



DRUCKFARBEN HELLAS SA

Revision nr. 4

Dated 06/07/2020

Printed on 06/07/2020

Page n. 1/13

Replaced revision:3 (Dated: 29/05/2020)

TOTAL PROOF PU AQUA WHITE

Safety Data Sheet

According to Annex II to REACH - Regulation 2015/830

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

1.1. Product identifier

Code: CC601050001
Product name: TOTAL PROOF PU AQUA ΛEYKO

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

Intended use: Water-based, waterproofing, polyurethane membrane for flat roofs

1.3. Details of the supplier of the safety data sheet

Name: DRUCKFARBEN HELLAS SA
Full address: Megaridos Ave
District and Country: 193 00 Aspropyrgos (Attiki)
Greece

Tel. +30 210 5519500

Fax +30 210 5519501

e-mail address of the competent person
responsible for the Safety Data Sheet

psafety@druckfarben.gr

1.4. Emergency telephone number

For urgent inquiries refer to: +30 210 7793777

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in (EC) Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of (EU) Regulation 2015/830. Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard classification and indication:

Hazardous to the aquatic environment, chronic toxicity, category 3 H412 Harmful to aquatic life with long lasting effects.

2.2. Label elements

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms: --

Signal words: --

Hazard statements:

TOTAL PROOF PU AQUA WHITE

H412 Harmful to aquatic life with long lasting effects.
EUH208 Contains: Biocide:(3:1)5-Chloro-2-methyl-2,3-dihydroisothiazol-3-one and 2-Methyl-2,3-dihydroisothiazol-3-one, 1,2-Benzisothiazol-3(2H)-one
 May produce an allergic reaction.

Precautionary statements:

P501 Dispose of contents and container to an approved waste disposal plant or recycled in accordance with local / national / international regulations.
P102 Keep out of reach of children.
P233 Keep container tightly closed.
P101 If medical advice is needed, have product container or label at hand.
P273 Avoid release to the environment.
P301+P312 IF SWALLOWED: Call a POISON CENTER / doctor if you feel unwell.

2.3. Other hazards

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

SECTION 3. Composition/information on ingredients
3.2. Mixtures

Contains:

Identification	x = Conc. %	Classification 1272/2008 (CLP)
1-isopropyl-2,2-dimethyltrimethylene diisobutyrate CAS 6846-50-0	0,5 < x < 1	Repr. 2 H361d, Aquatic Chronic 3 H412
EC 229-934-9 INDEX - Reg. no. 01-2119451093-47-0000		
Zinc Oxide CAS 1314-13-2	0,5 < x < 1	Aquatic Acute 1 H400 M=1, Aquatic Chronic 1 H410 M=1
EC 215-222-5 INDEX 030-013-00-7 Reg. no. 01-2119463881-32		
1,2-Benzisothiazol-3(2H)-one CAS 2634-33-5	0 < x < 0,05	Acute Tox. 4 H302, Eye Dam. 1 H318, Skin Irrit. 2 H315, Skin Sens. 1 H317, Aquatic Acute 1 H400 M=1
EC 220-120-9 INDEX 613-088-00-6		
Pyrithione zinc CAS 13463-41-7	0 < x < 0,025	Acute Tox. 3 H301, Acute Tox. 3 H331, Eye Dam. 1 H318, Aquatic Acute 1 H400 M=100, Aquatic Chronic 1 H410 M=10
EC 236-671-3 INDEX - Reg. no. 01-2119511196-46-XXXX		



DRUCKFARBEN HELLAS SA

Revision nr. 4

Dated 06/07/2020

Printed on 06/07/2020

Page n. 3/13

Replaced revision:3 (Dated: 29/05/2020)

TOTAL PROOF PU AQUA WHITE

Biocide:(3:1)5-Chloro-2-methyl-2,3-dihydroisothiazol-3-one and 2-Methyl-2,3-dihydroisothiazol-3-one

CAS 55965-84-9

0 < x < 0,0015

Acute Tox. 2 H310, Acute Tox. 2 H330, Acute Tox. 3 H301, Skin Corr. 1C H314, Eye Dam. 1 H318, Skin Sens. 1 H317, Aquatic Acute 1 H400 M=100, Aquatic Chronic 1 H410 M=100, EUH071

EC :

611-341-5

INDEX 613-167-00-5

The full wording of hazard (H) phrases is given in section 16 of the sheet.

