

Date: 2023-05-15 **Former date:**

This data sheet contains changes from the previous version ""

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


- 1.1 **Product identifier / Commercial Product Name:** FlexoTop Beschichtung GlasPlus
UFI - Code: No data available
- 1.2 **Relevant identified uses of the substance or mixture and uses advised against:** None known.
Professional Use of the Substance/Preparation: Coating for glass
Chemical nature of the preparation: Acidic ethanolic chemical solution with functional additives
- 1.3 **Details of the manufacturer / supplier of the safety data sheet:**
Address: Manufacturer, supplier:
 Flexotec GmbH, Im Öschle 1, 78736 Epfendorf, Germany, Telephone: + 49 7404-914 440,
 Telefax: +49 7404-914 383
Responsible Department: eMail: info@flexotec.de
Responsible for the safety data sheet :
 CHEMCO123 @ – Chemical Consultancy, graduate chemist Rosemarie Fechner, Telephone: + 49 5221 6935980
 e-mail address: info@chemco123.de
- 1.4 **Emergency telephone number:**
Poison center Berlin: + 49 30-30686 700 (Advice in German and English)
 Emergency – Telephone of Company / Undertaking+ 49 7404-914 440
 During business hours: 9:00 a.m. - 4:00 p.m.

SECTION 2: Hazards identification

- 2.1 **Classification:**
Hazard-determining component for labeling: Ethanol

Hazard Statement	Hazard Class and - Category
H225 - Highly flammable liquid and vapour.	Flamm. Liquid 2
H319 - Causes serious eye irritation.	Eye Irrit. 2

- 2.2 **Label elements:**



Danger
 Highly flammable liquid and vapour.
 Causes serious eye irritation.

Keep away from heat/sparks/open flames/hot surfaces. No smoking.
 Use explosion-proof electrical/ventilating/lighting equipment. Take precautionary measures against static discharge. Store in a well-ventilated place. Keep container tightly closed.
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Dispose of contents / container to a recognized disposal company.

- 2.3 **Other hazards:**
Human experience:
 In use, may form flammable/explosive vapour-air mixture. Prolonged skin contact may cause skin irritation.
Aquatic environment
 Slightly water endangering.
 Persistent, bioaccumulative and toxic substances (PBT-substances): None.
 Very persistent and very bioaccumulative substances (vPvB-substances): None.

Commercial Product Name: FlexoTop Beschichtung GlasPlus

Manufacturer, supplier: Flexotec GmbH, Im Öschle 1, 78736 Epfendorf, Germany, Telephone: + 49 7404-914 440

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SECTION 3: Composition/information on ingredients

3.1. **Substances:** Not applicable.

3.2. **Mixtures:**

Dangerous Ingredients

CAS - No.	Index - No.	EC - No.	Chemical name / REACH Registration number	m% - range	pictogram(e)	H - phrases
64-17-5	603-002-00-5	200-578-6	ethanol / 01-2119457610-43	85 < C < 90 %	GHS02 GHS07	H225 H319

H225 = Flam. Liq. 2, H319 = Eye Irrit. 2

SECTION 4: First aid measures

4.1 **Description of first aid measures:**

General advice:

Show this safety data sheet to the doctor in attendance.

Inhalation:

Move to fresh air. If symptoms persist, call a physician.

Skin contact:

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

If skin irritation persists, call a physician.

Eye contact:

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing. If eye irritation persists: Get medical advice/attention.

Ingestion:

Rinse mouth out and drink plenty of water. In case of swallowing larger quantities consult physician immediately.

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

Not known.

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

Symptomatic treatment.

SECTION 5: Firefighting measures

5.1 **Extinguishing media:**

Suitable extinguishing media: Use dry chemical, carbon dioxide, water spray or "alcohol" foam.

Unsuitable extinguishing media: None.

5.2 **Special hazards arising from the substance or mixture:**

In the event of fire the following can be released: Carbon oxides.

5.3 **Advice for firefighters:** Water mist may be used to cool closed containers.

