ARTIGUM TOP
Code: 08022MARGRIS

Version: 6 Revision: 29/08/2016 Previous revision: 18/02/2013 Date of printing: 29/08/2016

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

1.1 PRODUCT IDENTIFIER: ARTIGUM TOP
Code: 08022MARGRIS

1.2 RELEVANT IDENTIFIED USES AND USES ADVISED AGAINST:
Intended uses (main technical functions): [_] Industrial [X] Professional [X] Consumers
Decorative paint.
Sectors of use:
Consumer uses (SU21).
Uses advised against:
None. As there is not classified as dangerous, this product can be used in ways other than the identified uses, but all uses have to be consistent with the safety guidelines provided.
Restrictions on manufacture, placing on market and use, according to Annex XVII of Regulation (EC) No. 1907/2006:
Not restricted.

1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET:
ARTIC INDUSTRIAL QUÍMICA, S.A.
Ctra. de Gerb, 51-73 - 25600 - BALAGUER (Lleida)
Phone: (+34) 902 431250 - Fax: (+34) 973 445045
E-mail address of the person responsible for the safety data sheet:
info@articsa.net

1.4 EMERGENCY TELEPHONE NUMBER: (+34) 973 450717 (9:00-13:00 / 15:00-18:00 h.) (working hours)

SECTION 2 : HAZARDS IDENTIFICATION

2.1 CLASSIFICATION OF THE SUBSTANCE OR MIXTURE:
This product is not classified as dangerous. in accordance with Regulation (EC) No. 1272/2008~605/2014 (CLP)

Note: When in section 3 a range of percentages is used, the health and environmental hazards describe the effects of the highest concentration of each component, but below the maximum value.

Note: This product does not require a material safety data sheet (MSDS) according to the Regulation (EC) no. 2015/830. When used as recommended or under ordinary conditions, it should not present a physicochemical, health safety or environmental hazard. However, an MSDS can be provided as a courtesy in response to a customer request.

2.2 LABEL ELEMENTS:
This product does not require pictograms, in accordance with Regulation (EC) No. 1272/2008~605/2014 (CLP)
Hazard statements:
None.
Precautionary statements:

P102	Keep out of reach of children.
P271	Use only outdoors or in a well-ventilated area.
P280B	Wear protective gloves and eye protection .
P273	Avoid release to the environment.

Supplementary statements:

EUH208	Contains 1,2-benzisothiazol-3(2H)-one, mixture CIT EC 247-500-7 MIT EC 220-239-6 (3:1). May produce an allergic reaction.
EUB174	Contains diuron (ISO), pyrithione zinc, 2-octyl-2H-isothiazol-3-one to protect the film. See information supplied by the manufacturer.

Hazardous ingredients:
None in a percentage equal to or higher than the limit for the name.

2.3 OTHER HAZARDS:
Hazards which do not result in classification but which may contribute to the overall hazards of the mixture:
Other physicochemical hazards: # *No other relevant adverse effects are known.*
Other adverse human health effects: # *Prolonged exposure to vapours may produce transient drowsiness. In case of prolonged contact, the skin may become dry.*
Other negative environmental effects: # *Does not contain substances that fulfil the PBT/vPvB criteria.*

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

3.1 SUBSTANCES:
Not applicable (mixture).

3.2 MIXTURES:
This product is a mixture.
Chemical description:
Solution of barium sulphate in aqueous media.

HAZARDOUS INGREDIENTS:
Substances taking part in a percentage higher than the exemption limit:
None

Impurities:
Does not contain other components or impurities which will influence the classification of the product.

Stabilizers:
None

Reference to other sections:
For more information on hazardous ingredients, see sections 8, 11, 12 and 16.

SUBSTANCES OF VERY HIGH CONCERN (SVHC):
List updated by ECHA on 20/06/2016.
Substances SVHC subject to authorisation, included in Annex XIV of Regulation (EC) no. 1907/2006:
None
Substances SVHC candidate to be included in Annex XIV of Regulation (EC) no. 1907/2006:
None

PERSISTENT, BIOACCUMULABLE AND TOXIC PBT, OR VERY PERSISTENT AND VERY BIOACCUMULABLE VPVB SUBSTANCES:
Does not contain substances that fulfill the PBT/vPvB criteria.

SECTION 4 : FIRST AID MEASURES

4.1
4.2 DESCRIPTION OF FIRST-AID MEASURES AND MAIN SYMPTOMS AND EFFECTS, ACUTE AND DELAYED:

Symptoms may occur after exposure, so that in case of direct exposure to the product, when in doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.

Route of exposure	Symptoms and effects, acute and delayed	Description of first-aid measures
Inhalation:	Normaly does not produce symptoms.	Should there be any symptoms, transfer the person affected to the open air.
Skin:	Normaly does not produce symptoms.	Remove contaminated clothing. Wash thoroughly the affected area with plenty of cold or lukewarm water and neutral soap, or use a suitable skin cleanser. Do not use solvents or thinners.
Eyes:	Normaly does not produce symptoms.	# *Remove contact lenses. Rinse eyes copiously by irrigation with plenty of clean, fresh water, holding the eyelids apart. If irritation persists, consult a physician.*
Ingestion:	If swallowed in high doses, may cause gastrointestinal disturbances.	If swallowed, seek immediate medical attention. Do not induce vomiting, due to the risk of aspiration. Keep the patient at rest.

4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED:
Notes to physician: # *Treatment should be directed at the control of symptoms and the clinical condition of the patient.*
Antidotes and contraindications: Specific antidote not known.

