MICRO ART AD 92

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

1.1 Product identifier: MICRO ART AD 92

Other means of identification:

UFI: CC30-20Q7-J004-NRP8

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

Relevant uses: Fixative

Uses advised against: All uses not specified in this section or in section 7.3

1.3 Details of the supplier of the safety data sheet:

Secil Martingança SA
Apartado 2
2406-909 Maceira LRA Leiria - Portugal
Phone: +351244770220 - Fax: +351244777997
comercial.seciltek@secil.pt
https://www.secil.pt

1.4 Emergency telephone number: CIAV: 800 250 250

SECTION 2: HAZARDS IDENTIFICATION **

2.1 Classification of the substance or mixture:

CLP Regulation (EC) No 1272/2008:

Classification of this product has been carried out in accordance with CLP Regulation (EC) No 1272/2008.

Aquatic Chronic 3: Hazardous to the aquatic environment, long-term hazard, Category 3, H412
Eye Dam. 1: Serious eye damage, Category 1, H318
Repr. 1A: Reproductive toxicity, Category 1A , H360Df

2.2 Label elements:

CLP Regulation (EC) No 1272/2008:

Danger

Hazard statements:

Aquatic Chronic 3: H412 - Harmful to aquatic life with long lasting effects.
Eye Dam. 1: H318 - Causes serious eye damage.
Repr. 1A: H360Df - May damage the unborn child. Suspected of damaging fertility.

Precautionary statements:

P101: If medical advice is needed, have product container or label at hand.
P102: Keep out of reach of children.
P201: Obtain special instructions before use.
P280: Wear protective gloves/face protection/protective clothing/respiratory protection/protective footwear.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313: IF exposed or concerned: Get medical advice/attention.
P310: Immediately call a poison center/doctor.
P501: Dispose of contents/container according to the separated collection system used in your municipality.

Supplementary information:

EUH208: Contains carbendazim (ISO), Formaldehyde , octhilinone (ISO), reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce an allergic reaction.

Additional Labelling:

Restricted to professional users
For use in industrial installations or professional treatment only

UFI: CC30-20Q7-J004-NRP8

2.3 Other hazards:

*** Changes with regards to the previous version*

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SECTION 2: HAZARDS IDENTIFICATION ** (continued)

Product fails to meet PBT/vPvB criteria
Endocrine-disrupting properties: The product fails to meet the criteria.

*** Changes with regards to the previous version*

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS **

3.1 Substance:

Non-applicable

3.2 Mixture:

Chemical description: Mixture of substances

Components:

In accordance with Annex II of Regulation (EC) No 1907/2006 (point 3), the product contains:

Identification	Chemical name/Classification		Concentration
CAS: 112-34-5 EC: 203-961-6 Index: 603-096-00-8 REACH: 01-2119475104-44-XXXX	**2-(2-butoxyethoxy)ethanol(1)**	ATP CLP00	**2,5 - <10 %**
	Regulation 1272/2008	Eye Irrit. 2: H319 - Warning	
CAS: 2687-91-4 EC: 220-250-6 Index: 616-208-00-5 REACH: 01-2119472138-36-XXXX	**N-ethyl-2-pyrrolidone(1)**	Self-classified	**2,5 - <10 %**
	Regulation 1272/2008	Eye Dam. 1: H318; Repr. 1B: H360Df - Danger	
CAS: 55965-84-9 EC: Non-applicable Index: 613-167-00-5 REACH: Non-applicable	**reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)(1)**	ATP ATP13	**<1 %**
	Regulation 1272/2008	Acute Tox. 2: H310+H330; Acute Tox. 3: H301; Aquatic Acute 1: H400; Aquatic Chronic 1: H410; Eye Dam. 1: H318; Skin Corr. 1C: H314; Skin Sens. 1A: H317; EUH071 - Danger	
CAS: 330-54-1 EC: 206-354-4 Index: 006-015-00-9 REACH: 01-2119517622-45-XXXX	**diuron (ISO)(1)**	ATP ATP01	**<1 %**
	Regulation 1272/2008	Acute Tox. 4: H302; Aquatic Acute 1: H400; Aquatic Chronic 1: H410; Carc. 2: H351; STOT RE 2: H373 - Warning	
CAS: 10605-21-7 EC: 234-232-0 Index: 613-048-00-8 REACH: Non-applicable	**carbendazim (ISO)(1)**	ATP ATP17	**<1 %**
	Regulation 1272/2008	Aquatic Acute 1: H400; Aquatic Chronic 1: H410; Muta. 1B: H340; Repr. 1B: H360FD; Skin Sens. 1: H317 - Danger	
CAS: 26530-20-1 EC: 247-761-7 Index: 613-112-00-5 REACH: 01-2120768921-45-XXXX	**octhilinone (ISO)(1)**	ATP ATP15	**<1 %**
	Regulation 1272/2008	Acute Tox. 2: H330; Acute Tox. 3: H301+H311; Aquatic Acute 1: H400; Aquatic Chronic 1: H410; Eye Dam. 1: H318; Skin Corr. 1: H314; Skin Sens. 1A: H317; EUH071 - Danger	
CAS: 50-00-0 EC: 200-001-8 Index: 605-001-00-5 REACH: 01-2119488953-20-XXXX	**Formaldehyde (1)**	ATP ATP06	**<1 %**
	Regulation 1272/2008	Acute Tox. 3: H301+H311+H331; Carc. 1B: H350; Muta. 2: H341; Skin Corr. 1B: H314; Skin Sens. 1: H317 - Danger	

(1) Voluntarily-listed substance failing to meet any of the criteria set out in Regulation (EU) No. 2020/878

To obtain more information on the hazards of the substances consult sections 11, 12 and 16.