SECTION 4. First aid measures

4.1. Description of first aid measures

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 30-60 minutes, opening the eyelids fully. Get medical advice/attention.

SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention.

INGESTION: Have the subject drink as much water as possible. Get medical advice/attention. Do not induce vomiting unless explicitly authorised by a doctor.

INHALATION: Get medical advice/attention immediately. Remove victim to fresh air, away from the accident scene. If the subject stops breathing, administer artificial respiration. Take suitable precautions for rescue workers.

4.2. Most important symptoms and effects, both acute and delayed

Specific information on symptoms and effects caused by the product are unknown.

4.3. Indication of any immediate medical attention and special treatment needed

Information not available

SECTION 5. Firefighting measures

5.1. Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT

The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.

UNSUITABLE EXTINGUISHING EQUIPMENT

None in particular.

5.2. Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Do not breathe combustion products.

5.3. Advice for firefighters

GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).



DRUCKFARBEN HELLAS SA

Revision nr. 4

Dated 06/07/2020

Printed on 06/07/2020

Page n. 5/13

Replaced revision:3 (Dated: 29/05/2020)

TOTAL PROOF PU AQUA WHITE

Oral	VND	18,8 mg/kg bw/d		
Inhalation	VND	32,6 mg/m3	VND	110 mg/m3
Skin	VND	18,8 mg/kg bw/d	VND	31,2 mg/kg bw/d

VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified.

8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.

When choosing personal protective equipment, ask your chemical substance supplier for advice.

Personal protective equipment must be CE marked, showing that it complies with applicable standards.

HAND PROTECTION

Protect hands with category III work gloves (see standard EN 374).

The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability.

The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

SKIN PROTECTION

Wear category I professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

EYE PROTECTION

Wear airtight protective goggles (see standard EN 166).

RESPIRATORY PROTECTION

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, use a mask with a type B filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.

Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

ENVIRONMENTAL EXPOSURE CONTROLS

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

Product residues must not be indiscriminately disposed of with waste water or by dumping in waterways.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	liquid
Colour	white
Odour	mild
Odour threshold	Not available
pH	8,5-9,0
Melting point / freezing point	Not available
Initial boiling point	Not available
Boiling range	Not available

TOTAL PROOF PU AQUA WHITE

Flash point	> 60 °C
Evaporation Rate	Not available
Flammability of solids and gases	Not available
Lower inflammability limit	Not available
Upper inflammability limit	Not available
Lower explosive limit	Not available
Upper explosive limit	Not available
Vapour pressure	Not available
Vapour density	Not available
Relative density	1,30-1,35 g/cm3
Solubility	Not available
Partition coefficient: n-octanol/water	Not available
Auto-ignition temperature	Not available
Decomposition temperature	Not available
Viscosity	120-130 KU
Explosive properties	Not available
Oxidising properties	Not available

9.2. Other information

Total solids (250°C / 482°F)	5,76 %
VOC (Directive 2010/75/EC) :	0,80 %

SECTION 10. Stability and reactivity**10.1. Reactivity**

There are no particular risks of reaction with other substances in normal conditions of use.

10.2. Chemical stability

The product is stable in normal conditions of use and storage.

10.3. Possibility of hazardous reactions

No hazardous reactions are foreseeable in normal conditions of use and storage.

10.4. Conditions to avoid

None in particular. However the usual precautions used for chemical products should be respected.

10.5. Incompatible materials

Information not available

10.6. Hazardous decomposition products

Information not available

SECTION 11. Toxicological information

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification.

It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

11.1. Information on toxicological effectsMetabolism, toxicokinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

Information not available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Information not available

Interactive effects

Information not available

ACUTE TOXICITY

LC50 (Inhalation) of the mixture:
Not classified (no significant component)
LD50 (Oral) of the mixture:
Not classified (no significant component)
LD50 (Dermal) of the mixture:
Not classified (no significant component)

Zinc Oxide

LD50 (Oral) > 8,437 mg/kg Rat

LD50 (Dermal) > 5 mg/kg Rabbit

1,2-Benzisothiazol-3(2H)-one

LD50 (Oral) 1150 mg/kg Mouse

LD50 (Dermal) > 2000 mg/kg Rat

Pyrrithione zinc

LD50 (Oral) 269 mg/kg Rat

LD50 (Dermal) > 2 mg/kg Rabbit

LC50 (Inhalation) 1,03 mg/l/4h 4 hours (Rat)



