

SAFETY DATA SHEET

MR60 - Protect

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

1.1. Product identifier

Trade name

MR60 - Protect

Unique formula identifier (UFI)

F15Q-H0EQ-R00Y-2NG3

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

Relevant identified uses of the substance or mixture

Biocide

Use descriptors (REACH)

Sectors of use	Description
LCS "C"	Consumer uses: Private households (= general public = consumers)
LCS "PW"	Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
Product category	Description
PC 8	Biocidal Products (e.g. Disinfectants, pest control)
Process category	Description
PROC 10	Roller application or brushing
PROC 11	Non industrial spraying
PROC 13	Treatment of articles by dipping and pouring

EuPCS

PP-BIO-7 / Film preservatives

Uses advised against

None known.

1.3. Details of the supplier of the safety data sheet

Company and address

Protox ApS

Fabriksvej 19

6000 Kolding

Denmark

+45 75 50 40 22

E-mail

info@protox.dk

▼ Revision

04/06/2026

▼ SDS Version

6.0

▼ Date of previous version

04/07/2025 (5.0)

1.4. ▼ Emergency telephone number

Healthcare professionals: Dial 0344 892 0111 to reach The National Poisons Information Service (NPIS) (24 hour service)

General public:

England - Dial 111 to reach NHS 111 (24 hour service)
Scotland - Dial 111 to reach NHS 24 (24 hour service)
Wales - Dial 111 or 0845 4647 to reach NHS Direct (24 hour service)
See section 4 "First aid measures".

SECTION 2: Hazards identification

Classified according to Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law.

2.1. Classification of the substance or mixture

Aquatic Chronic 3; H412, Harmful to aquatic life with long lasting effects.

2.2. ▼ Label elements

Hazard pictogram(s)

Not applicable.

Signal word

Not applicable.

Hazard statement(s)

Harmful to aquatic life with long lasting effects. (H412)

▼ Precautionary statement(s)

▼ General

Not applicable.

Prevention

Avoid release to the environment. (P273)

▼ Response

Not applicable.

▼ Storage

Not applicable.

Disposal

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

Hazardous substances

3-iodo-2-propynyl butylcarbamate;3-iodoprop-2-yn-1-yl butylcarbamate

Additional labelling

EUH208, Contains 3-iodo-2-propynyl butylcarbamate;3-iodoprop-2-yn-1-yl butylcarbamate. May produce an allergic reaction.

Active substance(s):

3-iodo-2-propynyl butylcarbamate;3-iodoprop-2-yn-1-yl butylcarbamate (0.753 g/100g)

UFI: F15Q-H0EQ-R00Y-2NG3

2.3. Other hazards

Additional warnings

This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.
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) 2023/707.

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
Isobutyric acid, monoester with 2,2,4-trimethylpentane-	CAS No.: 25265-77-4 EC No.: 246-771-9	1-3%		

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

1,3-diol	UK-REACH: 01-2119441305-48-0000 Index No.:		
3-iodo-2-propynyl butylcarbamate;3-iodoprop- 2-yn-1-yl butylcarbamate	CAS No.: 55406-53-6 EC No.: 259-627-5 UK-REACH: 01-2120762115-60-XXXX Index No.: 616-212-00-7	<1%	Acute Tox. 4, H302 Skin Sens. 1, H317 Eye Dam. 1, H318 Acute Tox. 3, H331 STOT RE 1, H372 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=1)

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

Other information

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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: Take off all contaminated clothing and wash it before reuse. Wash skin with water. If skin irritation or rash occur: Get medical advice.

Eye contact

If in eyes: Flush eyes with water or saline water (20-30 °C) for at least 5 minutes. Remove contact lenses. Seek medical assistance and 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

Treat symptomatically.

Information to medics

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

SECTION 5: Firefighting measures

5.1. Extinguishing media

Not applicable.

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:

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

Remove flammable materials if conditions allow it. Ensure sufficient ventilation.
Contaminated areas may be slippery.

6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc. In the event of leakage to the surroundings, contact local environmental authorities.