Special protective equipment for firefighters:

Special protective equipment for firefighters:

SECTION 6: Accidental release measures

6.1 **Personal precautions, protective equipment and emergency procedures:**

6.1.1 *For non-emergency personnel:*

Use personal protective equipment. Remove all sources of ignition. Emergency procedures such as the need to evacuate the danger area or to consult an expert.

6.1.2 *For emergency responders:*

Use personal protective equipment. Inform the untrained personnel that the precautions listed in the subsection 6.1.1 are complied with.

6.2 **Environmental precautions:**

Do not allow to enter surface water or sewage system. Inform responsible authorities after accidental conduction of larger quantities. Soak up with inert absorbent material (e.g. sand, silica gel, universal binder).

Shovel into suitable container for disposal.

Commercial Product Name: FlexoTop Beschichtung GlasPlus**Manufacturer, supplier:** Flexotec GmbH, Im Öschle 1, 78736 Epfendorf, Germany, Telephone: + 49 7404-914 440**Date:** 2023-05-15 **Former date:** 2022-02-22**6.3 Methods and material for containment and cleaning up:****6.3.1. Methods and material for containment:**

Soak up with inert absorbent material (e.g. sand, silica gel, universal binder). Shovel into suitable container for disposal. After cleaning, flush away traces with water.

6.3.2. Methods and material for cleaning up:

After cleaning, flush away traces with water.

6.3.3. Inappropriate containment or clean-up techniques:

None.

6.4. Reference to other sections:

See section 8 / 13.

SECTION 7: Handling and storage**7.1. Precautions for safe handling:****7.1.1. Recommendations shall be specified to:**

Avoid contact with skin and eyes. Do not breathe vapors or spray mist. Ensure adequate ventilation, especially in confined areas. Vapours are heavier than air and may spread along floors.

7.1.2. Advice on general occupational hygiene shall be provided:

Avoid contact with eyes. Do not breathe vapors or spray mist. When using, do not eat, drink or smoke.

7.2. Conditions for safe storage, including any incompatibilities:

Keep container tightly closed. Keep cool in a well-ventilated place. Use explosion-proof electrical/ventilating/lighting equipment. Take precautionary measures against static discharge. Do not store together with strong oxidizing agents.

Precautions in Case of Fire and Explosion:

Normal measures for preventive fire protection. Remove all sources of ignition.

7.3. Specific end use(s):

Coating for glass.

SECTION 8: Exposure controls/personal protection**8.1. Control parameters:****CAS / Material****Limit Value according to TRGS 900/ EC Guideline 2000/39:**

64-17-5 / ethanol	Germany 8 hours: 200 ppm, 380 mg/m ³ Germany 0,25 hours: 800 ppm, 1520mg/m ³ A risk of fetal damage does not need to be feared if the occupational exposure limits are adhered to. EU: no own values
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Reference: Gestis Data base - Data on chemical media

DNEL-Values: ethanol	
Excessive exposures - systemic properties:	Inhalation: 380 / 950 mg / m ³
PNEC – Wert: ethanol	9,82 mg/l

8.2. Exposure controls:

Ingredient named in section 8.1.

8.2.1. Appropriate engineering controls:

Ensure adequate ventilation, especially in confined areas. Vapours are heavier than air and may spread along floors.

