SAFETY DATA SHEET

Prepared in accordance with the Commission Regulation (EU) 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (OJ of EU no L203 of 26 June 2020)

Date of compilation: 03.03.2023

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Permanent markers PROLINE

Product codes: 38031,38032, 38033, 38039, 38041,38043, 38049

UFI: 6600-X0R2-X00C-4Y7G

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

Identified uses: Pen - colored marker.

Uses advised against: Not identified.

1.3 Details of the supplier of the safety data sheet:

Supplier:

PROFIX Sp. z o. o.

Main office

Marywilska Str. 34

03-228 Warszawa, Poland

DISTRIBUTION AND COMMERCIAL CENTER

Łomna Las, Dobra Str. 3

05-152 Czosnów, Poland

Phone: +48 22 785 96 24

Fax: +48 22 785 96 10

E- mail: astrybuc@profix.com.pl

1.4 Emergency telephone number

Emergency telephone number **in Poland (operating Mo.-Fr. 7:00 – 15:00): + 48 22 785 96 24**

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Flammable liquids, Hazard Category 3 (Flam. Liq. 3)

Flammable liquid and vapour. (H226)

Harmful effects on human health:

In case of direct contact with the eyes, slight irritation, redness and tearing may occur. Repeated skin contact may cause itching, local redness.

Environmental effects:

With proper use does not pose risk to aquatic environment.

Adverse effects associated with physico-chemical properties:
Vapours of the product are heavier than air and may form explosive mixtures with air. They accumulate close to the ground surface and in the lower parts of the premises. Containers exposed to fire or extreme heat may explode.

2.2 Label elements

Pictograms:



Signal Word: **Warning**

Hazard Statement:
H226 - Flammable liquid and vapour.

Precautionary Statement:
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261 - Avoid breathing vapours.
P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.

In the case of use by consumers, additionally:
P101 - If medical advice is needed, have product container or label at hand.
P102 - Keep out of reach of children.

ATTENTION!!! In accordance with the provisions of Annex I **CLASSIFICATION AND LABELLING REQUIREMENTS FOR HAZARDOUS SUBSTANCES AND MIXTURES**
1.5.2. Exemptions from Article 17 [(Article 29(2)]
1.5.2.1. Labelling of packages where the contents do not exceed 125 ml
1.5.2.1.1. **The hazard statements and the precautionary statements linked to the hazard categories listed below may be omitted** from the label elements required by Article 17 where:
(a) the contents of the package do not exceed 125 ml; and
(b) the substance or mixture is classified in one or more of the following hazard categories:
(…)
3) Flammable liquids of category 2 or 3;

2.3 Other hazards

This mixture meets neither PBT nor vPvB criteria. It does not contain ingredients that are considered endocrine disruptors according to Art. 57 (f) of REACH Regulation or Regulation (EU) 2017/2100 or Regulation (EU) 2018/605 at a concentration of 0.1% or higher.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

3.2 Mixtures

Product identifier: *Permanent markers PROLINE*
Product codes: 38031,38032, 38033, 38039, 38041,38043, 38049
Mixture components:

Substance name	Index no.	CAS no.	EC no.	% mass fraction	Hazard Classes and Category Codes	Hazard statement codes
Glycerol	none	56-81-5	200-289-5	5 - 38	none	none
Ethanol Registration No.: 01-2119457610-43-XXXX	603-002-00-5	64-17-5	200-578-6	6 - 25	Flam. Liq. 2 Eye Irrit. 2	H225 H319 *Specific concentration limits:* *Eye Irrit. 2; H319 C ≥ 50 %*
Carbon black	none	1333-86-4	215-609-9	2 - 15	none	brak

In addition, the product contains: (depending on specification):
Basic Blue 3 (CAS: 33203-82-6); Basic Red 1 (CAS: 969-38-8); Basic Yellow 37 (CAS: 6358-36-7) and water to 100 %.

Full text of H statements, hazard classes and category codes have been specified in the Section 16 of this safety data sheet.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation: Remove casualty from exposure site to fresh air, place in reclining or sitting position, keep at rest and protect against heat loss. Provide medical advice if needed.

Skin contact: Take off contaminated clothes and rinse immediately with plenty of water. Provide medical advice if needed.

