Safety Data Sheet

According to Annex II to REACH - Regulation (EU) 2020/878 and to Annex II to UK REACH

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

1.1. Product identifier

Code: **455757**
Product name **GRANIPLAST 20**

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

Identified Uses	Industrial	Professional	Consumer
Paint / Coating	-	PC: 9a.	-

Uses Advised Against

All uses other than painting in construction.

1.3. Details of the supplier of the safety data sheet

Name **CROMOLOGY ITALIA S.P.A.**
Full address **Via IV Novembre, 4**
District and Country **55016 Porcari (LU)**
Italia

Tel. 199.11.99.55

Fax 199.11.99.77

e-mail address of the competent person
responsible for the Safety Data Sheet **info-sds@cromology.it**

1.4. Emergency telephone number

For urgent inquiries refer to **Contact your local poison control centre.**
For more information: Cromology Italia SpA Phone +39 05832424
from Monday to Friday 9:30-12:30 14:00-17:30

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 2020/878.
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:

H412 Harmful to aquatic life with long lasting effects.

EUH208 Contains: 2-METHYL-2H-ISOTHIAZOL-3-ONE (MIT), Reaction mass of 5-chloro-2-methyl-1,2-thiazol-3(2H)-one and 2-methyl-1,2-thiazol-3(2H)-one (3: 1) (C(M)IT/MIT), 1,2-BENZOISOTIAZOL-3(2H)-ONE (BIT), 2-OCTIL-2H-ISOTHIAZOL-3-ONE (OIT)
May produce an allergic reaction.

Precautionary statements:

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P273 Avoid release to the environment.

P501 Dispose of contents/container according to local regulation.

VOC (Directive 2004/42/EC) :

Multi-coloured coatings.

VOC given in g/litre of product in a ready-to-use condition :	99,00
Limit value:	100,00

Contains biocidal products. This product contains the following biocidal active substances for dry film protection: 2-octyl-2H-isothiazol-3-one (OIT) CAS No. 26530-20-1; Terbutrin CAS No. 886-50-0

2.3. Other hazards

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

The product does not contain substances with endocrine disrupting properties in concentration ≥ 0.1%.

SECTION 3. Composition/information on ingredients

3.2. Mixtures

Contains:

Identification	**x = Conc. %**	**Classification (EC) 1272/2008 (CLP)**
2-(2-BUTOXYETHOXY)ETHANOL		
INDEX 603-096-00-8	0,6 ≤ x < 0,7	Eye Irrit. 2 H319
EC 203-961-6		
CAS 112-34-5		

