 (BUTYL CELLOSOLVE ; CAS No. : 111-76-2)
Species : Daphnia magna (Big water flea)
Evaluation parameter : Chronic (long-term) daphnia toxicity
Effective dose : 297 mg/l
Exposure time : 21 d
Method : OECD 211

Acute (short-term) daphnia toxicity

Parameter : EC50 (ETHANOL ; CAS No. : 64-17-5)
Species : Daphnia
Evaluation parameter : Acute (short-term) daphnia toxicity
Effective dose : 5012 mg/l
Exposure time : 48 h

Chronic (long-term) daphnia toxicity

Parameter : NOEC (ETHANOL ; CAS No. : 64-17-5)
Species : Daphnia
Evaluation parameter : Chronic (long-term) daphnia toxicity
Effective dose : 2 - 9,6 mg/l
Exposure time : 10 d
Parameter : NOEC (BUTYL CELLOSOLVE ; CAS No. : 111-76-2)
Species : Brachydanio rerio (zebra-fish)
Evaluation parameter : Chronic (long-term) fish toxicity
Effective dose : > 100 mg/l
Exposure time : 21 d
Method : OECD 204
Parameter : NOEC (BUTYL CELLOSOLVE ; CAS No. : 111-76-2)
Species : Daphnia magna (Big water flea)
Evaluation parameter : Chronic (long-term) daphnia toxicity
Effective dose : 100 mg/l
Exposure time : 21 d
Method : OECD 211
Parameter : NOEC (BUTYL CELLOSOLVE ; CAS No. : 111-76-2)
Species : Algae
Effective dose : 286 mg/l
Exposure time : 72 h
Method : OECD 201

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Acute (short-term) algae toxicity

Parameter : EC50 (ETHANOL ; CAS No. : 64-17-5)
Species : Chlorella vulgaris
Evaluation parameter : Acute (short-term) fish toxicity
Effective dose : 675 mg/l
Exposure time : 4 d
Method : OECD 201
Parameter : EC50 (BUTYL CELLOSOLVE ; CAS No. : 111-76-2)
Species : Algae
Effective dose : 1840 mg/l
Exposure time : 72 h
Method : OECD 201

Bacteria toxicity

Parameter : EC50 (ETHANOL ; CAS No. : 64-17-5)
Species : Bacteria toxicity
Effective dose : 5,8 g/l
Exposure time : 4 h

12.2 Persistence and degradability

According to the recipe, contains no AOX.

Biodegradation

Parameter : Biodegradation (ETHANOL ; CAS No. : 64-17-5)
Inoculum : Biodegradation
Evaluation parameter : Aerobic
Effective dose : ca. 84 %
Exposure time : 20 d
Evaluation : Readily biodegradable (according to OECD criteria).
Parameter : Biodegradation (BUTYL CELLOSOLVE ; CAS No. : 111-76-2)
Inoculum : Biodegradation
Effective dose : 88 %
Exposure time : 20 d

12.3 Bioaccumulative potential

No indication of bioaccumulation potential.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.

12.6 Other adverse effects

No information available.

12.7 Additional ecotoxicological information

After neutralisation, reduction in toxic effects is observed.

SECTION 13: Disposal considerations

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process. List of proposed waste codes/waste designations in accordance with EWC

13.1 Waste treatment methods

Product/Packaging disposal

Waste codes/waste designations according to EWC/AVV

Waste code product

07 06 01* - aqueous washing liquids and mother liquors
20 01 29* - detergents containing dangerous substances.

Waste code packaging

15 01 02 - plastic packaging.

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Waste treatment options

Appropriate disposal / Package

Contaminated packages must be completely emptied and can be re-used following proper cleaning. Handle contaminated packages in the same way as the substance itself.

13.2 Additional information

These codes are assigned based upon the most common uses for this material and may not reflect contaminants resulting from actual use.

SECTION 14: Transport information

14.1 UN number

No dangerous goods in sense of this transport regulation.

14.2 UN proper shipping name

No dangerous goods in sense of this transport regulation.

14.3 Transport hazard class(es)

No dangerous goods in sense of this transport regulation.

14.4 Packing group

No dangerous goods in sense of this transport regulation.

14.5 Environmental hazards

No dangerous goods in sense of this transport regulation.

14.6 Special precautions for user

None

SECTION 15: Regulatory information

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

EU legislation

Other regulations (EU)

Restrictions of occupation

Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

Labelling for contents according to regulation (EC) No. 648/2004

None

National regulations

AT: Labelling according to Austrian regulations (Chemikaliengesetz/ChemV).

CH: Chemikalienverordnung (ChemV) and Chemikalien-Risikoreduktions-Verordnung (Chem RRV) are complied.

Water hazard class (WGK)

Class : 1 (Slightly hazardous to water) Classification according to VwVwS

Other regulations, restrictions and prohibition regulations

Betriebssicherheitsverordnung (BetrSichV)

No flammable liquid according to BetrSichV.

15.2 Chemical Safety Assessment

For this substance a chemical safety assessment has not been carried out.

SECTION 16: Other information

16.1 Indication of changes

None

16.2 Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

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AOX: adsorbable organohalogens
CAS: Chemical Abstracts Service (division of the American Chemical Society)
CLP: Classification Labelling and Packaging (Regulation (EC) No. 1272/2008)
EAK / AVV: europäischer Abfallschlüsselkatalog (european waste catalogue)
EINECS: European Inventory of Existing Commercial Chemical Substances
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
IATA: International Air Transport Association
ICAO: International Civil Aviation Organization
IMDG: International Maritime Code for Dangerous Goods
RCP: reciprocal calculation procedure
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
TRGS: Technische Regel für den Umgang mit Gefahrstoffen
VbF: Verordnung über brennbare Flüssigkeiten
VOC: volatile organic compound
VwVwS: Verwaltungsvorschrift wassergefährdender Stoffe
WGK: Wassergefährdungsklasse (water hazardous class)

16.3 Key literature references and sources for data

DGUV: GESTIS-Stoffdatenbank
ECHA: Classification And Labelling Inventory
ECHA: Registered Substances
ECHA: Registered Substances
EC_Safety Data Sheet of Suppliers
ESIS: European Chemical Substances Information System
GDL: Gefahrstoffdatenbank der Länder
UBA Rigoletto: Wassergefährdende Stoffe

16.4 Classification for mixtures and used evaluation method according to regulation (EC) 1272/2008 [CLP]

No information available.

16.5 Relevant H- and EUH-phrases (Number and full text)

H225	Highly flammable liquid and vapour.
H302+H312+H332	Harmful if swallowed, in contact with skin or if inhaled.
H315	Causes skin irritation.
H319	Causes serious eye irritation.

16.6 Training advice

None

16.7 Additional information

None

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.