Eye contact: Rinse immediately with plenty of lukewarm water for at least 15 min. Remove contact lenses. To avoid cornea damage, don't use jet stream. Provide medical advice immediately.

Ingestion: If swallowed, do not induce vomiting (this is an unlikely route of exposure as the product is contained in a plastic casing). Rinse mouth with water and then give plenty of water to drink. Provide immediate medical attention.

4.2 Most important symptoms and effects, both acute and delayed

In case of direct contact with the eyes, slight irritation, redness and tearing may occur. Repeated skin contact may cause itching, local redness.

4.3 Indication of any immediate medical attention and special treatment needed

No special requirements, apply symptomatic treatment. Provide the assisting physician with the Safety Data Sheet.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media: Fire foam, fire extinguishing carbon dioxide, extinguishing powders, water spray.
Unsuitable extinguishing media: Do not use a solid water jet.

5.2 Special hazards arising from the substance or mixture

During fire carbon oxides may be formed.

5.3 Advice for firefighters

Flammable liquid and vapour. Vapours of the product are heavier than air and may form explosive mixtures with air. They accumulate close to the ground surface and in the lower parts of the premises. Containers exposed to fire should be cooled from a safe distance with water spray (danger of explosion); if possible, remove them from the endangered area. Antistatic gas-tight protective suit, self-contained breathing apparatus.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Wear protective clothing made of natural fabrics (cotton) or synthetic fibres, safety gloves made of butyl rubber (thickness 0.4 ± 0.05 mm, breakthrough time ≥ 480 min) and safety goggles. Eliminate sources of ignition (extinguish open fire, announce prohibition of smoking and usage of sparking tools). Remove from the affected area unprotected persons who do not participate in removal of the failure. Avoid direct contact with the mixture. Avoid breathing vapours.

6.2 Environmental precautions

Protect from releasing to sewage system, surface and ground water, soil.

6.3 Methods and materials for containment and cleaning up

Protect sink basins. In case of damage to the container, absorb the product into chemically inert binding material (sand, soil diatomaceous), collect into a closed container and hand it over to utilization. Rinse the contaminated surface with plenty of water.

6.4 Reference to other sections

Remove according to the recommendations listed in the section 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Provide appropriate general ventilation. Keep away from heat and ignition sources. Protect from releasing to sewage system, water courses and soil. Do not eat, drink or smoke while handling. Wash hands during intervals and after finishing work.

7.2 Conditions for safe storage, including any incompatibilities

Store in original, properly labeled, tightly closed containers, in a dry, well-ventilated storage room. Keep away from sources of high temperatures, ignition sources, oxidizers. Protect from sunlight.

7.3 Specific end use(s)

No information about the applications other than those mentioned in subsection 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Controls parameters

No EU control parameters established (IOELV, STEL).

Ethanol:

DNEL $_{long\text{-}term}$ for workers:

343 mg/kg bw/day (skin) – systemic effects

DNEL $_{long\text{-}term}$ for workers:
950 mg/m^3 (inhalation) – systemic effects
DNEL $_{acute}$ for workers:
1900 mg/m^3 (inhalation) – local effects
DNEL $_{acute}$ for general population:
950 mg/m^3 (inhalation) – local effects
DNEL $_{long\text{-}term}$ for general population:
114 mg/m^3 (inhalation) – systemic effects
PNEC:
0.96 mg/l (freshwater)
0.79 mg/l (marine water)
2.9 mg/kg (sediment-freshwater)
3.6 mg/kg (sediment-marine water)

8.2 Exposure controls

8.2.1 *Appropriate engineering controls*

Necessary local exhaust ventilation removing vapours from the places of their emission and general ventilation of the room (during production and packaging). Do not use near ignition or heat sources.

8.2.2 *Individual protective measures such as personal protective equipment*

Respiratory protection:	With proper use, respiratory protection is not required.
Skin and hands protection:	Wear protective clothing made of natural fabrics (cotton) or synthetic fibres, safety gloves made of nitrile rubber or butyl rubber (thickness 0.4 ± 0.1 mm, breakthrough time ≥ 480 min).
Eye/face protection:	Not required.
Occupational hygiene:	General industrial hygiene rules apply. Don't allow exceeding occupational exposure levels. After finishing work remove contaminated clothes. Wash hands and face before work breaks. Wash entire body after finishing work. Do not drink, eat and smoke during work.