Other information:

Identification		M-factor	
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)		Acute	100
CAS: 55965-84-9	EC: Non-applicable	Chronic	100
diuron (ISO)		Acute	10
CAS: 330-54-1	EC: 206-354-4	Chronic	10
carbendazim (ISO)		Acute	10
CAS: 10605-21-7	EC: 234-232-0	Chronic	10
octhilinone (ISO)		Acute	100
CAS: 26530-20-1	EC: 247-761-7	Chronic	100

*** Changes with regards to the previous version*

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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS ** (continued)

Identification	Specific concentration limit
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) CAS: 55965-84-9 EC: Non-applicable	% (w/w) >=0,6: Skin Corr. 1C - H314 0,06<= % (w/w) <0,6: Skin Irrit. 2 - H315 % (w/w) >=0,6: Eye Dam. 1 - H318 0,06<= % (w/w) <0,6: Eye Irrit. 2 - H319 % (w/w) >=0,0015: Skin Sens. 1A - H317
octhilinone (ISO) CAS: 26530-20-1 EC: 247-761-7	% (w/w) >=0,0015: Skin Sens. 1A - H317
Formaldehyde CAS: 50-00-0 EC: 200-001-8	% (w/w) >=25: Skin Corr. 1B - H314 5<= % (w/w) <25: Skin Irrit. 2 - H315 % (w/w) >=25: Eye Dam. 1 - H318 5<= % (w/w) <25: Eye Irrit. 2 - H319 % (w/w) >=0,2: Skin Sens. 1 - H317 % (w/w) >=5: STOT SE 3 - H335

*** Changes with regards to the previous version*

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures:

The symptoms resulting from intoxication can appear after exposure, therefore, in case of doubt, seek medical attention for direct exposure to the chemical product or persistent discomfort, showing the SDS of this product.

By inhalation:

This product is not classified as hazardous through inhalation. However, in case of intoxication symptoms it is recommended to remove the person affected from the area of exposure, provide clean air and keep at rest. Request medical attention if symptoms persist.

By skin contact:

This product is not classified as hazardous when in contact with the skin. However, in case of skin contact it is recommended to remove contaminated clothes and shoes, rinse the skin or if necessary shower the affected person thoroughly with cold water and neutral soap. In case of serious reaction consult a doctor.

By eye contact:

Rinse eyes thoroughly with lukewarm water for at least 15 minutes. Do not allow the person affected to rub or close their eyes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, in which case this could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS of the product.

By ingestion/aspiration:

Do not induce vomiting, but if it does happen keep the head down to avoid aspiration. Keep the person affected at rest. Rinse out the mouth and throat, as they may have been affected during ingestion.

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

Acute and delayed effects are indicated in sections 2 and 11.

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

Non-applicable

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media:

Suitable extinguishing media:

Product is non-flammable under normal conditions of storage, handling and use. In the case of combustion as a result of improper handling, storage or use preferably use polyvalent powder extinguishers (ABC powder), in accordance with the Regulation on fire protection systems.

Unsuitable extinguishing media:

Non-applicable

5.2 Special hazards arising from the substance or mixture:

As a result of combustion or thermal decomposition reactive sub-products are created that can become highly toxic and, consequently, can present a serious health risk.

5.3 Advice for firefighters:

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SECTION 5: FIREFIGHTING MEASURES (continued)

Depending on the magnitude of the fire it may be necessary to use full protective clothing and self-contained breathing apparatus (SCBA). Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...) in accordance with Directive 89/654/EC.

Additional provisions:

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Eliminate all sources of ignition. In case of fire, cool the storage containers and tanks for products susceptible to combustion, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:

For non-emergency personnel:

Isolate leaks provided that there is no additional risk for the people performing this task. Personal protection equipment must be used against potential contact with the spilt product (See section 8). Evacuate the area and keep out those who do not have protection.

For emergency responders:

Wear protective equipment. Keep unprotected persons away. See section 8.

6.2 Environmental precautions:

Avoid at all cost any type of spillage into an aqueous medium. Contain the product absorbed appropriately in hermetically sealed containers. Notify the relevant authority in case of exposure to the general public or the environment.

6.3 Methods and material for containment and cleaning up:

It is recommended:

Absorb the spillage using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. For any concern related to disposal consult section 13.

6.4 Reference to other sections:

See sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling:

A.- General precautions for safe use

Comply with the current legislation concerning the prevention of industrial risks with regards manually handling weights. Maintain order, cleanliness and dispose of using safe methods (section 6).

B.- Technical recommendations for the prevention of fires and explosions

Product is non-flammable under normal conditions of storage, handling and use. It is recommended to transfer at slow speeds to avoid the generation of electrostatic charges that can affect flammable products. Consult section 10 for information on conditions and materials that should be avoided.