REACH Reg. 01-2119475104-44-XXXX		
2-BROMO-2-NITROPROPANE-1,3-DIOL		
INDEX 603-085-00-8	0 < x < 0,05	Acute Tox. 4 H302, Acute Tox. 4 H312, Eye Dam. 1 H318, Skin Irrit. 2 H315, STOT SE 3 H335, Aquatic Acute 1 H400 M=10, Aquatic Chronic 1 H410 M=1
EC 200-143-0		ATE Oral: 500 mg/kg, ATE Dermal: 1100 mg/kg
CAS 52-51-7		
REACH Reg. 01-2119980938-15-XXXX		
1,2-BENZOISOTIAZOL-3(2H)-ONE (BIT)		
INDEX 613-088-00-6	0 < x < 0,036	Acute Tox. 2 H330, Acute Tox. 4 H302, Eye Dam. 1 H318, Skin Irrit. 2 H315, Skin Sens. 1A H317, Aquatic Acute 1 H400 M=1, Aquatic Chronic 1 H410 M=1
EC 220-120-9		Skin Sens. 1A H317: ≥ 0,036%
CAS 2634-33-5		ATE Oral: 500 mg/kg, LC50 Inhalation mists/powders: 0,21 mg/l/4h
REACH Reg. 01-2120761540-60		
Sodium pyrithione		
INDEX 613-344-00-7	0 < x < 0,05	Acute Tox. 3 H311, Acute Tox. 3 H331, Acute Tox. 4 H302, STOT RE 1 H372, Eye Irrit. 2 H319, Skin Irrit. 2 H315, Skin Sens. 1 H317, Aquatic Acute 1 H400 M=100, Aquatic Chronic 2 H411, EUH070
EC 223-296-5		ATE Oral: 500 mg/kg, ATE Dermal: 300 mg/kg, LC50 Inhalation mists/powders: 0,5 mg/l/4h
CAS 3811-73-2		
2-OCTIL-2H-ISOTHIAZOL-3-ONE (OIT)		
INDEX 613-112-00-5	0,0015 ≤ x < 0,0025	Acute Tox. 2 H330, Acute Tox. 3 H301, Acute Tox. 3 H311, Skin Corr. 1A H314, Eye Dam. 1 H318, Skin Sens. 1A H317, Aquatic Acute 1 H400 M=100, Aquatic Chronic 1 H410 M=100, EUH071
EC 247-761-7		Skin Sens. 1A H317: ≥ 0,0015%
CAS 26530-20-1		LD50 Oral: 125 mg/kg, LD50 Dermal: 311 mg/kg, LC50 Inhalation mists/powders: 0,27 mg/l/4h
Terbutrine		
INDEX -	0 < x < 0,0025	Acute Tox. 4 H302, Skin Sens. 1A H317, Aquatic Acute 1 H400 M=100, Aquatic Chronic 1 H410 M=100
EC 212-950-5		LD50 Oral: >1000 mg/kg
CAS 886-50-0		
Reaction mass of 5-chloro-2-methyl-1,2-thiazol-3(2H)-one and 2-methyl-1,2-thiazol-3(2H)-one (3: 1) (C(M)IT/MIT)		
INDEX 613-167-00-5	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. 1A H317, Aquatic Acute 1 H400 M=100, Aquatic Chronic 1 H410 M=100, EUH071, Classification note according to Annex VI to the CLP Regulation: B
EC 611-341-5		Skin Corr. 1C H314: ≥ 0,6%, Skin Irrit. 2 H315: ≥ 0,06% - < 0,6%, Skin Sens. 1A H317: ≥ 0,0015%, Eye Dam. 1 H318: ≥ 0,6%, Eye Irrit. 2 H319: ≥ 0,06% - < 0,6%
CAS 55965-84-9		LD50 Oral: 66 mg/kg, LD50 Dermal: >141 mg/kg, ATE Inhalation mists/powders: 0,051 mg/l, ATE Inhalation vapours: 0,501 mg/l
2-METHYL-2H-ISOTHIAZOL-3-ONE (MIT)		
INDEX 613-326-00-9	0 < x < 0,0015	Acute Tox. 2 H330, Acute Tox. 3 H301, Acute Tox. 3 H311, Skin Corr. 1B H314, Eye Dam. 1 H318, Skin Sens. 1A H317, Aquatic Acute 1 H400 M=10, Aquatic Chronic 1 H410 M=1
EC 220-239-6		Skin Sens. 1A H317: ≥ 0,0015%
CAS 2682-20-4		LD50 Oral: 120 mg/kg, LD50 Dermal: 300 mg/kg, LC50 Inhalation mists/powders: 0,34 mg/l/4h

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 15 minutes, opening the eyelids fully. If problem persists, seek medical advice.
SKIN: Remove contaminated clothing. Wash immediately with plenty of water. If irritation persists, get medical advice/attention. Wash contaminated clothing before using it again.
INHALATION: Remove to open air. In the event of breathing difficulties, get medical advice/attention immediately.
INGESTION: Get medical advice/attention. Induce vomiting only if indicated by the doctor. Never give anything by mouth to an unconscious person, unless authorised by a doctor.

Rescuer protection

Information not available

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

Information not available

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

Information not available

Means to have available in the workplace for specific and immediate treatment

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).