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

It is recommended to install waste collection trays in order to prevent emissions to the waste water system and surrounding environment.
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 conditions

No specific requirements.

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

3-iodo-2-propynyl butylcarbamate;3-iodoprop-2-yn-1-yl butylcarbamate

Duration:	Route of exposure:	DNEL:
Long term – Systemic effects - Workers	Dermal	2 mg/kg bw/day
Long term – Local effects - Workers	Inhalation	1.16 mg/m ³

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Long term – Systemic effects - Workers	Inhalation	23 µg/m ³
Short term – Local effects - Workers	Inhalation	1.16 mg/m ³
Short term – Systemic effects - Workers	Inhalation	70 µg/m ³

Isobutyric acid, monoester with 2,2,4-trimethylpentane-1,3-diol

Duration:	Route of exposure:	DNEL:
Long term – Systemic effects - General population	Dermal	12.5 mg/kg bw/day
Long term – Systemic effects - Workers	Dermal	35 mg/kg bw/day
Short term – Systemic effects - General population	Dermal	62.5 mg/kg bw/day
Short term – Systemic effects - Workers	Dermal	175 mg/kg bw/day
Long term – Systemic effects - General population	Inhalation	21.7 mg/m ³
Long term – Systemic effects - Workers	Inhalation	123.42 mg/m ³
Short term – Systemic effects - General population	Inhalation	108.5 mg/m ³
Short term – Systemic effects - Workers	Inhalation	617 mg/m ³
Long term – Systemic effects - General population	Oral	12.5 mg/kg bw/day
Short term – Systemic effects - General population	Oral	62.5 mg/kg bw/day

PNEC

3-iodo-2-propynyl butylcarbamate;3-iodoprop-2-yn-1-yl butylcarbamate

Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		500 ng/L
Freshwater sediment		17 µg/kg
Intermittent release (freshwater)		530 ng/L
Intermittent release (marine water)		530 ng/L
Marine water		46 ng/L
Marine water sediment		1.6 µg/kg
Sewage treatment plant		440 µg/L
Soil		5 µg/kg

Isobutyric acid, monoester with 2,2,4-trimethylpentane-1,3-diol

Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		15 µg/L
Freshwater sediment		780 µg/kg
Intermittent release (freshwater)		150 µg/L
Marine water		1.5 µg/L
Marine water sediment		78 µg/kg
Predators		66.7 mg/kg
Sewage treatment plant		7.5 mg/L
Soil		147 µg/kg

8.2. Exposure controls

Apply general control to prevent unnecessary exposure

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. Pay special attention to hands, forearms and face.

Measures to avoid environmental exposure

Keep damming materials near the workplace. If possible, collect spillage during work.

Individual protection measures, such as personal protective equipment

Generally

Use only UKCA marked protective equipment.

Respiratory Equipment

Work situation	Type	Class	Colour	Standards	
When there is risk of formation of mist/aerosol	Combination filter A2P2	Class 2	Brown/White	EN14387	

▼ Skin protection

Work situation	Recommended	Type/Category	Standards	
When there is risk of splash- / intermittent exposure	Dedicated work clothing should be worn.	-	-	

▼ Hand protection

Work situation	Material	Glove thickness (mm)	Breakthrough time (min.)	Standards	
In the event of prolonged exposure or high concentrations	Nitrile	0,38	> 240	EN374-2, EN16523-1, EN388	

Eye protection

Work situation	Type	Standards	
When there is risk of splash- / intermittent exposure	Wear safety glasses with side shields.	EN166	

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state

Liquid

Colour

White

Odour / Odour threshold

Characteristic

pH

8,1

Density (g/cm³)

1.004

Kinematic viscosity

No data available.

Particle characteristics

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

Phase changes

Melting point/Freezing point (°C)

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

Softening point/range (°C)

Does not apply to liquids.

Boiling point (°C)

100

Vapour pressure

No data available.

Relative vapour density

Not applicable

Decomposition temperature (°C)

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

Data on fire and explosion hazards

Flash point (°C)

No data available.