8.2.3 *Environmental exposure controls*

Prevent from draining to a municipal sewage system and watercourses.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

a) Physical state
Liquid in a container.
b) Colour
Colour dependent on specification.
c) Odour
Alcohol-like.
d) Melting point/freezing point
No data.
e) Boiling point or initial boiling point and boiling range
> 35 ^{0}C
f) Flammability
The mixture is inflammatory.
g) Lower and upper explosion limit
No data, however vapours of the product may form explosive mixtures with air.
h) Flash point
> 23 - < 60 °C

i) Auto-ignition temperature
> 400 °C

j) Decomposition temperature
No data.

k) pH
Not applicable for organic mixtures.

l) Kinematic viscosity
No data.

m) Solubility
Soluble in most organic solvents.

n) Partition coefficient: n-octanol/water (log value)
No data.

o) Vapour pressure
No data.

p) Density and/or relative density
0.968 (water = 1)

q) Relative vapour density
> 1 (air=1)

r) Particle characteristics
Not applicable (liquid).

9.2 Other information

9.2.1 *Information with regard to physical hazard classes*

a) Explosives: Not applicable
b) Flammable gases: Not applicable
c) Aerosols: Not applicable
d) Oxidising gases: Not applicable
e) Gases under pressure: Not applicable
f) Flammable liquids: Flam. Liq. 3; Flammable liquid and vapour.
g) Flammable solids: Not applicable
h) Self-reactive substances and mixtures: Not applicable
i) Pyrophoric liquids: Not applicable
j) Pyrophoric solids: Not applicable
k) Self-heating substances and mixtures: Not applicable
l) Substances and mixtures, which emit flammable gases in contact with water: Not applicable
m) Oxidising liquids: Not applicable
n) Oxidising solids: Not applicable
o) Organic peroxides: Not applicable
p) Corrosive to metals: Not applicable
q) Desensitised explosive: Not applicable

9.2.2 *Other safety characteristics*

a) mechanical sensititivity: No data available
b) self-accelerating polymerisation temperature: No data available
c) formation of explosible dust/air mixtures: Not applicable
d) acid/alkaline reserve: No data available
e) evaporation rate: No data available
f) miscibility: No data available
g) conductivity: No data available
h) corrosiveness: No data available
i) gas group: Not applicable
j) redox potential: Not applicable
k) radical formation potential: No data available
l) photocatalytic properties: No data available

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity
No reactivity if stored and used as intended.

10.2 Chemical stability
Stable in standard conditions of storage and use.

10.3 Possibility of hazardous reactions
Vapours of the product may form explosive mixtures with air.

10.4 Conditions to avoid
High temperature, ignition sources, open fire.

10.5 Incompatible materials
Strong oxidising agents,

10.6 Hazardous decomposition products
Not known.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity:
Based on available data, the classification criteria are not met.

Component	CAS No.	Dose	value	unit
Ethanol	64-17-5	LDL_O – oral child	2000	mg/kg
		TDL_O – oral man	700	mg/kg
		DLL_O – oral human	1400	mg/kg
		LC_{50} – inhalation rat	20000	mg/l (10h)
Glycerol	56-81-5	LD_{50} – oral rat	12600	mg/kg

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.
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:
Based on available data, the classification criteria are not met.
Aspiration hazard:
Based on available data, the classification criteria are not met.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

It does not contain ingredients which are considered endocrine disruptors according to Art. 57 (f) of REACH or Regulation (EU) 2017/2100 or Regulation (EU) 2018/605 at a concentration of 0.1% or higher.

11.2.2. Other information

No data.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Based on available data, the classification criteria are not met.

Component	CAS No.	Dose	value	unit
Ethanol	64-17-5	LC_{50} - fish (*Leuciscus idus melanotus*)	8140	mg/l (48h)
		EC_{50} - invertebrates (*Daphnia magna*)	>10000	mg/l (24h)
		EC_{50} - algae (*Chlorella pyrenoidoso*)	9310	mg/l
Carbon black	1333-86-4	EC_{50} – invertebrates (*Daphnia magna*)	>5600	mg/l (24h)
Glycerol	56-81-5	LC_{50} - fish (*Oncorhynchus mykiss*)	54000	mg/l (96h)
		EC_{50} - invertebrates (*Daphnia magna*)	>10000	mg/l (24h)

12.2 Persistence and degradability

Ethanol: readily biodegradable.
Glycerol: readily biodegradable.

