



Safety data sheet

according to Regulation (EC) No 1907/2006, Article 31

Printing date: 08.04.2025

Version No: 2.00 (replaces version 1.00)

Revision: 08.04.2025

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

1.1 Product identifier

Trade name: FFX-20

UFI: JX00-W08V-8006-AWYK

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

Application of the substance / the preparation:

Extinguishing Agent

Professional use.

Industrial use

Uses advised against: No further relevant information available.

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

Burnguard

Brielen 2

2830 Willebroek

Belgium

T +32 (0) 14 394 820, F +32 (0) 14 394 822

info@incendin.com, http://www.incendin.com/

1.4 Emergency telephone number:

For 24/7 multilingual advice for spill, leak, fire, exposure, or accident call:

Call CHEMTREC, EMEA: +44 20 3885 0382 and provide CCN1021248

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Acute Tox. 4 H302 Harmful if swallowed.

STOT RE 2 H373 May cause damage to the kidneys through prolonged or repeated exposure. Route of exposure: Oral.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

Hazard pictograms



GHS07



GHS08

Signal word Warning

Hazard-determining components of labelling:

ethanediol

Hazard statements

H302 Harmful if swallowed.

H373 May cause damage to the kidneys through prolonged or repeated exposure. Route of exposure: Oral.

Precautionary statements

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

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P264 Wash thoroughly after handling.
 P270 Do not eat, drink or smoke when using this product.
 P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
 P330 Rinse mouth.
 P314 Get medical advice/attention if you feel unwell.
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Additional information:

EUH208 Contains 1,2-benzisothiazol-3(2H)-one. May produce an allergic reaction.

2.3 Other hazards**Results of PBT and vPvB assessment**

PBT: This product does not contain any substances $\geq 0.1\%$ that have been assessed as PBT.

vPvB: This product does not contain any substances $\geq 0.1\%$ that have been assessed as vPvB.

Determination of endocrine-disrupting properties	
CAS: 95-14-7	1,2,3-benzotriazole

List II

*** SECTION 3: Composition/information on ingredients**

3.2 Mixtures

Dangerous components:		
CAS: 107-21-1 EC number: 203-473-3 Index number: 603-027-00-1 Reg.nr.: 01-2119456816-28-XXXX	ethanediol STOT RE 2, H373; Acute Tox. 4, H302 ATE: LD50 oral: 500 mg/kg	10 - < 30%
CAS: 112-34-5 EC number: 203-961-6 Index number: 603-096-00-8 Reg.nr.: 01-2119475104-44-XXXX	2-(2-butoxyethoxy)ethanol Eye Irrit. 2, H319	1 - < 3%
CAS: 95-14-7 EC number: 202-394-1 Reg.nr.: 01-2119979079-20-XXXX	1,2,3-benzotriazole Aquatic Chronic 2, H411; Acute Tox. 4, H302; Eye Irrit. 2, H319	0.1 - < 1%
CAS: 2634-33-5 EC number: 220-120-9 Index number: 613-088-00-6 Reg.nr.: 01-2120761540-60-XXXX	1,2-benzisothiazol-3(2H)-one Acute Tox. 2, H330; Eye Dam. 1, H318; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Acute Tox. 4, H302; Skin Irrit. 2, H315; Skin Sens. 1A, H317 ATE: LD50 oral: 450 mg/kg LC50 (4h) inhalative: 0.21 mg/L Specific concentration limit: Skin Sens. 1A; H317:C $\geq 0.036\%$	$\geq 0.0152 - < 0.02\%$

Additional information: For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures**General information:**

Take affected persons out of danger area and lay down.

In case of irregular breathing or respiratory arrest provide artificial respiration.

After inhalation: Supply fresh air.

After skin contact: Generally the product does not irritate the skin.

After eye contact: Remove contact lenses, if present and easy to do. Continue rinsing.

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After swallowing:

Rinse out mouth and then drink plenty of water.

If symptoms persist consult doctor.

Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media**Suitable extinguishing agents:**

CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Use fire extinguishing methods suitable to surrounding conditions.

For safety reasons unsuitable extinguishing agents: Water with full jet

5.2 Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

In case of fire, the following can be released:

Carbon monoxide

Carbon dioxide

Nitrogen oxides (NO_x)

Sulphur oxides (SO_x)

Phosphorus compounds

5.3 Advice for firefighters

Protective equipment: Wear self-contained respiratory protective device.

Additional information

Cool endangered receptacles with water spray.

Collect contaminated fire fighting water separately. It must not enter the sewage system.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation.

Wear protective clothing.

6.2 Environmental precautions:

Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose of the material collected according to regulations.

6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

Information about fire and explosion protection: No special measures required.

7.2 Conditions for safe storage, including any incompatibilities**Storage:**

Requirements to be met by storerooms and receptacles: Store only in the original receptacle.

Information about storage in one common storage facility: Store away from oxidising agents.

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Further information about storage conditions: Store in cool, dry conditions in well sealed receptacles.**7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:

CAS: 107-21-1 ethanediol

OEL (Ireland)	Short-term value: 104 mg/m ³ , 40 ppm Long-term value: 52 mg/m ³ , 20 ppm Skin, IOELV
IOELV (EU)	Short-term value: 104 mg/m ³ , 40 ppm Long-term value: 52 mg/m ³ , 20 ppm Skin

CAS: 112-34-5 2-(2-butoxyethoxy)ethanol

OEL (Ireland)	Short-term value: 101.2 mg/m ³ , 12 ppm Long-term value: 67.5 mg/m ³ , 10 ppm IOELV
IOELV (EU)	Short-term value: 101.2 mg/m ³ , 15 ppm Long-term value: 67.5 mg/m ³ , 10 ppm

DNELs

CAS: 107-21-1 ethanediol

Dermal	DNEL(long/systemic)	106 mg/kg bw/day (Workers (Industrial/Professional))
Inhalative	DNEL(long/local)	35 mg/m ³ (Workers (Industrial/Professional))

CAS: 112-34-5 2-(2-butoxyethoxy)ethanol

Oral	DNEL(long/systemic)	5 mg/kg bw/day (Consumer)
Dermal	DNEL(long/systemic)	50 mg/kg bw/day (Consumer)
		83 mg/kg bw/day (Workers (Industrial/Professional))
Inhalative	DNEL(long/local)	40.5 mg/m ³ (Consumer)
		67.5 mg/m ³ (Workers (Industrial/Professional))
	DNEL(long/systemic)	40.5 mg/m ³ (Consumer)
		67.5 mg/m ³ (Workers (Industrial/Professional))
	DNEL(short/local)	60.7 mg/m ³ (Consumer)
		101.2 mg/m ³ (Workers (Industrial/Professional))

PNECs

CAS: 112-34-5 2-(2-butoxyethoxy)ethanol

PNEC(aqua)	1.1 mg/L (freshwater) 0.11 mg/L (marine water) 11 mg/L (intermittent release)
PNEC(STP)	200 mg/L (sewage treatment plant)
PNEC(sediment)	4.4 mg/kg sedi. dw (freshwater) 0.44 mg/kg sedi. dw (marine water)
PNEC(soil)	0.32 mg/kg soil dw (soil)
PNEC(oral)	56 mg/kg food (food)

8.2 Exposure controls

Appropriate engineering controls No further data; see section 7.**Individual protection measures, such as personal protective equipment****General protective and hygienic measures:**

Do not eat, drink, smoke or sniff while working.

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Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Store protective clothing separately.

Do not inhale gases / fumes / aerosols.

The usual precautionary measures are to be adhered to when handling chemicals.

Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Hand protection



Protective gloves

Only use chemical-protective gloves with CE-labelling of category III.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye/face protection



Tightly sealed goggles

Body protection: Protective work clothing

Environmental exposure controls No further relevant information available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Physical state

Liquid

Form:

Liquid

Colour:

Colourless

Odour:

Characteristic

Odour threshold:

Not determined.