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Block the leakage if there is no hazard.
Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

6.2. Environmental precautions

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

6.3. Methods and material for containment and cleaning up

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.
Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

6.4. Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Before handling the product, consult all the other sections of this material safety data sheet. Avoid leakage of the product into the environment. Do not eat, drink or smoke during use. Wash hands after use.

7.2. Conditions for safe storage, including any incompatibilities

Keep the product in clearly labelled containers. Store the containers sealed, in a well ventilated place, away from direct sunlight.

7.3. Specific end use(s)

See the exposure scenarios attached to this safety datasheet.

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Regulatory references:

DEU	Deutschland	Forschungsgemeinschaft MAK- und BAT-Werte-Liste 2022 Ständige Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe Mitteilung 58
ESP	España	Límites de exposición profesional para agentes químicos en España 2023
FRA	France	Valeurs limites d'exposition professionnelle aux agents chimiques en FranceDécret n° 2021-1849 du 28 décembre 2021
GRC	Ελλάδα	Π.Δ. 26/2020 (ΦΕΚ 50/Α` 6.3.2020) Εναρμόνιση της ελληνικής νομοθεσίας προς τις διατάξεις των οδηγιών 2017/2398/ΕΕ, 2019/130/ΕΕ και 2019/983/ΕΕ «για την τροποποίηση της οδηγίας 2004/37/ΕΚ ``σχετικά με

		την προστασία των εργαζομένων από τους κινδύνους που συνδέονται με την έκθεση σε καρκινογόνους ή μεταλλαξιγόνους παράγοντες κατά την εργασία``»
HRV	Hrvatska	Pravilnik o izmjenama i dopunama Pravilnika o zaštiti radnika od izloženosti opasnimkemikalijama na radu, graničnim vrijednostima izloženosti i biološkim graničnim vrijednostima (NN 1/2021)
ITA	Italia	Decreto Legislativo 9 Aprile 2008, n.81
NLD	Nederland	Arbeidsomstandighedenregeling. Lijst van wettelijke grenswaarden op grond van de artikelen 4.3, eerste lid, en 4.16, eerste lid, van het Arbeidsomstandighedenbesluit
PRT	Portugal	Decreto-Lei n.º 1/2021 de 6 de janeiro, valores-limite de exposição profissional indicativos para os agentes químicos. Decreto-Lei n.º 35/2020 de 13 de julho, proteção dos trabalhadores contra os riscos ligados à exposição durante o trabalho a agentes cancerígenos ou mutagénicos
ROU	România	Hotărârea nr. 53/2021 pentru modificarea hotărârii guvernului nr. 1.218/2006, precum și pentru modificarea și completarea hotărârii guvernului nr. 1.093/2006
SVN	Slovenija	Pravilnik o varovanju delavcev pred tveganji zaradi izpostavljenosti kemičnim snovem pri delu (Uradni list RS, št. 100/01, 39/05, 53/07, 102/10, 43/11 – ZVZD-1, 38/15, 78/18 in 78/19)
GBR	United Kingdom	EH40/2005 Workplace exposure limits (Fourth Edition 2020)
EU	OEL EU	Directive (EU) 2022/431; Directive (EU) 2019/1831; Directive (EU) 2019/130; Directive (EU) 2019/983; Directive (EU) 2017/2398; Directive (EU) 2017/164; Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC; Directive 98/24/EC; Directive 91/322/EEC.
	TLV-ACGIH	ACGIH 2023

2-(2-BUTOXYETHOXY)ETHANOL

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	67	10	100,5	15	Hinweis, 11
MAK	DEU	67	10	100,5	15	Hinweis
VLA	ESP	67,5	10	101,2	15	
VLEP	FRA	67,5	10	101,2	15	
TLV	GRC	67,5	10	101,2	15	
GVI/KGVI	HRV	67,5	10	101,2	15	
VLEP	ITA	67,5	10	101,2	15	
TGG	NLD	50		100		SKIN
VLE	PRT	67,5	10	101,2	15	
TLV	ROU	67,5	10	101,2	15	
MV	SVN	67,5	10	101,2	15	
WEL	GBR	67,5	10	101,2	15	
OEL	EU	67,5	10	101,2	15	
TLV-ACGIH		66	10			INHAL