C.- Technical recommendations on general occupational hygiene

PREGNANT WOMEN SHOULD NOT BE EXPOSED TO THIS PRODUCT. Transfer in designated areas that comply with the necessary safety conditions (emergency showers and eyewash stations in close proximity), using personal protection equipment, especially on the hands and face (See section 8). Limit manual transfers to small amounts only. Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

D.- Technical recommendations to prevent environmental risks

Due to the danger of this product for the environment it is recommended to use it within an area containing contamination control barriers in case of spillage, as well as having absorbent material in close proximity.

7.2 Conditions for safe storage, including any incompatibilities:

A.- Technical measures for storage

Minimum Temp.:	5 ºC
Maximum Temp.:	30 ºC
Maximum time:	12 Months

B.- General conditions for storage

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SECTION 7: HANDLING AND STORAGE (continued)

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

7.3 Specific end use(s):

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters:

Substances whose occupational exposure limits have to be monitored in the workplace (European OEL, not country-specific legislation):

Directive (EU) 2000/39, Directive 2004/37/EC,Directive (EU) 2006/15, Directive (EU) 2009/161, Directive (EU) 2017/164, Directive (EU) 2019/1831:

Identification	Occupational exposure limits		
2-(2-butoxyethoxy)ethanol	IOELV (8h)	10 ppm	67,5 mg/m³
CAS: 112-34-5 EC: 203-961-6	IOELV (STEL)	15 ppm	101,2 mg/m³
Formaldehyde	IOELV (8h)	0,3 ppm	0,37 mg/m³
CAS: 50-00-0 EC: 200-001-8	IOELV (STEL)	0,6 ppm	0,74 mg/m³

DNEL (Workers):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
2-(2-butoxyethoxy)ethanol	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 112-34-5	Dermal	Non-applicable	Non-applicable	83 mg/kg	Non-applicable
EC: 203-961-6	Inhalation	Non-applicable	101,2 mg/m³	67,5 mg/m³	67,5 mg/m³
N-ethyl-2-pyrrolidone	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 2687-91-4	Dermal	Non-applicable	Non-applicable	4 mg/kg	Non-applicable
EC: 220-250-6	Inhalation	Non-applicable	20,1 mg/m³	16,75 mg/m³	10,05 mg/m³
diuron (ISO)	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 330-54-1	Dermal	Non-applicable	Non-applicable	5,79 mg/kg	Non-applicable
EC: 206-354-4	Inhalation	Non-applicable	Non-applicable	0,17 mg/m³	Non-applicable
Formaldehyde	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 50-00-0	Dermal	Non-applicable	Non-applicable	240 mg/kg	Non-applicable
EC: 200-001-8	Inhalation	Non-applicable	0,75 mg/m³	9 mg/m³	0,375 mg/m³

DNEL (General population):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
2-(2-butoxyethoxy)ethanol	Oral	Non-applicable	Non-applicable	5 mg/kg	Non-applicable
CAS: 112-34-5	Dermal	Non-applicable	Non-applicable	50 mg/kg	Non-applicable
EC: 203-961-6	Inhalation	Non-applicable	60,7 mg/m³	40,5 mg/m³	40,5 mg/m³
N-ethyl-2-pyrrolidone	Oral	Non-applicable	Non-applicable	0,5 mg/kg	Non-applicable
CAS: 2687-91-4	Dermal	Non-applicable	Non-applicable	0,5 mg/kg	Non-applicable
EC: 220-250-6	Inhalation	Non-applicable	1,2 mg/m³	1 mg/m³	1,2 mg/m³
Formaldehyde	Oral	Non-applicable	Non-applicable	4,1 mg/kg	Non-applicable
CAS: 50-00-0	Dermal	Non-applicable	Non-applicable	102 mg/kg	Non-applicable
EC: 200-001-8	Inhalation	Non-applicable	Non-applicable	3,2 mg/m³	0,1 mg/m³

PNEC:

Identification				
2-(2-butoxyethoxy)ethanol	STP	200 mg/L	Fresh water	1,1 mg/L
CAS: 112-34-5	Soil	0,32 mg/kg	Marine water	0,11 mg/L
EC: 203-961-6	Intermittent	11 mg/L	Sediment (Fresh water)	4,4 mg/kg
	Oral	0,056 g/kg	Sediment (Marine water)	0,44 mg/kg

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Identification				
N-ethyl-2-pyrrolidone	STP	10 mg/L	Fresh water	0,25 mg/L
CAS: 2687-91-4	Soil	0,104 mg/kg	Marine water	0,025 mg/L
EC: 220-250-6	Intermittent	1 mg/L	Sediment (Fresh water)	1,25 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0,125 mg/kg
diuron (ISO)	STP	58 mg/L	Fresh water	0,00032 mg/L
CAS: 330-54-1	Soil	0,012 mg/kg	Marine water	0,000032 mg/L
EC: 206-354-4	Intermittent	0,00022 mg/L	Sediment (Fresh water)	0,052 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0,005 mg/kg
octhilinone (ISO)	STP	Non-applicable	Fresh water	0,0022 mg/L
CAS: 26530-20-1	Soil	0,0082 mg/kg	Marine water	0,00022 mg/L
EC: 247-761-7	Intermittent	0,00122 mg/L	Sediment (Fresh water)	0,0475 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0,00475 mg/kg
Formaldehyde	STP	0,19 mg/L	Fresh water	0,44 mg/L
CAS: 50-00-0	Soil	0,2 mg/kg	Marine water	0,44 mg/L
EC: 200-001-8	Intermittent	4,44 mg/L	Sediment (Fresh water)	2,3 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	2,3 mg/kg

8.2 Exposure controls:

A.- Individual protection measures, such as personal protective equipment

As a preventative measure it is recommended to use basic Personal Protective Equipment, with the corresponding <<CE marking>> in accordance with Regulation (EU) 2016/425. For more information on Personal Protective Equipment (storage, use, cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For more information see subsection 7.1. All information contained herein is a recommendation which needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal.