DRUCKFARBEN HELLAS SA

Revision nr. 4

Dated 06/07/2020

Printed on 06/07/2020

Page n. 8/13

Replaced revision:3 (Dated: 29/05/2020)

TOTAL PROOF PU AQUA WHITE

Biocide:(3:1)5-Chloro-2-methyl-2,3-dihydroisothiazol-3-one and 2-Methyl-2,3-dihydroisothiazol-3-one

LD50 (Oral) 550 mg/kg Rat

LD50 (Dermal) 1000 mg/kg Rat

LC50 (Inhalation) 0,31 mg/l Rat

1-isopropyl-2,2-dimethyltrimethylene diisobutyrate

LD50 (Oral) > 2000 mg/kg Rat

LD50 (Dermal) > 2000 mg/kg Rat

LC50 (Inhalation) > 0,12 mg/l/6h Rat

SKIN CORROSION / IRRITATION

Does not meet the classification criteria for this hazard class

SERIOUS EYE DAMAGE / IRRITATION

Does not meet the classification criteria for this hazard class

RESPIRATORY OR SKIN SENSITISATION

May produce an allergic reaction.Contains: Biocide:(3:1)5-Chloro-2-methyl-2,3-dihydroisothiazol-3-one and 2-Methyl-2,3-dihydroisothiazol-3-one
1,2-Benzisothiazol-3(2H)-one

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class Viscosity: 120-130 KU

SECTION 12. Ecological information

This product is dangerous for the environment and the aquatic organisms. In the long term, it have negative effects on aquatic environment.

12.1. Toxicity

Zinc Oxide

LC50 - for Fish	1,1 mg/l/96h <i>Oncorhynchus mykiss</i>
EC50 - for Crustacea	1,7 mg/l/48h <i>Daphnia magna</i>
EC50 - for Algae / Aquatic Plants	0,14 mg/l/72h <i>Pseudokirchnerella subcapitata</i>
Chronic NOEC for Fish	0,53 mg/l
Chronic NOEC for Algae / Aquatic Plants	0,024 mg/l

1,2-Benzisothiazol-3(2H)-one

LC50 - for Fish	0,8 mg/l/96h <i>Oncorhynchus mykiss</i> (Ιριδίζουσα πέστροφα)
EC50 - for Algae / Aquatic Plants	4,4 mg/l/72h <i>Daphnia magna</i> (Νερόψυλλος ο μέγας)

Pyrrithione zinc

LC50 - for Fish	0,0026 mg/l/96h <i>Pimephales promelas</i>
EC50 - for Crustacea	0,0082 mg/l/48h <i>Daphnia magna</i>
Chronic NOEC for Crustacea	0,00046 mg/l

Biocide:(3:1)5-Chloro-2-methyl-2,3-dihydroisothiazol-3-one and 2-Methyl-2,3-dihydroisothiazol-3-one

LC50 - for Fish	0,58 mg/l/96h
EC50 - for Algae / Aquatic Plants	0,161 mg/l/72h
Chronic NOEC for Algae / Aquatic Plants	0,032 mg/l 96h

1-isopropyl-2,2-dimethyltrimethylene diisobutyrate

EC50 - for Algae / Aquatic Plants	> 7,49 mg/l/72h
Chronic NOEC for Fish	> 6 mg/l
Chronic NOEC for Crustacea	> 1,46 mg/l

12.2. Persistence and degradability

Zinc Oxide

Solubility in water 2,9 mg/l

Degradability: information not available

NOT rapidly degradable

Pyrrithione zinc

Rapidly degradable

Biocide:(3:1)5-Chloro-2-methyl-2,3-dihydroisothiazol-3-one and 2-Methyl-2,3-



TOTAL PROOF PU AQUA WHITE

dihydroisothiazol-3-one
NOT rapidly degradable

30 %, Exposure time: 28 d, OECD Test Guideline 301B

12.3. Bioaccumulative potential

Zinc Oxide

BCF > 175

Pyrrithione zinc

BCF 50

1-isopropyl-2,2-dimethyltrimethylene
diisobutyrate

Partition coefficient: n-octanol/water 4,04 Log Kow

BCF 1,95

12.4. Mobility in soil

1-isopropyl-2,2-dimethyltrimethylene
diisobutyrate

Partition coefficient: soil/water 2,69

12.5. Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

12.6. Other adverse effects

Information not available

SECTION 13. Disposal considerations**13.1. Waste treatment methods**

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

SECTION 14. Transport information

The product is not dangerous under current provisions of the Code of International Carriage of Dangerous Goods by Road (ADR) and by Rail (RID), of the International Maritime Dangerous Goods Code (IMDG), and of the International Air Transport Association (IATA) regulations.

