SAFETY DATA SHEET

4730 protect

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

1.1. Product identifier

Trade name

4730 protect

Product no.

4423845

Unique formula identifier (UFI)

Y33E-F00U-G00N-P6M6

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

Relevant identified uses of the substance or mixture

Surface treatment

▼Uses advised against

None known.

1.3. Details of the supplier of the safety data sheet

Company and address

mira byggeprodukter a/s
Egegårdsvej 2
4621 Gadstrup
+45 46 19 19 46
www.mira.eu.com

Contact person

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E-mail

info@mira.eu.com

Revision

25/04/2023

SDS Version

3.0

Date of previous version

08/04/2022 (2.0)

1.4. Emergency telephone number

Contact The National Poisons Information Service (dial 111, 24 h service).
See section 4 “First aid measures”.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Skin Sens. 1; H317, May cause an allergic skin reaction.
Eye Irrit. 2; H319, Causes serious eye irritation.
Classified according to Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law.

2.2. Label elements

Hazard pictogram(s)

Signal word

Warning

Hazard statement(s)

May cause an allergic skin reaction. (H317)
Causes serious eye irritation. (H319)

Precautionary statements

General

If medical advice is needed, have product container or label at hand. (P101)
Keep out of reach of children. (P102)

▼Prevention

Wash hands thoroughly after handling. (P264)
Wear protective gloves/protective clothing/eye protection/face protection. (P280)

▼Response

If eye irritation persists: Get medical advice/attention. (P337+P313)
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. (P305P351P338)

Storage

-

▼Disposal

Dispose of contents/container in accordance with local regulation. (P501)

▼Hazardous substances

Hexamethylene diisocyanate, oligomers
propylene carbonate
Hexane, 1,6-diisocyanato-, homopolymer, polyethylene glycol mono-Me ether-blocked
triethylamine

▼Additional labelling

UFI: Y33E-F00U-G00N-P6M6

2.3. Other hazards

▼Additional warnings

This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.
This product does not contain any substances considered to be endocrine disruptors in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

SECTION 3: Composition/information on ingredients

3.1. ▼Substances

Not applicable. This product is a mixture.

3.2. ▼Mixtures

Product/substance	Identifiers	% w/w	Classification	Note
Hexamethylene diisocyanate, oligomers	CAS No.: 28182-81-2 EC No.: 500-060-2 UK-REACH: Index No.:	5-10%	Skin Sens. 1, H317 Acute Tox. 4, H332 STOT SE 3, H335	
propylene carbonate	CAS No.: 108-32-7 EC No.: 203-572-1 UK-REACH: Index No.: 607-194-00-1	3-5%	Eye Irrit. 2, H319	
Hexane, 1,6-diisocyanato-, homopolymer, polyethylene glycol mono-Me ether-blocked	CAS No.: 160994-68-3 EC No.: 679-501-7 UK-REACH: Index No.:	1-3%	Skin Sens. 1B, H317 Acute Tox. 4, H332 STOT SE 3, H335 Aquatic Chronic 3, H412	
triethylamine	CAS No.: 121-44-8 EC No.: 204-469-4 UK-REACH: Index No.: 612-004-00-5	1-3%	Flam. Liq. 2, H225 Acute Tox. 4, H302 Acute Tox. 3, H311 Skin Corr. 1A, H314	[1]

	Eye Dam. 1, H318 Acute Tox. 3, H331 STOT SE 3, H335

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

▼Other information

[1] European occupational exposure limit.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet. Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

Inhalation

Upon breathing difficulties or irritation of the respiratory tract: Bring the person into fresh air and stay with him/her.

Skin contact

IF ON SKIN: Wash with plenty of water and soap.
Remove contaminated clothing and shoes. Ensure to wash exposed skin thoroughly with water and soap. DO NOT use solvents or thinners.
If skin irritation occurs: Get medical advice/attention.

Eye contact

Upon irritation of the eye: Remove contact lenses. Flush eyes immediately with plenty of water or isotonic water (20-30 °C) for at least 5 minutes and continue until irritation stops. Make sure to flush under upper and lower eyelids. If irritation continues, contact a doctor. Continue flushing during transport.

▼Ingestion

If the person is conscious, rinse the mouth with water and stay with the person. Never give the person anything to drink.
In case of malaise, seek medical advice immediately and bring the safety data sheet or label from the product. Do not induce vomiting, unless recommended by the doctor. Have the person lean forward with head down to avoid inhalation of or choking on vomited material.

▼Burns

Not applicable.

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

Sensitisation: This product contains substances, which may trigger allergic reaction upon dermal contact.
Manifestation of allergic reactions typically takes place within 12-72 hours after exposure.

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

If skin irritation or rash occurs: Get medical advice/attention.

Information to medics

Bring this safety data sheet or the label from this product.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: Alcohol-resistant foam, carbon dioxide, powder, water mist.
Unsuitable extinguishing media: Waterjets should not be used, since they can spread the fire.