B.- Respiratory protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory respiratory tract protection	Filter mask for gases and vapours	CE CAT III	EN 405:2002+A1:2010	Replace when there is a taste or smell of the contaminant inside the face mask. If the contaminant comes with warnings it is recommended to use isolation equipment.

C.- Specific protection for the hands

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory hand protection	Chemical protective gloves (Material: Nitrile, Breakthrough time: > 480 min, Thickness: 0.4 mm)	CE CAT III	EN ISO 21420:2020	Replace the gloves at any sign of deterioration.

As the product is a mixture of several substances, the resistance of the glove material can not be calculated in advance with total reliability and has therefore to be checked prior to the application.

D.- Eye and face protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory face protection	Face shield	CE CAT II	EN 166:2002 EN 167:2002 EN 168:2002 EN ISO 4007:2018	Clean daily and disinfect periodically according to the manufacturer´s instructions. Use if there is a risk of splashing.

E.- Body protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory complete body protection	Disposable clothing for protection against chemical risks	CE CAT III	EN 13034:2005+A1:2009 EN 168:2002 EN ISO 13982-1:2004/A1:2010 EN ISO 6529:2013 EN ISO 6530:2005 EN 464:1994	For professional use only. Clean periodically according to the manufacturer´s instructions.

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory foot protection	Safety footwear for protection against chemical risk	CE CAT III	EN ISO 20345:2011 EN 13832-1:2019	Replace boots at any sign of deterioration.

F.- Additional emergency measures

Emergency measure	Standards	Emergency measure	Standards
 Emergency shower	ANSI Z358-1 ISO 3864-1:2011, ISO 3864-4:2011	 Eyewash stations	DIN 12 899 ISO 3864-1:2011, ISO 3864-4:2011

Environmental exposure controls:

In accordance with the community legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container. For additional information see subsection 7.1.D

Volatile organic compounds:

With regard to Directive 2010/75/EU, this product has the following characteristics:

V.O.C. (Supply):	4,01 % weight
V.O.C. density at 20 ºC:	43,35 kg/m³ (43,35 g/L)
Average carbon number:	5,99
Average molecular weight:	113,24 g/mol

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

For complete information see the product datasheet.

Appearance:

Physical state at 20 ºC:	Liquid
Appearance:	Characteristic
Colour:	Colourless
Odour:	Characteristic
Odour threshold:	Non-applicable *

Volatility:

Boiling point at atmospheric pressure:	Non-applicable *
Vapour pressure at 20 ºC:	Non-applicable *
Vapour pressure at 50 ºC:	11255,72 Pa (11,26 kPa)
Evaporation rate at 20 ºC:	Non-applicable *

Product description:

Density at 20 ºC:	1080,1 kg/m³
Relative density at 20 ºC:	Non-applicable *
Dynamic viscosity at 20 ºC:	Non-applicable *
Kinematic viscosity at 20 ºC:	Non-applicable *
Kinematic viscosity at 40 ºC:	Non-applicable *
Concentration:	Non-applicable *
pH:	≈7 - 9
Vapour density at 20 ºC:	Non-applicable *
Partition coefficient n-octanol/water 20 ºC:	Non-applicable *

*Not relevant due to the nature of the product, not providing information property of its hazards.

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)

Solubility in water at 20 ºC:	Non-applicable *
Solubility properties:	Water-soluble
Decomposition temperature:	Non-applicable *
Melting point/freezing point:	Non-applicable *
Flammability:	
Flash Point:	Non Flammable (>60 ºC)
Flammability (solid, gas):	Non-applicable *
Autoignition temperature:	Non-applicable *
Lower flammability limit:	Non-applicable *
Upper flammability limit:	Non-applicable *
Particle characteristics:	
Median equivalent diameter:	Non-applicable

9.2 Other information:

Information with regard to physical hazard classes:

Explosive properties:	Non-applicable *
Oxidising properties:	Non-applicable *
Corrosive to metals:	Non-applicable *
Heat of combustion:	Non-applicable *
Aerosols-total percentage (by mass) of flammable components:	Non-applicable *
Other safety characteristics:	
Surface tension at 20 ºC:	Non-applicable *
Refraction index:	Non-applicable *

*Not relevant due to the nature of the product, not providing information property of its hazards.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity:

No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7.

10.2 Chemical stability:

Chemically stable under the indicated conditions of storage, handling and use.