Flammability (°C)

No data available.

Auto-ignition temperature (°C)

No data available.

Lower and upper explosion limit (% v/v)

No data available.

Solubility

Solubility in water

Completely soluble

n-octanol/water coefficient (LogKow)

No data available.

Solubility in fat (g/L)

No data available.

9.2. Other information

Evaporation rate (n-butylacetate = 100)

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

Other physical and chemical parameters

No data available.

Oxidizing properties

No data available.

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

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

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.

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 sensitization

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

Skin sensitisation

This product contains substances that may trigger an allergic reaction in already sensitized persons.

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.

▼ Symptoms related to the physical, chemical and toxicological characteristics

None known.

11.2. Information on other hazards

Endocrine disrupting properties

This mixture/product does not contain any substances known to have hormone-disrupting properties in relation to health.

Other information

None known.

SECTION 12: Ecological information

12.1. Toxicity

Harmful to aquatic life with long lasting effects.

12.2. Persistence and degradability

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

12.3. Bioaccumulative potential

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

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.

12.6. Endocrine disrupting properties

This mixture/product does not contain any substances considered to have endocrine-disrupting properties in relation to the environment.

12.7. Other adverse effects

This product contains substances that are toxic to the environment. May result in adverse effects to aquatic organisms.

This product contains substances, which may cause adverse long-term effects to the aquatic environment.

SECTION 13: Disposal considerations

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

13.1. Waste treatment methods

Product is not covered by regulations on dangerous waste.

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.

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/A	-	-	-	-	-	-
DN/RID						
IMDG	-	-	-	-	-	-
IATA	-	-	-	-	-	-

* Packing group

** Environmental hazards

▼ Additional information

Not dangerous goods according to ADR/ADN/RID, 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

No special.

Demands for specific education

No specific requirements.

SEVESO - Categories / dangerous substances

Not applicable.

Additional information

Not applicable.

Sources

In accordance with Regulation (EU) No 528/2012 concerning the making available on the market and use of biocidal products as retained and amended in UK law.

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

H302, Harmful if swallowed.

H317, May cause an allergic skin reaction.

H318, Causes serious eye damage.

H331, Toxic if inhaled.

H372, Causes damage to organs through prolonged or repeated exposure.

H400, Very toxic to aquatic life.

H410, Very toxic to aquatic life with long lasting effects.

The full text of identified uses as mentioned in section 1

LCS "C" = Consumer uses: Private households (= general public = consumers)

LCS "PW" = Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

PROC 10 = Roller application or brushing

PROC 11 = Non industrial spraying

PROC 13 = Treatment of articles by dipping and pouring

PC 8 = Biocidal Products (e.g. Disinfectants, pest control)

▼ 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 (European conformity)

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

EC = Effective concentration

ED = Effective dose

EINECS = European Inventory of Existing Commercial chemical Substances

EL = Effective Loading

ErC = Concentration associated with x% growth rate response

ES = Exposure Scenario

EUH statement = CLP-specific Hazard statement

EuPCS = European Product Categorisation System

EWG = European Waste Catalogue

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

GWP = Global warming potential

HP = Hazardous Property code

IARC = International Agency for Research on Cancer (IARC)

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IC = X maximum inhibitory concentration

IMDG = International Maritime Dangerous Goods

LC = Lethal concentration

LCLo = Value is the lowest concentration of a material in air reported to have caused the death of animals or humans

LD = Lethal dose

LOAEC = Lowest Observed Adverse Effect Concentration

LOAEL = Lowest Observed Adverse Effect Level

LOEC = Lowest Observed Effect Concentration

LogKow = logarithm of the n-octanol/water coefficient

LL = Lethal Loading

M = For multiplication factor

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

NOAEC = No Observed Adverse Effect Concentration

NOAEL = No Observed Adverse Effect Level

NOEC = No Observed Effect Concentration

NOELR = No Observable Effect Loading Rate

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 environmental 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

HMJ

Other

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a 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