Predicted no-effect concentration - PNEC		
Normal value in fresh water	1,1	mg/l
Normal value in marine water	11	mg/l
Normal value for fresh water sediment	4,4	mg/kg
Normal value for marine water sediment	0,44	mg/kg
Normal value of STP microorganisms	200	mg/l
Normal value for the terrestrial compartment	0,32	mg/kg

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral								6,25 mg/kg bw/d

Inhalation	101,2 mg/m3	67,5 mg/m3	67,5 mg/m3

Legend:

(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.

VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified ; LOW = low hazard ; MED = medium hazard ; HIGH = high hazard.

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.

When choosing risk management measures and operating conditions, consult the exposure scenarios attached.

HAND PROTECTION
Protect hands with category III work gloves.
The following should be considered when choosing work glove material (see standard EN 374): compatibility, degradation, permeability time.
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 ISO 16321).

RESPIRATORY PROTECTION
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. Use a mask with a type A filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387).
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.

For information on controlling environmental exposure, see the exposure scenarios attached to this safety datasheet.

2-(2-BUTOXYETHOXY)ETHANOL

Butyl diglycol: DNEL: Workers End Use, Acute Effects, Inhalation 101.2 mg/m3; Chronic effects, skin contact: 20mg/kg (1d), inhalation 67.5 mg/m3. Final consumer use, acute inhalation effects 50.6mg/m3, chronic effects, skin contact 10mg/kg (d), inhalation: 34mg/m3, ingestion 1.25mg/kg (1d).

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Information
Appearance	paste	
Colour	various	
Odour	mild, characteristic	
Melting point / freezing point	< 5 °C	Method:Derived
Initial boiling point	100 °C	Method:Derived
Flammability	not flammable	Method:Derived
Lower explosive limit	not applicable	
Upper explosive limit	not applicable	
Flash point	> 60 °C	Method:Derived
Auto-ignition temperature	not applicable	
Decomposition temperature	not applicable	
pH	8,5	Method:ISO 19396-1 Concentration: 100 % Temperature: 20 °C
Kinematic viscosity	not determined	Reason for missing data:Not significant data for classification
Dynamic viscosity	220 Pa*s	Method:ISO 2884-1 Temperature: 20 °C
Solubility	die-dispersible in water, insoluble in hydrocarbons	Method:Derived Temperature: 20 °C
Partition coefficient: n-octanol/water	not applicable	
Vapour pressure	23 hPa	Substance:WATER Temperature: 20 °C
Density and/or relative density	1,49 kg/l	Method:ISO 2811-1 Temperature: 20 °C
Relative vapour density	>1	Method:Derived Temperature: 20 °C
Particle characteristics	not applicable	

9.2. Other information

9.2.1. Information with regard to physical hazard classes

Information not available

9.2.2. Other safety characteristics

VOC (Directive 2004/42/EC) :	99,00	g/litre

SECTION 10. Stability and reactivity

10.1. Reactivity

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

2-BROMO-2-NITROPROPANE-1,3-DIOL

Decomposes on contact with: water,metals,strong bases.

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.

2-(2-BUTOXYETHOXY)ETHANOL

May react with: oxidising substances.May form peroxides with: oxygen.Develops hydrogen on contact with: aluminium.May form explosive mixtures with: air.

10.4. Conditions to avoid

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

2-BROMO-2-NITROPROPANE-1,3-DIOL

Avoid exposure to: light,UV rays,moisture.

2-(2-BUTOXYETHOXY)ETHANOL

Avoid exposure to: air.

10.5. Incompatible materials

2-(2-BUTOXYETHOXY)ETHANOL

Incompatible with: oxidising substances,strong acids,alkaline metals.

10.6. Hazardous decomposition products

In the event of thermal decomposition or fire, gases and vapours that are potentially dangerous to health may be released.