10.3 Possibility of hazardous reactions:

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

10.4 Conditions to avoid:

Applicable for handling and storage at room temperature:

Shock and friction	Contact with air	Increase in temperature	Sunlight	Humidity
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

10.5 Incompatible materials:

Acids	Water	Oxidising materials	Combustible materials	Others
Avoid strong acids	Not applicable	Avoid direct impact	Not applicable	Avoid alkalis or strong bases

10.6 Hazardous decomposition products:

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO_2), carbon monoxide and other organic compounds.

SECTION 11: TOXICOLOGICAL INFORMATION **

*** Changes with regards to the previous version*

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SECTION 11: TOXICOLOGICAL INFORMATION ** (continued)

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

The experimental information related to the toxicological properties of the product itself is not available

Contains glycols. It is recommended not to breathe the vapours for prolonged periods of time due to the possibility of effects that are hazardous to the health .

Dangerous health implications:

In case of exposure that is repetitive, prolonged or at concentrations higher than the recommended occupational exposure limits, adverse effects on health may result, depending on the means of exposure:

A- Ingestion (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous for consumption. For more information see section 3.
- Corrosivity/Irritability: Based on available data, the classification criteria are not met. However, it does contain substances classified as hazardous for this effect. For more information see section 3.

B- Inhalation (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met. However, it contains substances classified as hazardous for inhalation. For more information see section 3.
- Corrosivity/Irritability: Prolonged inhalation of the product is corrosive to mucous membranes and the upper respiratory tract

C- Contact with the skin and the eyes (acute effect):

- Contact with the skin: Based on available data, the classification criteria are not met. However, it contains substances classified as hazardous for skin contact. For more information see section 3.
- Contact with the eyes: Produces serious eye damage after contact.

D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):

- Carcinogenicity: Based on available data, the classification criteria are not met. However, it contains substances classified as dangerous with carcinogenic effects. For more information see section 3.
  IARC: Formaldehyde (1)
- Mutagenicity: Based on available data, the classification criteria are not met. However, it contains substances classified as dangerous with mutagenic effects. For more information see section 3.
- Reproductive toxicity: May damage the unborn child. Suspected of damaging fertility.

E- Sensitizing effects:

- Respiratory: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous with sensitising effects. For more information see section 3.
- Skin: Based on available data, the classification criteria are not met. However, it contains substances classified as dangerous with sensitising effects. For more information see section 3.

F- Specific target organ toxicity (STOT) - single exposure:

Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

G- Specific target organ toxicity (STOT)-repeated exposure:

- Specific target organ toxicity (STOT)-repeated exposure: Based on available data, the classification criteria are not met. However, it does contain substances which are classified as dangerous due to repetitive exposure. For more information see section 3.
- Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

H- Aspiration hazard:

Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

Other information:

Non-applicable

Specific toxicology information on the substances:

*** Changes with regards to the previous version*

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SECTION 11: TOXICOLOGICAL INFORMATION ** (continued)

Identification	Acute toxicity		Genus
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	LD50 oral	64 mg/kg	Rat
CAS: 55965-84-9	LD50 dermal	87,12 mg/kg	Rabbit
EC: Non-applicable	LC50 inhalation	0,33 mg/L (4 h)	Rat
carbendazim (ISO)	LD50 oral	6400 mg/kg	Rat
CAS: 10605-21-7	LD50 dermal	8500 mg/kg	Rabbit
EC: 234-232-0	LC50 inhalation	Non-applicable	
octhilinone (ISO)	LD50 oral	125 mg/kg	
CAS: 26530-20-1	LD50 dermal	311 mg/kg	
EC: 247-761-7	LC50 inhalation	0,5 mg/L (ATEi)	
Formaldehyde	LD50 oral	100 mg/kg	
CAS: 50-00-0	LD50 dermal	300 mg/kg	
EC: 200-001-8	LC50 inhalation	3 mg/L (ATEi)	
N-ethyl-2-pyrrolidone	LD50 oral	3200 mg/kg	Rat
CAS: 2687-91-4	LD50 dermal	Non-applicable	
EC: 220-250-6	LC50 inhalation	Non-applicable	
diuron (ISO)	LD50 oral	1017 mg/kg	Rat
CAS: 330-54-1	LD50 dermal	Non-applicable	
EC: 206-354-4	LC50 inhalation	Non-applicable	

11.2 Information on other hazards:

Endocrine disrupting properties

Endocrine-disrupting properties: The product fails to meet the criteria.

Other information

Non-applicable

*** Changes with regards to the previous version*

SECTION 12: ECOLOGICAL INFORMATION **

The experimental information related to the eco-toxicological properties of the product itself is not available

12.1 Toxicity:

Acute toxicity:

Identification	Concentration		Species	Genus
2-(2-butoxyethoxy)ethanol	LC50	1300 mg/L (96 h)	Lepomis macrochirus	Fish
CAS: 112-34-5	EC50	2850 mg/L (24 h)	Daphnia magna	Crustacean
EC: 203-961-6	EC50	53 mg/L (192 h)	Microcystis aeruginosa	Algae
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	LC50	>0.1 - 1 mg/L (96 h)		Fish
CAS: 55965-84-9	EC50	>0.1 - 1 mg/L (48 h)		Crustacean
EC: Non-applicable	EC50	>0.1 - 1 mg/L (72 h)		Algae
diuron (ISO)	LC50	6,6 mg/L (96 h)	Leuciscus idus	Fish
CAS: 330-54-1	EC50	1,4 mg/L (48 h)	Daphnia magna	Crustacean
EC: 206-354-4	EC50	0,022 mg/L (96 h)	Scenedesmus subspicatus	Algae
carbendazim (ISO)	LC50	0,3 mg/L (96 h)	Oncorhynchus mykiss	Fish
CAS: 10605-21-7	EC50	0,22 mg/L (48 h)	Daphnia magna	Crustacean
EC: 234-232-0	EC50	Non-applicable		
octhilinone (ISO)	LC50	>0.1 - 1 mg/L (96 h)		Fish
CAS: 26530-20-1	EC50	>0.1 - 1 mg/L (48 h)		Crustacean
EC: 247-761-7	EC50	>0.1 - 1 mg/L (72 h)		Algae
Formaldehyde	LC50	100 mg/L (96 h)	Lepomis macrochirus	Fish
CAS: 50-00-0	EC50	42 mg/L (24 h)	Daphnia magna	Crustacean
EC: 200-001-8	EC50	Non-applicable		

*** Changes with regards to the previous version*

- CONTINUED ON NEXT PAGE -

SECTION 12: ECOLOGICAL INFORMATION ** (continued)

Chronic toxicity:

Identification	Concentration		Species	Genus
diuron (ISO)	NOEC	0,001 mg/L	Danio rerio	Fish
CAS: 330-54-1 EC: 206-354-4	NOEC	0,56 mg/L	Daphnia magna	Crustacean
Formaldehyde	NOEC	Non-applicable		
CAS: 50-00-0 EC: 200-001-8	NOEC	6,4 mg/L	Daphnia magna	Crustacean

12.2 Persistence and degradability:

Substance-specific information:

Identification	Degradability		Biodegradability	
2-(2-butoxyethoxy)ethanol	BOD5	0,25 g O2/g	Concentration	100 mg/L
CAS: 112-34-5	COD	2,08 g O2/g	Period	28 days
EC: 203-961-6	BOD5/COD	0,12	% Biodegradable	92 %
diuron (ISO)	BOD5	Non-applicable	Concentration	100 mg/L
CAS: 330-54-1	COD	Non-applicable	Period	28 days
EC: 206-354-4	BOD5/COD	Non-applicable	% Biodegradable	0 %
carbendazim (ISO)	BOD5	Non-applicable	Concentration	100 mg/L
CAS: 10605-21-7	COD	Non-applicable	Period	28 days
EC: 234-232-0	BOD5/COD	Non-applicable	% Biodegradable	0 %
Formaldehyde	BOD5	Non-applicable	Concentration	100 mg/L
CAS: 50-00-0	COD	Non-applicable	Period	14 days
EC: 200-001-8	BOD5/COD	Non-applicable	% Biodegradable	92 %

12.3 Bioaccumulative potential:

Substance-specific information:

Identification	Bioaccumulation potential	
2-(2-butoxyethoxy)ethanol	BCF	0.46
CAS: 112-34-5	Pow Log	0.56
EC: 203-961-6	Potential	Low
diuron (ISO)	BCF	64
CAS: 330-54-1	Pow Log	2.68
EC: 206-354-4	Potential	Moderate
carbendazim (ISO)	BCF	4
CAS: 10605-21-7	Pow Log	1.52
EC: 234-232-0	Potential	Low
Formaldehyde	BCF	3
CAS: 50-00-0	Pow Log	0.35
EC: 200-001-8	Potential	Low

12.4 Mobility in soil:

Identification	Absorption/desorption		Volatility	
2-(2-butoxyethoxy)ethanol	Koc	48	Henry	7,2E-9 Pa·m³/mol
CAS: 112-34-5	Conclusion	Very High	Dry soil	No
EC: 203-961-6	Surface tension	3,395E-2 N/m (25 ºC)	Moist soil	No
carbendazim (ISO)	Koc	350	Henry	2,128E-6 Pa·m³/mol
CAS: 10605-21-7	Conclusion	Moderate	Dry soil	Non-applicable
EC: 234-232-0	Surface tension	Non-applicable	Moist soil	Non-applicable
Formaldehyde	Koc	Non-applicable	Henry	Non-applicable
CAS: 50-00-0	Conclusion	Non-applicable	Dry soil	Non-applicable
EC: 200-001-8	Surface tension	1,416E-2 N/m (25 ºC)	Moist soil	Non-applicable

12.5 Results of PBT and vPvB assessment:

Product fails to meet PBT/vPvB criteria

12.6 Endocrine disrupting properties:

*** Changes with regards to the previous version*

- CONTINUED ON NEXT PAGE -

SECTION 12: ECOLOGICAL INFORMATION ** (continued)

Endocrine-disrupting properties: The product fails to meet the criteria.

12.7 Other adverse effects:

Not described

*** Changes with regards to the previous version*

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods:

Code	Description	Waste class (Regulation (EU) No 1357/2014)
	It is not possible to assign a specific code, as it depends on the intended use by the user	Dangerous

Type of waste (Regulation (EU) No 1357/2014):

HP14 Ecotoxic, HP6 Acute Toxicity, HP7 Carcinogenic, HP10 Toxic for reproduction, HP11 Mutagenic, HP4 Irritant — skin irritation and eye damage

Waste management (disposal and evaluation):

Consult the authorized waste service manager on the assessment and disposal operations in accordance with Annex 1 and Annex 2 (Directive 2008/98/EC). As under 15 01 (2014/955/EC) of the code and in case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-dangerous residue. Waste should not be disposed of to drains. See paragraph 6.2.