14.1. UN number

Not applicable

14.2. UN proper shipping name

Not applicable



DRUCKFARBEN HELLAS SA

Revision nr. 4

Dated 06/07/2020

Printed on 06/07/2020

Page n. 11/13

Replaced revision:3 (Dated: 29/05/2020)

TOTAL PROOF PU AQUA WHITE

14.3. Transport hazard class(es)

Not applicable

14.4. Packing group

Not applicable

14.5. Environmental hazards

Not applicable

14.6. Special precautions for user

Not applicable

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Information not relevant

SECTION 15. Regulatory information

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

Seveso Category - Directive 2012/18/EC: None

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006

Product

Point 3

Substances in Candidate List (Art. 59 REACH)

On the basis of available data, the product does not contain any SVHC in percentage greater than 0,1%.

Substances subject to authorisation (Annex XIV REACH)

None

Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012:

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

Healthcare controls



DRUCKFARBEN HELLAS SA

Revision nr. 4

Dated 06/07/2020

Printed on 06/07/2020

Page n. 12/13

Replaced revision:3 (Dated: 29/05/2020)

TOTAL PROOF PU AQUA WHITE

Information not available

15.2. Chemical safety assessment

A chemical safety assessment has not been performed for the preparation/for the substances indicated in section 3.

SECTION 16. Other information

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

Repr. 2	Reproductive toxicity, category 2
Acute Tox. 2	Acute toxicity, category 2
Acute Tox. 3	Acute toxicity, category 3
Acute Tox. 4	Acute toxicity, category 4
Skin Corr. 1C	Skin corrosion, category 1C
Eye Dam. 1	Serious eye damage, category 1
Skin Irrit. 2	Skin irritation, category 2
Skin Sens. 1	Skin sensitization, category 1
Aquatic Acute 1	Hazardous to the aquatic environment, acute toxicity, category 1
Aquatic Chronic 1	Hazardous to the aquatic environment, chronic toxicity, category 1
Aquatic Chronic 3	Hazardous to the aquatic environment, chronic toxicity, category 3
H361d	Suspected of damaging the unborn child.
H310	Fatal in contact with skin.
H330	Fatal if inhaled.
H301	Toxic if swallowed.
H331	Toxic if inhaled.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
EUH071	Corrosive to the respiratory tract.

LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX NUMBER: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%



DRUCKFARBEN HELLAS SA

Revision nr. 4

Dated 06/07/2020

Printed on 06/07/2020

Page n. 13/13

Replaced revision:3 (Dated: 29/05/2020)

TOTAL PROOF PU AQUA WHITE

- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: EC Regulation 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA STEL: Short-term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

GENERAL BIBLIOGRAPHY

1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
 2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
 3. Regulation (EU) 790/2009 (I Atp. CLP) of the European Parliament
 4. Regulation (EU) 2015/830 of the European Parliament
 5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
 6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
 7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
 8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
 9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
 10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
 11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
 12. Regulation (EU) 2016/1179 (IX Atp. CLP)
 13. Regulation (EU) 2017/776 (X Atp. CLP)
 14. Regulation (EU) 2018/669 (XI Atp. CLP)
 15. Regulation (EU) 2018/1480 (XIII Atp. CLP)
 16. Regulation (EU) 2019/521 (XII Atp. CLP)
- The Merck Index. - 10th Edition
 - Handling Chemical Safety
 - INRS - Fiche Toxicologique (toxicological sheet)
 - Patty - Industrial Hygiene and Toxicology
 - N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
 - IFA GESTIS website
 - ECHA website
 - Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.

Product's classification is based on the calculation methods set out in Annex I of the CLP Regulation, unless otherwise indicated in sections 11 and 12.

The data for evaluation of chemical-physical properties are reported in section 9.

Changes to previous review:

The following sections were modified:

02 / 03 / 04 / 07 / 08 / 09 / 11 / 12 / 16.