5.2. ▼Special hazards arising from the substance or mixture

Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.
If the product is exposed to high temperatures, e.g. in the event of fire, dangerous decomposition compounds are produced. These are:

Nitrogen oxides (NO_x)
Carbon oxides (CO / CO2)

5.3. Advice for firefighters
Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact The National Poisons Information Service (dial 111, 24 h service) in order to obtain further advice.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Avoid direct contact with spilled substances.

6.2. Environmental precautions
Avoid discharge to lakes, streams, sewers, etc.

6.3. ▼Methods and material for containment and cleaning up
Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.
Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.

6.4. ▼Reference to other sections
See section 13 “Disposal considerations” on handling of waste.
See section 8 "Exposure controls/personal protection" for protective measures.

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Smoking, drinking and consumption of food is not allowed in the work area.
See section 8 "Exposure controls/personal protection" for information on personal protection.

7.2. Conditions for safe storage, including any incompatibilities
Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Recommended storage material
Always store in containers of the same material as the original container.

Storage temperature
Store in a closed original container in a dry and well-ventilated place.

Incompatible materials
Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

7.3. ▼Specific end use(s)
This product should only be used for applications quoted in section 1.2.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters
No substances are listed in the national list of substances with an occupational exposure limit.

▼DNEL

Hexamethylene diisocyanate, oligomers

Duration:	Route of exposure:	DNEL:
Short term – Local effects - Workers	Inhalation	1 mg/m³

propylene carbonate

Duration:	Route of exposure:	DNEL:
Long term – Local effects - Workers	Inhalation	20 mg/m³
Long term – Systemic effects - Workers	Inhalation	176 mg/m³

▼PNEC

Hexamethylene diisocyanate, oligomers

Route of exposure:	Duration of Exposure:	PNEC:
Freshwater sediment		266700 mg/kg
Marine water sediment		26670 mg/kg

propylene carbonate

Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		0,9 mg/L

8.2. ▼Exposure controls

Control is unnecessary if the product is used as intended.

General recommendations

Smoking, drinking and consumption of food is not allowed in the work area.

Exposure scenarios

There are no exposure scenarios implemented for this product.

Exposure limits

Occupational exposure limits have not been defined for the substances in this product.

Appropriate technical measures

Apply standard precautions during use of the product. Avoid inhalation of vapours.

Hygiene measures

In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Always wash hands, forearms and face.

▼Measures to avoid environmental exposure

No specific requirements.

Individual protection measures, such as personal protective equipment

▼Generally

Take off contaminated clothing and wash it before reuse.
Use only UKCA marked protective equipment.

Respiratory Equipment

No specific requirements

Skin protection

Recommended	Type/Category	Standards
Remove soiled clothing and wash skin thoroughly with soap and water when work is complete.		

Hand protection

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards
Protective gloves made of eg PVC, neoprene and vinyl			

Eye protection

Type	Standards
Safety glasses	

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state

Liquid

Colour
Clear

▼Odour / Odour threshold
Sharp/pungent

pH
7 - 9

▼Density (g/cm³)
Testing not relevant or not possible due to the nature of the product.

▼Kinematic viscosity
Testing not relevant or not possible due to the nature of the product.

▼Particle characteristics
Does not apply to liquids.

Phase changes

▼Melting point/Freezing point (°C)
Testing not relevant or not possible due to the nature of the product.

▼Softening point/range (waxes and pastes) (°C)
Does not apply to liquids.

▼Boiling point (°C)
Testing not relevant or not possible due to the nature of the product.

▼Vapour pressure
Testing not relevant or not possible due to the nature of the product.

▼Relative vapour density
Testing not relevant or not possible due to the nature of the product.

▼Decomposition temperature (°C)
Testing not relevant or not possible due to the nature of the product.

Data on fire and explosion hazards

▼Flash point (°C)
Testing not relevant or not possible due to the nature of the product.

▼Flammability (°C)
Testing not relevant or not possible due to the nature of the product.

▼Auto-ignition temperature (°C)
Testing not relevant or not possible due to the nature of the product.

▼Lower and upper explosion limit (% v/v)
Testing not relevant or not possible due to the nature of the product.

Solubility

▼Solubility in water
Testing not relevant or not possible due to the nature of the product.

▼n-octanol/water coefficient
Testing not relevant or not possible due to the nature of the product.

▼Solubility in fat (g/L)
Testing not relevant or not possible due to the nature of the product.

9.2. Other information

▼Other physical and chemical parameters
No data available.

▼Oxidizing properties
Testing not relevant or not possible due to the nature of the product.

SECTION 10: Stability and reactivity

10.1. ▼Reactivity
No data available.

10.2. Chemical stability
The product is stable under the conditions, noted in section 7 “Handling and storage”.

10.3. ▼Possibility of hazardous reactions
None known.

10.4. ▼Conditions to avoid

None known.

10.5. Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

10.6. Hazardous decomposition products

The product is not degraded when used as specified in section 1.