Regulations related to waste management:

In accordance with Annex II of Regulation (EC) No 1907/2006 (REACH) the community or state provisions related to waste management are stated

Community legislation: Directive 2008/98/EC, 2014/955/EU, Regulation (EU) No 1357/2014

SECTION 14: TRANSPORT INFORMATION **

Transport of dangerous goods by land:

With regard to ADR 2021 and RID 2021:

14.1	**UN number or ID number:**	Non-applicable
14.2	**UN proper shipping name:**	Non-applicable
14.3	**Transport hazard class(es):**	Non-applicable
	Labels:	Non-applicable
14.4	**Packing group:**	Non-applicable
14.5	**Environmental hazards:**	No
14.6	**Special precautions for user**	
	Special regulations:	Non-applicable
	Tunnel restriction code:	Non-applicable
	Physico-Chemical properties:	see section 9
	Limited quantities:	Non-applicable
14.7	**Maritime transport in bulk according to IMO instruments:**	Non-applicable

Transport of dangerous goods by sea:

With regard to IMDG 40-20:

*** Changes with regards to the previous version*

- CONTINUED ON NEXT PAGE -

SECTION 14: TRANSPORT INFORMATION ** (continued)

14.1	**UN number or ID number:**	Non-applicable
14.2	**UN proper shipping name:**	Non-applicable
14.3	**Transport hazard class(es):**	Non-applicable
	Labels:	Non-applicable
14.4	**Packing group:**	Non-applicable
14.5	**Marine pollutant:**	No
14.6	**Special precautions for user**	
	Special regulations:	Non-applicable
	EmS Codes:	
	Physico-Chemical properties:	see section 9
	Limited quantities:	Non-applicable
	Segregation group:	Non-applicable
14.7	**Maritime transport in bulk according to IMO instruments:**	Non-applicable

Transport of dangerous goods by air:

With regard to IATA/ICAO 2022:

14.1	**UN number or ID number:**	Non-applicable
14.2	**UN proper shipping name:**	Non-applicable
14.3	**Transport hazard class(es):**	Non-applicable
	Labels:	Non-applicable
14.4	**Packing group:**	Non-applicable
14.5	**Environmental hazards:**	No
14.6	**Special precautions for user**	
	Physico-Chemical properties:	see section 9
14.7	**Maritime transport in bulk according to IMO instruments:**	Non-applicable

*** Changes with regards to the previous version*

SECTION 15: REGULATORY INFORMATION

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

Regulation (EC) No 528/2012: contains a preservative to protect the initial properties of the treated article. Contains reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1), diuron (ISO), carbendazim (ISO), octhilinone (ISO).

Candidate substances for authorisation under the Regulation (EC) No 1907/2006 (REACH): Non-applicable

Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: Non-applicable

Regulation (EC) No 1005/2009, about substances that deplete the ozone layer: Non-applicable

Article 95, REGULATION (EU) No 528/2012: reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) (Product-type 2, 4, 6, 11, 12, 13) ; diuron (ISO) (Product-type 7, 10) ; carbendazim (ISO) (Product-type 7, 10) ; octhilinone (ISO) (Product-type 6, 7, 8, 9, 10, 11, 13) ; Formaldehyde (Product-type 2, 3, 22)

REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Contains carbendazim (ISO)

Seveso III:

Non-applicable

Limitations to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII REACH, etc ....):

- CONTINUED ON NEXT PAGE -

SECTION 15: REGULATORY INFORMATION (continued)

Product classified hazardous under the CMR. Sale and distribution to the general public is prohibited. Due to its CMR category, it is essential to apply the specific measures for workplace hazard prevention covered in articles 4 and 5 of the 2004/37/EC Directive and later modifications.
Shall not be used in:
—ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,
—tricks and jokes,
—games for one or more participants, or any article intended to be used as such, even with ornamental aspects.
Contains more than 0.0015 % of reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) by weight. The placing on the market of treated articles is subject to the following conditions: | (1) | In view of the risks identified for human health, mixtures treated with or incorporating C(M)IT/MIT (3:1) and placed on the market for use by the general public shall not contain C(M)IT/MIT (3:1) at a concentration triggering classification as skin sensitiser, unless exposure can be avoided by other means than the wearing of personal protective equipment. | (2) | In view of the risks identified for human health, liquid detergents treated with or incorporating C(M)IT/MIT (3:1) and placed on the market for use by professional users shall not contain C(M)IT/MIT (3:1) at a concentration triggering classification as skin sensitiser, unless exposure can be avoided by other means than the wearing of personal protective equipment. | (3) | In view of the risks identified for human health, mixtures treated with or incorporating C(M)IT/MIT (3:1), other than liquid detergents, and placed on the market for use by professional users shall not contain C(M)IT/MIT (3:1) at a concentration triggering classification as skin sensitiser, unless exposure can be avoided, including by the wearing of personal protective equipment. | (4) | The person responsible for the placing on the market of a treated article treated with or incorporating C(M)IT/MIT (3:1) shall ensure that the label of that treated article provides the information listed in the second subparagraph of Article 58(3) of Regulation (EU) No 528/2012.