Commercial Product Name: FlexoTop Beschichtung GlasPlus**Manufacturer, supplier:** Flexotec GmbH, Im Öschle 1, 78736 Epfendorf, Germany, Telephone: + 49 7404-914 440**Date:** 2023-05-15 **Former date:** 2022-02-22**8.2.2 Personal Protective Equipment****Respiratory Protection:** No personal respiratory protective equipment normally required.**Hand Protection:****Excessive exposure:** Protective gloves (butyl rubber) according to EN 374.
Break through time: 240 Min. Glove thickness: 0,5 mm.**Short time exposure:** Protective gloves according to EN 374. (butyl rubber).
Break through time: 30 Min. Glove thickness: 0,4 mm.**Eye Protection:** Goggles according to EN 166.**Skin Protection:** Solvent-resistant protective clothing.**Further Information:** Choose body protection according to the amount and concentration of the dangerous substance at the work place.**Thermal hazards:** None.**8.2.3 Environmental exposure controls:** None.**SECTION 9: Physical and chemical properties****9.1 Information on basic physical and chemical properties:****Appearance:** liquid
Colour: colorless to light yellow
Odour: smell of ethanol
Odour threshold: no data available**Safety Relevant Data**pH:, (undiluted): 5,2
Boiling point/range: (°C): ~ 78 (ethanol)
Melting point/range : (°C): ~ - 117 (ethanol)
Flash point (°C): ~ 16
Flammability: Highly flammable liquid and vapour.
Ignition temperature (° C): > 400
Lower flammability or explosive limits: ~ 3,5 (ethanol).
Upper flammability or explosive limits: ~ 15 (ethanol)
Vapour pressure: 57 mbar at 20 °C (ethanol)
Relative density (g/cm³): 0,82
Water solubility: Soluble
Fat solubility: Yes.
Partition coefficient (n-octanol/water): no data available
Auto-ignition temperature °C: Not applicable.
Viscosity: no data available
Kinematic viscosity: no data available
Oxidising properties: Not applicable.
Explosive properties: Not applicable.
Particle characteristics: not applicable
Solvent (g/100 g): ~ 90
VOC (g / kg): ~ 900
Thermal decomposition (°C): > 400
Vapour density (Air = 1): > 1
Evaporation rate: Data source: Safety data sheet of the supplier for ethanol
ethanol: 8,0 (ether = 1) (DIN 53170)
ethanol: 1,7 (nBuAc = 1) (ASTM D 3539)**9.2 Other information:****9.2.1 Information with regard to physical hazard classes:**

No further information according to a to q according to Regulation (EU) 2020/878 required.

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- 10.1 **Reactivity:**
No hazards resulting from the material as supplied.
- 10.2 **Chemical stability:**
Stable at normal conditions
- 10.3 **Possibility of hazardous reactions:**
Reactions with strong oxidizing agents, alkali and alkaline earth metals.
- 10.4 **Conditions to avoid:**
None.
- 10.5 **Incompatible materials:**
None.
- 10.6 **Hazardous decomposition :**
No dangerous decomposition products when properly handled.

SECTION 11: Toxicological information**11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008****11.1.1 Mixtures****Acute toxicity**

LC50/inhalation/ rat/ppm / 10 h: no data available

LD50/oral/rat /mg/kg: no data available

LD0/oral/human/mg/kg: no data available

LD50/dermal/rat(g/kg):= no data available

Skin corrosion/irritation

Serious eye damage/irritation Causes serious eye irritation. Eye Irrit. 2

Respiratory or skin sensitisation: Not sensitizing.

Carcinogenicity None.

Reproductive toxicity None.

STOT-single exposure None.

STOT-repeated exposure None.

Aspiration hazard None.

11.1.2 Substances**Acute toxicity ethanol:**

LC50/inhalation/ rat/ mg/l/4 h 124,7

LD50/oral/rat /mg/kg: 7060

LDL0/oral/human/mg/kg: 1400

LD50/dermal/rab (g/kg): > 20

Skin corrosion/irritation None.

Serious eye damage/irritation None.

Respiratory or skin sensitisation Not sensitizing.

Germ cell mutagenicity Cat. 5 (DFG – classification, Germany)

Carcinogenicity Carc. Cat. 5 (DFG – classification, Germany)

Reproductive toxicity A risk of fetal damage does not need to be feared if the occupational exposure limits are adhered to

STOT-single exposure None.

STOT-repeated exposure None.

Aspiration hazard None.

11.1.3 Test data: no data available

11.1.4 Classification criteria for a particular hazard class:

According to Regulation (EC) No. 1272/2008 including the amending regulations.

11.1.5 Information on likely routes of exposure: See 11.1.1 und 11.1.2.

11.1.6 Symptoms related to the physical, chemical and toxicological characteristics:

In use, may form flammable/explosive vapour-air mixture. Prolonged skin contact may cause skin irritation.

When used as intended and in compliance with the individual protective measures listed under 8.2.2, there is no danger from the product in the form in which it is supplied.