Melting point/freezing point:

Not determined.

Boiling point or initial boiling point and boiling range

Not determined.

Flammability

Not applicable.

Lower and upper explosion limit

Not applicable.

Lower:

Not applicable.

Upper:

Not applicable.

Flash point:

Not determined.

Auto-ignition temperature:

Not determined.

Decomposition temperature:

Not determined.

pH at 20 °C

6 - 9

Viscosity:

Not determined.

Kinematic viscosity

Not determined.

Dynamic:

Not determined.

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Solubility**water:**

Fully miscible.

Partition coefficient n-octanol/water (log value)

107-21-1	ethanediol	-1,36 logPow (calculated)
112-34-5	2-(2-butoxyethoxy)ethanol	1 logPow (20°C, pH 7, OECD Guideline 117)
95-14-7	1,2,3-benzotriazole	1,17 (@22,7 °C, OECD Guideline 107)
2634-33-5	1,2-benzisothiazol-3(2H)-one	0,7 log Pow (20 °C, pH 7, EU Method A.8)

Vapour pressure:

Not determined.

Density and/or relative density**Density:**

Not determined.

Relative density

Not determined.

Vapour density

Not determined.

Relative gas density

Not determined.

Particle characteristics

Not applicable.

9.2 Other information**Explosive properties:** Product does not present an explosion hazard.**Solvent content:****Organic solvents:**

1.5 %

Water:

55 %

Molecular weight

Not applicable.

Oxidising properties

No

Evaporation rate

Not determined.

SECTION 10: Stability and reactivity**10.1 Reactivity** No further relevant information available.**10.2 Chemical stability** No decomposition if used and stored according to specifications.**Thermal decomposition / conditions to be avoided:**

No decomposition if used according to specifications.

10.3 Possibility of hazardous reactions No dangerous reactions known.**10.4 Conditions to avoid** No further relevant information available.**10.5 Incompatible materials:** No further relevant information available.**10.6 Hazardous decomposition products:** No dangerous decomposition products known.**SECTION 11: Toxicological information****11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008****Acute toxicity**

Harmful if swallowed.

LD/LC50 values relevant for classification:		
CAS: 107-21-1 ethanediol		
Oral	LD50	500 mg/kg (ATE)
Dermal	LD50	> 3500 mg/kg (mouse)
Inhalative	LC50	> 2.5 mg/L (Rat) (inhalation: aerosol) 6 h
CAS: 112-34-5 2-(2-butoxyethoxy)ethanol		
Oral	LD50	2410 mg/kg (mouse) (OECD Guideline 401)
Dermal	LD50	2764 mg/kg (rabbit) (OECD Guideline 402)

Primary irritant effect:**Skin corrosion/irritation** Based on available data, the classification criteria are not met.**Serious eye damage/irritation** Based on available data, the classification criteria are not met.**Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.

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Germ cell mutagenicity Based on available data, the classification criteria are not met.**Carcinogenicity** Based on available data, the classification criteria are not met.**Reproductive toxicity** Based on available data, the classification criteria are not met.**STOT-single exposure** Based on available data, the classification criteria are not met.**STOT-repeated exposure**

May cause damage to the kidneys through prolonged or repeated exposure. Route of exposure: Oral.

Aspiration hazard Based on available data, the classification criteria are not met.**11.2 Information on other hazards****Endocrine disrupting properties**

CAS: 95-14-7 | 1,2,3-benzotriazole

List II

*** SECTION 12: Ecological information****12.1 Toxicity****Aquatic toxicity:****CAS: 107-21-1 ethanediol**

LC50 (96h) (static)	72860 mg/L (fish) (EPA 600/4-90/027, Pimephales promelas) nominal
EC20 (0,5h) (static)	> 1995 mg/L (Bacteria) (ISO 8192) Read-across to CAS 111-46-6
EC50 (96h) (static)	6500 - 13000 mg/L (algae) (EPA 600/9-78-018, Pseudokirchnerella subcapitata)
EC50 (48h) (static)	> 100 mg/L (Daphnia) (OECD Guideline 202, Daphnia magna)
NOEC	8590 mg/L (Daphnia) (EPA 600/4-89/001, Ceriodaphnia dubia) 7d nominal 15380 mg/L (fish) (EPA 600/4-89/001, Pimephales promelas) 7 d nominal