2-BROMO-2-NITROPROPANE-1,3-DIOL

May develop: nitric oxide,carbon oxides,hydrobromic acid.

2-(2-BUTOXYETHOXY)ETHANOL

May develop: hydrogen.

SECTION 11. Toxicological information

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

Metabolism, toxicokinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

2-(2-BUTOXYETHOXY)ETHANOL
WORKERS: inhalation; contact with the skin.

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

2-(2-BUTOXYETHOXY)ETHANOL
May be absorbed by inhalation, ingestion and skin contact; is irritating for the skin and especially for the eyes. May cause damage to the spleen. At room temperature the danger of inhalation is unlikely, due to the low vapour pressure of the substance.

Interactive effects

Information not available

ACUTE TOXICITY

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

Reaction mass of 5-chloro-2-methyl-1,2-thiazol-3(2H)-one and 2-methyl-1,2-thiazol-3(2H)-one (3: 1) (C(M)IT/MIT)

LD50 (Dermal):	> 141 mg/kg Rat OECD 402
LD50 (Oral):	66 mg/kg Rat OECD 401

1,2-BENZOISOTIAZOL-3(2H)-ONE (BIT)

LD50 (Oral):	450 mg/kg ATP 21
LC50 (Inhalation mists/powders):	0,21 mg/l/4h ATP 21

2-METHYL-2H-ISOTHIAZOL-3-ONE (MIT)

LD50 (Dermal):	300 mg/kg
LD50 (Oral):	120 mg/kg
LC50 (Inhalation mists/powders):	0,34 mg/l/4h

Terbutrine

LD50 (Dermal):	> 2000 mg/kg Rabbit
LD50 (Oral):	> 1000 mg/kg Rat

CALCIUM CARBONATE

LD50 (Oral):	6450 mg/kg Rat

2-OCTIL-2H-ISOTHIAZOL-3-ONE (OIT)

LD50 (Dermal):	311 mg/kg STA 15 ATP
LD50 (Oral):	125 mg/kg STA 15 ATP
LC50 (Inhalation mists/powders):	0,27 mg/l/4h STA 15 ATP

2-BROMO-2-NITROPROPANE-1,3-DIOL

LD50 (Oral):	66 mg/kg
LC50 (Inhalation mists/powders):	0,17 mg/l/4h

2-(2-BUTOXYETHOXY)ETHANOL

LD50 (Dermal):	2700 mg/kg Rabbit
LD50 (Oral):	3384 mg/kg Rat

Sodium pyrithione

LD50 (Dermal):	790 mg/kg 18 ATP to CLP
ATE (Dermal):	300 mg/kg estimate from table 3.1.2 of Annex I of the CLP (figure used for calculation of the acute toxicity estimate of the mixture)
LD50 (Oral):	500 mg/kg 18 ATP to CLP
LC50 (Inhalation mists/powders):	0,5 mg/l/4h 18 ATP to CLP

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:
2-METHYL-2H-ISOTHIAZOL-3-ONE (MIT)
Reaction mass of 5-chloro-2-methyl-1,2-thiazol-3(2H)-one and 2-methyl-1,2-thiazol-3(2H)-one (3: 1) (C(M)IT/MIT)
1,2-BENZOISOTIAZOL-3(2H)-ONE (BIT)
2-OCTIL-2H-ISOTHIAZOL-3-ONE (OIT)

Skin sensitization

No classification as Skin Sens. H317, based on the results of tested mixtures
similar, applying bridging principles, in accordance with Article 9 (4) of the CLP Regulation. Result of the
Studies: Sensitization OECD 429 (LLNA) (mouse) non-sensitizing - S4565, S5145, S5146, S5147, S4568. However the
product is classified EUH208.

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

11.2. Information on other hazards

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with human health effects under evaluation.

SECTION 12. Ecological information

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

2-(2-BUTOXYETHOXY)ETHANOL
Butil diglicol: PNEC: acqua dolce: 1mg/l, acqua di mare: 0,1 mg/l, sedimento di acqua dolce 4mg/kg, sedimento marino: 0,4mg/kg, suolo:0,4mg/kg.