12.3 Bioaccumulative potential

No significant bioaccumulation potential is to be expected.
Partition coefficient octanol/water: (K_{ow}): No data available for the mixture.
Bioconcentration factor (BCF): No data available for the mixture.

12.4 Mobility in soil

No data available for the mixture.

12.5 Results of PBT and vPvB assessment

The mixture meets neither PBT nor vPvB criteria.

12.6 Endocrine disrupting properties

The mixture does not contain ingredients that are considered endocrine disruptors according to Art. 57 (f) of REACH Regulation or Regulation (EU) 2017/2100 or Regulation (EU) 2018/605 at a concentration of 0.1% or higher.

12.7 Other adverse effects

No data available.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Prevent from draining to a municipal sewage system and watercourses.

Hazardous waste:
HP 3 "Flammable"

*COMMISSION REGULATION (EU) No 1357/2014 of 18 December 2014 replacing Annex III to Directive 2008/98/EC of the European Parliament and of the Council on waste and repealing certain Directives (L 365/89)

Used packaging, should be emptied. Single-use container (after thorough cleaning) shall be recycled.

Special precautions:
Dispose product and packaging off safely. Care should be taken when handling emptied containers that have not been thoroughly cleaned.

SECTION 14: TRANSPORT INFORMATION

ADR/RID, IMDG, IATA

14.1 UN number or ID number
1170

14.2 UN proper shipping name
ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)

14.3 Transport hazard class(es)
3

14.4 Packing group
III

14.5 Environmental hazards
The mixture is not hazardous to the environment according to the UN Model Regulations.

14.6 Special precautions for user
No special precautions.

14.7 Maritime transport in bulk according to IMO instruments
Not applicable.
Attention: If the amount of dangerous goods in the inner packaging or object does not exceed 5 l, you can benefit from the exemption for dangerous goods packed in limited quantities. If the collective package contains no more than 20 kg gross (pack) or 30 kg gross (combined packaging), you can also benefit from this exemption.

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC (OJ EU L396 of December 30 2006 with later amendments);
REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCILof 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 (OJ EU L353 of December, 31 2008, with later amendments ATP 1-18);

15.2 Chemical safety assessment
Supplier has not assessed the chemical safety of the mixture.

SECTION 16: OTHER INFORMATION

This safety data sheet has been prepared and verified in the Łukasiewicz Research Network - Industrial Chemistry Research Institute based on the safety data sheet for the mixture provided by the supplier.

Data for the registered substances: http://echa.europa.eu/web/guest/information-on-chemicals/registered-substances

The information contained in this safety data sheet describes the product exclusively from the safety requirements perspective. The user is responsible for setting up the conditions for safe use of the product and bears a sole responsibility for the consequences of its incorrect use.

Text of H statements, hazard classes and category codes used in the section 3 of this safety data sheet:

H225	Highly flammable liquid and vapour
H319	Causes serious eye irritation.
Flam. Liq. 2	Flammable liquids, Hazard Category 2
Eye Irrit. 2	Serious eye damage/eye irritation, Hazard Category 2

Abreviations:

OEL	Occupational Exposure Level (8 h/day).
WEL	Workplace Exposure Limits
STEL	Short Term Exposure Limit (30 minutes).
vPvB	very Persistent very Bioaccumulative.
PBT	Persistent, Bioaccumulative, Toxic.
LD_{50}	Lethal dose, median dose , where 50 % of test subject dies.
LC_{50}	Lethal concentration, median concentration where 50 % of test subjects dies.
EC_{50}	The effective concentration of substance that causes 50% of the maximum response.
EC_{10}	The effective concentration of substance that causes 10% of the maximum response.
OECD	Organisation for Economic Co-operation and Development.
DNEL	Derived No-Effect Level.
PNEC	Predicted No Effect Concentration.
NOEC	No observed effect concentration.
BCF	Biological Concentration Factor.
ADR	Agreement on Dangerous Goods by Road.
RID	Regulations Concerning the International Transport of Dangerous Goods by Rail.
IMDG	International Maritime Dangerous Goods Code.
IATA	International Air Transport Association.
IMO	International Maritime Organization

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