11.1.7 Delayed and immediate effects as well as chronic effects from short and long-term exposure: Not known.

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- 11.1.8 Interactive effects: Not known.
- 11.1.9 Absence of specific data: No specific data available.
- 11.1.10 Mixtures: The mixture as a whole has not been tested for its health effects.
The possible dangers of the ingredients are specified in point 11.1.2.
(Classification according to Regulation (EC) No. 1272/2008 including the amending regulations.
- 11.1.11 Mixture versus substance information:
- 11.1.11.1 Interactions of the ingredients in the mixture in the body: No information available.
- 11.1.11.2 Effect of the ingredients: No further information available.
- 11.2.1 **Endocrine disrupting properties:** None.
- 11.2.2 **Other information:** No data available.

SECTION 12: Ecological information

- 12.1 **Toxicity:**
Slightly water endangering.
Reference: Gestis Data base - Data on chemical media

ethanol	
LC50 fish (96 hours)	
Median value	11000 mg/l
LC50 crustaceans (48 hours)	
Median value	9820 mg/l

- 12.2 **Persistence and degradability:**
The product is biodegradable.
- Toxicity to fish:**
- 12.3 **Bioaccumulative potential:**
Does not bioaccumulate.
- 12.4 **Mobility in soil:**
Does not bioaccumulate.
- 12.5 **Results of PBT and vPvB assessment:**
Persistent, bioaccumulative and toxic substances (PBT-substances): None.
Very persistent and very bioaccumulative substances (vPvB-substances): None.
- 12.6 **Endocrine harmful properties:**
No data available.
- 12.7 **Other adverse effects**
No data available.

SECTION 13: Disposal considerations

- 13.1 **Waste treatment methods:**
Methods of waste treatment of both the substance or mixture and any contaminated packaging
Suggestions: Dispose of contents / container to a recognized disposal company.
Waste disposal number: 07 07 99 - wastes from the MFSU of fine chemicals and chemicals , n.o.s., wastes n.o.s. (Decision 2014/955/EU)

SECTION 14: Transport information

- Transportation according to ADR/GGVS, IMDG/GGVSee and IATA-DGR/ICAO-TI:**
- 14.1 **UN-Nummer:** 1170
- 14.2 **UN proper shipping name:** UN 1170 – Ethanol-Solution
- 14.3 **Risk Label:** 3
Classification Code: F1

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- 14.4 **Packaging group:** II
Transport category (Tunnel restriction code): 2(D/E)
- 14.5 **Environmental hazards:**
Marine pollutant: not applicable.
- 14.6 **Special precautions for user:**
None.
- 14.7 **Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:**
None.

SECTION 15: Regulatory information

- 15.1 **Safety, health and environmental regulations/legislation specific for the substance or mixture**
Compliance with occupational safety
Regulation (EC) 1005/2009: not applicable.
Regulation (EC) 850/2004: not applicable..
Regulation (EC) 649/2012: not applicable..
Directive 96/82/EC (Seveso): applicable.
Regulation (EC) No 648/2004 on detergents: not applicable
- 15.2 **Chemical safety assessment:** No data available.

SECTION 16: Other information

H - Phrases:

See Section 2.1.

Abbreviations:

UFI - Code: UFI = Unique Formula Identifier

DNEL-Werte (Derived No-Effect Levels)

PNEC = predicted no effect concentration

DFG = Deutsche Forschungsgemeinschaft (Germany)

AGS = Ausschuss für Gefahrstoffe (Germany)

Regulation (EC) 1005/2009: Substances that deplete the ozone layer

Regulation (EC) 850/2004: Persistent organic pollutants

Regulation (EC) 649/2012: Export and import of dangerous chemicals

Further information to work out the Data sheet:

Data of the producer.

Classification: In accordance with Regulation (EC) No 1272/2008, Table 2.6.1 and Table 3.3.3, including the amending regulations.

The statements in this Material Safety Data Sheet were made to the best of our knowledge and are as accurate as possible. They are given for information only. They do not constitute a contractual guarantee of a product's properties. They must neither be altered nor transferred to other products.

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