Reaction mass of 5-chloro-2-methyl-1,2-thiazol-3(2H)-one and 2-methyl-1,2-thiazol-3(2H)-one (3: 1) (C(M)IT/MIT)

LC50 - for Fish	0,22 mg/l/96h Oncorhynchus mykiss
EC50 - for Crustacea	0,0052 mg/l/48h Dafnia magna
EC50 - for Algae / Aquatic Plants	0,048 mg/l/72h Pseudokirchnereilla subcapitata
Chronic NOEC for Fish	0,098 mg/l Onchorthyncus Mykiss (OECD 210)
Chronic NOEC for Crustacea	0,004 mg/l Daphina magna (OECD 211)
Chronic NOEC for Algae / Aquatic Plants	0,00064 mg/l Skeletonema costantium (ISO 10263, RAC)

1,2-BENZOISOTIAZOL-3(2H)-ONE (BIT)

LC50 - for Fish	11 mg/l/96h Oncorhynchus mykiss (OECD 203)
EC50 - for Crustacea	16,4 mg/l/48h Daphnia magna (OECD 202)
EC50 - for Algae / Aquatic Plants	0,6 mg/l/72h Selenastrum capricornutum (OECD 201)
Chronic NOEC for Crustacea	1,2 mg/l Daphnia magna OECD 215

Terbutrine

LC50 - for Fish	1,8 mg/l/96h Rasbora heteromorpha
EC50 - for Crustacea	7,1 mg/l/48h Dafnia magna
EC50 - for Algae / Aquatic Plants	0,0055 mg/l/72h Selenastrum capricornutum

2-OCTIL-2H-ISOTHIAZOL-3-ONE (OIT)

LC50 - for Fish	0,036 mg/l/96h Oncorhynchus mykiss (OECD 203)
Chronic NOEC for Fish	0,022 mg/l 28d Oncorhnchus mykiss (OECD 210)
Chronic NOEC for Crustacea	0,002 mg/l 21 d (OECD 211)
Chronic NOEC for Algae / Aquatic Plants	0,004 mg/l 72h Algae (OECD 201)

2-BROMO-2-NITROPROPANE-1,3-DIOL

LC50 - for Fish	3,4 mg/l/96h Cyprinodon variegatus
EC50 - for Algae / Aquatic Plants	2,3 mg/l/72h desmodesmus subspicatus
Chronic NOEC for Crustacea	0,06 mg/l Daphnia magna

Sodium pyrithione	
LC50 - for Fish	< 0,0077 mg/l/96h Danio rerio; OECD TG 203 GLP Year: 2015

12.2. Persistence and degradability

Reaction mass of 5-chloro-2-methyl-1,2-thiazol-3(2H)-one and 2-methyl-1,2-thiazol-3(2H)-one (3: 1) (C(M)IT/MIT)	
Rapidly degradable	
2-BROMO-2-NITROPROPANE-1,3-DIOL	
Solubility in water	286000 mg/l
Rapidly degradable	
2-(2-BUTOXYETHOXY)ETHANOL	
Solubility in water	1000 - 10000 mg/l
Rapidly degradable	

12.3. Bioaccumulative potential

Reaction mass of 5-chloro-2-methyl-1,2-thiazol-3(2H)-one and 2-methyl-1,2-thiazol-3(2H)-one (3: 1) (C(M)IT/MIT)	
BCF	3,6 Calculated
1,2-BENZOISOTIAZOL-3(2H)-ONE (BIT)	
Partition coefficient: n-octanol/water	0,7 n-Octanol/Water, OECD 117
BCF	6,95 Pesce (OECD 305)
2-METHYL-2H-ISOTHIAZOL-3-ONE (MIT)	
Partition coefficient: n-octanol/water	0,32 n-octanolo/water
BCF	3,16
2-BROMO-2-NITROPROPANE-1,3-DIOL	
Partition coefficient: n-octanol/water	0,22
BCF	3,16
2-(2-BUTOXYETHOXY)ETHANOL	
Partition coefficient: n-octanol/water	1

12.4. Mobility in soil

Information not available

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 ≥ than 0,1%.