CAS: 112-34-5 2-(2-butoxyethoxy)ethanol

LC50 (96h) (static)	1300 mg/L (fish) (OECD Guideline 203, Lepomis macrochirus) nominal
EC10 (0,5h) (static)	> 1995 mg/L (Bacteria) (OECD Guideline 209, activated sludge) nominal
EC50 (96h) (static)	> 100 mg/L (algae) (OECD Guideline 201, Desmodesmus subspicatus) nominal
EC50 (48h) (static)	> 100 mg/L (Daphnia) (EU Method C.2, Daphnia magna) nominal

12.2 Persistence and degradability

107-21-1	ethanediol	90-100% (10d, OECD Guideline 301A)
112-34-5	2-(2-butoxyethoxy)ethanol	85 % (28d, OECD Guideline 301 C)
95-14-7	1,2,3-benzotriazole	2 % (28d)
2634-33-5	1,2-benzisothiazol-3(2H)-one	80% (OECD Guideline 303A)

12.3 Bioaccumulative potential

95-14-7	1,2,3-benzotriazole	2,5 BCF
2634-33-5	1,2-benzisothiazol-3(2H)-one	6,62 BCF (OECD Guideline 305)

12.4 Mobility in soil

2634-33-5	1,2-benzisothiazol-3(2H)-one	ca. 0,97 log Koc (25 °C, OECD Guideline 121)
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Annex II - REPORTABLE EXPLOSIVES PRECURSORS

None of the ingredients is listed.

Regulation (EC) No 273/2004 on drug precursors

None of the ingredients is listed.

Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

None of the ingredients is listed.

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.**SECTION 16: Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Relevant phrases

H302 Harmful if swallowed.
 H315 Causes skin irritation.
 H317 May cause an allergic skin reaction.
 H318 Causes serious eye damage.
 H319 Causes serious eye irritation.
 H330 Fatal if inhaled.
 H373 May cause damage to organs through prolonged or repeated exposure.
 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.

Date of previous version: 09.10.2024**Version number of previous version:** 1.00**Abbreviations and acronyms:**

REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals
 MARPOL: (from Marine Pollutant) International Convention for the Prevention of Marine Pollution from Ships
 IBC Code: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
 UN: United Nations (also UNO: United Nations Organization)
 NOEC: No Observed Effect Concentration
 OECD: Organisation for Economic Co-operation and Development
 ASTM: American Society for Testing and Materials
 WAF: Water Accommodated Fraction
 ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
 IMDG: International Maritime Code for Dangerous Goods
 IATA: International Air Transport Association
 GHS: Globally Harmonised System of Classification and Labelling of Chemicals
 EINECS: European Inventory of Existing Commercial Chemical Substances
 ELINCS: European List of Notified Chemical Substances
 CAS: Chemical Abstracts Service (division of the American Chemical Society)
 DNEL: Derived No-Effect Level (REACH)
 PNEC: Predicted No-Effect Concentration (REACH)
 LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent
 PBT: Persistent, Bioaccumulative and Toxic
 vPvB: very Persistent and very Bioaccumulative
 ATE: Acute toxicity estimate values
 Acute Tox. 4: Acute toxicity – Category 4
 Acute Tox. 2: Acute toxicity – Category 2
 Skin Irrit. 2: Skin corrosion/irritation – Category 2
 Eye Dam. 1: Serious eye damage/eye irritation – Category 1
 Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
 Skin Sens. 1A: Skin sensitisation – Category 1A
 STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
 Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
 Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1
 Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

*** Data compared to the previous version altered.**