SECTION 11: Toxicological information

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

▼Acute toxicity

Product/substance	Hexamethylene diisocyanate, oligomers
Species:	Rat
Route of exposure:	Oral
Test:	LD50
Result:	5100 mg/kg

Product/substance	propylene carbonate
Species:	Rat
Route of exposure:	Oral
Test:	LD50
Result:	29000 mg/kg

Product/substance	Hexane, 1,6-diisocyanato-, homopolymer, polyethylene glycol mono-Me ether-blocked
Species:	
Route of exposure:	Inhalation
Test:	LC50
Result:	11 mg/L

Skin corrosion/irritation

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

Serious eye damage/irritation

Causes serious eye irritation.

Respiratory sensitisation

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

Skin sensitisation

May cause an allergic skin reaction.

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

▼Long term effects

Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

▼Endocrine disrupting properties

Not applicable.

▼Other information

None known.

SECTION 12: Ecological information

12.1. ▼Toxicity

Product/substance	Hexamethylene diisocyanate, oligomers
Species:	Algae, Scenedesmus subspicatus
Duration:	72 hours
Test:	EC50
Result:	1000 mg/L

Product/substance	propylene carbonate
Species:	Fish
Duration:	96 hours
Test:	LC50
Result:	5300 mg/L

Product/substance	Hexane, 1,6-diisocyanato-, homopolymer, polyethylene glycol mono-Me ether-blocked
Species:	Fish, Danio rerio
Duration:	96 hours
Test:	LC50
Result:	28,3 mg/L

12.2. ▼Persistence and degradability

No data available.

12.3. ▼Bioaccumulative potential

No data available.

12.4. ▼Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.

12.6. ▼Endocrine disrupting properties

Not applicable.

12.7. ▼Other adverse effects

None known.

SECTION 13: Disposal considerations

13.1. ▼Waste treatment methods

Product is covered by the regulations on hazardous waste.
HP 4 - Irritant (skin irritation and eye damage)
Dispose of contents/container to an approved waste disposal plant.
Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law.

▼EWC code

Not applicable.

▼Specific labelling

Not applicable.

Contaminated packing

Packaging containing residues of the product must be disposed of similarly to the product.

SECTION 14: Transport information

	14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information:
ADR	-	-	-	-	-	-
IMDG	-	-	-	-	-	-
IATA	-	-	-	-	-	-

* Packing group
** Environmental hazards

Additional information

Not dangerous goods according to ADR, IATA and IMDG.

14.6. ▼Special precautions for user

Not applicable.

14.7. ▼Maritime transport in bulk according to IMO instruments

No data available.

SECTION 15: Regulatory information

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

▼Restrictions for application

People under the age of 18 shall not be exposed to this product.
Pregnant women and women breastfeeding must not be exposed to this product. The risk, and possible technical precautions or design of the workplace needed to eliminate exposure, must be considered.

▼Demands for specific education

No specific requirements.

▼SEVESO - Categories / dangerous substances

Not applicable.

▼Additional information

Not applicable.

▼Sources

The Management of Health and Safety at Work Regulations 1999.
The Health and Safety at Work etc. Act 1974 Regulations 2013.
Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law.
Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP) as retained and amended in UK law.
Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) as retained and amended in UK law.

15.2. Chemical safety assessment

No

SECTION 16: Other information

▼Full text of H-phrases as mentioned in section 3

H225, Highly flammable liquid and vapour.
H302, Harmful if swallowed.
H311, Toxic in contact with skin.
H314, Causes severe skin burns and eye damage.
H317, May cause an allergic skin reaction.
H318, Causes serious eye damage.
H319, Causes serious eye irritation.
H331, Toxic if inhaled.
H332, Harmful if inhaled.
H335, May cause respiratory irritation.
H412, Harmful to aquatic life with long lasting effects.

▼Abbreviations and acronyms

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
CAS = Chemical Abstracts Service
CE = Conformité Européenne
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
CSA = Chemical Safety Assessment
CSR = Chemical Safety Report
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
EINECS = European Inventory of Existing Commercial chemical Substances
ES = Exposure Scenario
EUH statement = CLP-specific Hazard statement
EWC = European Waste Catalogue
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IARC = International Agency for Research on Cancer (IARC)
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
OECD = Organisation for Economic Co-operation and Development
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
RRN = REACH Registration Number
SCL = A specific concentration limit
SVHC = Substances of Very High Concern
STOT-RE = Specific Target Organ Toxicity - Repeated Exposure
STOT-SE = Specific Target Organ Toxicity - Single Exposure
TWA = Time weighted average
UN = United Nations
UVBC = Unknown or variable composition, complex reaction products or of biological materials
VOC = Volatile Organic Compound
vPvB = Very Persistent and Very Bioaccumulative

▼Additional information

The classification of the substance/mixture in regard of health hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law.

▼The safety data sheet is validated by

Reyhaneh R. Kanafi

Other

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a blue triangle.
The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.
It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.
Country-language: GB-en