12.6. Endocrine disrupting properties

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with

environmental effects under evaluation.

12.7. 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 or ID number

not applicable

14.2. UN proper shipping name

not applicable

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. Maritime transport in bulk according to IMO instruments

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/EU: None

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

Product

Point	3

Contained substance

Point	75

Regulation (EU) 2019/1148 - on the marketing and use of explosives precursors

not applicable

Substances in Candidate List (Art. 59 REACH)

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

Substances subject to authorisation (Annex XIV REACH)

None

Substances subject to exportation reporting pursuant to Regulation (EU) 649/2012:

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

Healthcare controls

Information not available

VOC (Directive 2004/42/EC) :

Multi-coloured coatings.

Contains biocidal products This product contains the following biocidal active substances for dry film protection: 2-octyl-2H-isothiazol-3-one (OIT) CAS No. 26530-20-1; Terbutrin CAS No. 886-50-0

15.2. Chemical safety assessment

A chemical safety assessment has been performed for the following contained substances

2-(2-BUTOXYETHOXY)ETHANOL

SECTION 16. Other information

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

Acute Tox. 2	Acute toxicity, category 2
Acute Tox. 3	Acute toxicity, category 3
Acute Tox. 4	Acute toxicity, category 4
STOT RE 1	Specific target organ toxicity - repeated exposure, category 1
Skin Corr. 1A	Skin corrosion, category 1A
Skin Corr. 1B	Skin corrosion, category 1B
Skin Corr. 1C	Skin corrosion, category 1C
Skin Corr. 1	Skin corrosion, category 1
Eye Dam. 1	Serious eye damage, category 1
Eye Irrit. 2	Eye irritation, category 2
Skin Irrit. 2	Skin irritation, category 2
STOT SE 3	Specific target organ toxicity - single exposure, category 3
Skin Sens. 1	Skin sensitization, category 1
Skin Sens. 1A	Skin sensitization, category 1A
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 2	Hazardous to the aquatic environment, chronic toxicity, category 2
Aquatic Chronic 3	Hazardous to the aquatic environment, chronic toxicity, category 3
H310	Fatal in contact with skin.
H330	Fatal if inhaled.
H301	Toxic if swallowed.

H311	Toxic in contact with skin.
H331	Toxic if inhaled.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H372	Causes damage to organs through prolonged or repeated exposure.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H335	May cause respiratory irritation.
H317	May cause an allergic skin reaction.
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.
H412	Harmful to aquatic life with long lasting effects.
EUH070	Toxic by eye contact.
EUH071	Corrosive to the respiratory tract.

Use descriptor system:

PC	**9a**	Coatings and paints, thinners, paint removers

LEGEND:
- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- ATE: Acute Toxicity Estimate
- CAS: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE: Identifier in ESIS (European archive of existing substances)
- CLP: Regulation (EC) 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: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent, bioaccumulative and toxic
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PMT: Persistent, mobile and toxic
- PNEC: Predicted no effect concentration
- REACH: Regulation (EC) 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: Time-weighted average exposure limit
- TWA STEL: Short-term exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very persistent and very bioaccumulative
- vPvM: Very persistent and very mobile
- WGK: Water hazard classes (German).

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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.
CALCULATION METHODS FOR CLASSIFICATION
Chemical and physical hazards: Product classification derives from criteria established by the CLP Regulation, Annex I, Part 2. The data for evaluation of chemical-physical properties are reported in section 9.
Health hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 3, unless determined otherwise in Section 11.
Environmental hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 4, unless determined otherwise in Section 12.

Exposure Scenarios

Substance	2-(2-BUTOXYETHOXY)ETHANOL
Scenario Title	Butildiglicole
Revision nr.	1
File	1