Specific provisions in terms of protecting people or the environment:

It is recommended to use the information included in this safety data sheet as a basis for conducting workplace-specific risk assessments in order to establish the necessary risk prevention measures for the handling, use, storage and disposal of this product.

Other legislation:

The product could be affected by sectorial legislation

15.2 Chemical safety assessment:

The supplier has not carried out evaluation of chemical safety.

SECTION 16: OTHER INFORMATION **

Legislation related to safety data sheets:
The SDS shall be supplied in an official language of the country where the product is placed on the market. This safety data sheet has been designed in accordance with ANNEX II-Guide to the compilation of safety data sheets of Regulation (EC) No 1907/2006 (COMMISSION REGULATION (EU) 2020/878).

Modifications related to the previous Safety Data Sheet which concerns the ways of managing risks.:

*** Changes with regards to the previous version*

- CONTINUED ON NEXT PAGE -

SECTION 16: OTHER INFORMATION ** (continued)

COMPOSITION/INFORMATION ON INGREDIENTS (SECTION 3, SECTION 11, SECTION 12):
- New declared substances
  - diuron (ISO) (330-54-1)
  - carbendazim (ISO) (10605-21-7)
  - octhilinone (ISO) (26530-20-1)
  - Formaldehyde (50-00-0)
- Removed substances
  - 3-iodo-2-propynyl Butylcarbamate (55406-53-6)
  - isoproturon (ISO) (34123-59-6)

Substances that contribute to the classification (SECTION 2):
- Removed substances
  - 3-iodo-2-propynyl Butylcarbamate (55406-53-6)
  - reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) (55965-84-9)
  - N-ethyl-2-pyrrolidone (2687-91-4)

CLP Regulation (EC) No 1272/2008 (SECTION 2, SECTION 16):
- Pictograms
- Hazard statements
- Precautionary statements
- Supplementary information
- Substances contained in EUH208:
  - New declared substances
    - carbendazim (ISO) (10605-21-7)
    - Formaldehyde (50-00-0)
    - octhilinone (ISO) (26530-20-1)
    - reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) (55965-84-9)
  - Removed substances
    - 3-iodo-2-propynyl Butylcarbamate (55406-53-6)

TRANSPORT INFORMATION (SECTION 14):
- UN number
- Packing group

Texts of the legislative phrases mentioned in section 2:

H412: Harmful to aquatic life with long lasting effects.
H318: Causes serious eye damage.
H360Df: May damage the unborn child. Suspected of damaging fertility.

Texts of the legislative phrases mentioned in section 3:

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3

CLP Regulation (EC) No 1272/2008:

Acute Tox. 2: H310+H330 - Fatal in contact with skin or if inhaled.
Acute Tox. 2: H330 - Fatal if inhaled.
Acute Tox. 3: H301 - Toxic if swallowed.
Acute Tox. 3: H301+H311 - Toxic if swallowed or in contact with skin.
Acute Tox. 3: H301+H311+H331 - Toxic if swallowed, in contact with skin or if inhaled.
Acute Tox. 4: H302 - Harmful if swallowed.
Aquatic Acute 1: H400 - Very toxic to aquatic life.
Aquatic Chronic 1: H410 - Very toxic to aquatic life with long lasting effects.
Carc. 1B: H350 - May cause cancer.
Carc. 2: H351 - Suspected of causing cancer.
Eye Dam. 1: H318 - Causes serious eye damage.
Eye Irrit. 2: H319 - Causes serious eye irritation.
Muta. 1B: H340 - May cause genetic defects.
Muta. 2: H341 - Suspected of causing genetic defects.
Repr. 1B: H360Df - May damage the unborn child. Suspected of damaging fertility.
Repr. 1B: H360FD - May damage fertility. May damage the unborn child.
Skin Corr. 1: H314 - Causes severe skin burns and eye damage.
Skin Corr. 1B: H314 - Causes severe skin burns and eye damage.
Skin Corr. 1C: H314 - Causes severe skin burns and eye damage.
Skin Sens. 1: H317 - May cause an allergic skin reaction.
Skin Sens. 1A: H317 - May cause an allergic skin reaction.
STOT RE 2: H373 - May cause damage to organs through prolonged or repeated exposure.

Advice related to training:

*** Changes with regards to the previous version*

- CONTINUED ON NEXT PAGE -

SECTION 16: OTHER INFORMATION ** (continued)

Training is recommended in order to prevent industrial risks for staff using this product and to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

Principal bibliographical sources:

http://echa.europa.eu
http://eur-lex.europa.eu

Abbreviations and acronyms:

ADR: European agreement concerning the international carriage of dangerous goods by road
IMDG: International maritime dangerous goods code
IATA: International Air Transport Association
ICAO: International Civil Aviation Organisation
COD: Chemical Oxygen Demand
BOD5: 5day biochemical oxygen demand
BCF: Bioconcentration factor
LD50: Lethal Dose 50
LC50: Lethal Concentration 50
EC50: Effective concentration 50
LogPOW: Octanolwater partition coefficient
Koc: Partition coefficient of organic carbon
UFI: unique formula identifier
IARC: International Agency for Research on Cancer

*** Changes with regards to the previous version*

- END OF SAFETY DATA SHEET -