SECTION 5 : FIRE-FIGHTING MEASURES

5.1 EXTINGUISHING MEDIA:
In the case of fire in the surroundings, all extinguishing agents are allowed.

5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE:
As consequence of combustion or thermal decomposition, hazardous products may be produced: carbon monoxide, carbon dioxide. Exposure to combustion or decomposition products may be a hazard to health.

5.3 ADVICE FOR FIREFIGHTERS:
Special protective equipment: # *Depending on magnitude of fire, heat-proof protective clothing may be required, appropriate independent breathing apparatus, gloves, protective glasses or face masks and boots. If the fire-proof protective equipment is not available or not used, combat fire from a sheltered position or at a safe distance. The standard EN469 provides a basic level of protection for chemical incidents.*
Other recommendations: Cool with water the tanks, cisterns or containers close to sources of heat or fire. Bear in mind the direction of the wind. Do not allow fire-fighting residue to enter drains, sewers or water courses.

SECTION 6 : ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES:
Avoid direct contact with this product.

6.2 ENVIRONMENTAL PRECAUTIONS:
Avoid contamination of drains, surface or subterranean water and soil. In the case of large scale spills or when the product contaminates lakes, rivers or sewages, inform the appropriate authorities in accordance with local regulations.

6.3 METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP:
Contain and mop up spills with absorbent materials (sawdust, earth, sand, vermiculite, diatomaceous earth, etc..). Avoid use of solvents. Keep the remains in a closed container.

6.4 REFERENCE TO OTHER SECTIONS:
For contact information in case of emergency, see section 1.
For information on safe handling, see section 7.
For exposure controls and personal protection measures, see section 8.
For subsequent waste disposal, follow the recommendations in section 13.

SECTION 7 : HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING:

Comply with the existing legislation on health and safety at work.

General recommendations:

Avoid any type of leakage or escape. Keep the container tightly closed.

Recommendations for the prevention of fire and explosion risks:

The product is not liable to ignite, deflagrate or explode, and does not sustain the combustion reaction by oxygen from air in the environment in which it is, so it is not included in the scope of Directive 94/9/EC concerning equipment and protective systems intended for use in potentially explosive atmospheres. Also they are not applicable the provisions of the ITC MIE BT-29 on the detailed requirements for electrical installations in locals with risk of fire or explosion.

Recommendations for the prevention of toxicological risks:

Do not eat, drink or smoke in application and drying areas. After handling, wash hands with soap and water. For exposure controls and personal protection measures, see section 8.

Recommendations for the prevention of environmental contamination:

Avoid any spillage in the environment. Pay special attention to the cleaning water. In the case of accidental spillage, follow the instructions indicated in section 6.

7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES:

Forbid the entry to unauthorized persons. Keep out of reach of children. Keep away from sources of heat. If possible, avoid direct contact with sunlight. In order to avoid leakages, the containers, after use, should be closed carefully and placed in a vertical position. For more information, see section 10.

Class of store	:	# *According to current legislation.*
Maximum storage period	:	24. months
Temperature interval	:	min: 5. ºC, max: 40. ºC (recommended).

Incompatible materials:

Keep away from oxidixing agents, from strongly alkaline and strongly acid materials.

Type of packaging:

According to current legislation.

Limit quantity (Seveso III): # *Directive 2012/18/EU:*

No aplicable.

7.3 SPECIFIC END USES:

For the use of this product do not exist particular recommendations apart from that already indicated.

SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1

CONTROL PARAMETERS:

 # If a product contains ingredients with exposure limits, may be necessary a personnel monitoring, work place or biological, to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to EN689, EN14042 and EN482 standard concerning methods for assesing the exposure by inhalation to chemical agents, and exposure to chemical and biological agents. Reference should be also made to national guidance documents for methods for the determination of dangerous substances.

OCCUPATIONAL EXPOSURE LIMIT VALUES (TLV)

AGCIH 2014 Year	TLV-TWA ppm	TLV-TWA mg/m3	TLV-STEL - Ceiling value. ppm	TLV-STEL - Ceiling value. mg/m3	Remarks
1,2-benzisothiazol-3(2H)-one	-	0.10	-	0.060	Recommended
Mixture CIT EC 247-500-7 MIT EC 220-239-6 (3:1)	-	0.080	-	0.23	Recommended

TLV - Threshold Limit Value, TWA - Time Weighted Average, STEL - Short Term Exposure Limit.

BIOLOGICAL LIMIT VALUES:
Not stablished

DERIVED NO-EFFECT LEVEL (DNEL):
Derived no-effect level (DNEL) is a level of exposure that is considered safe, derived from toxicity data according to specific guidances included in REACH. DNEL values may differ from a occupational exposure limit (OEL) for the same chemical. OEL values may come recommended by a particular company, a government regulatory agency or an organization of experts. Although considered protective of health, the OEL values are derived by a process different of REACH.

	DNEL Inhalation mg/m3		DNEL Cutaneous mg/kg bw/d		DNEL Oral mg/kg bw/d	
Derived no-effect level, workers: - Systemic effects, acute and chronic:						
1,2-benzisothiazol-3(2H)-one	- (a)	- (c)	- (a)	- (c)	- (a)	- (c)
Mixture CIT EC 247-500-7 MIT EC 220-239-6 (3:1)	- (a)	- (c)	- (a)	- (c)	- (a)	- (c)
	DNEL Inhalation mg/m3		**DNEL Cutaneous mg/cm2**		**DNEL Eyes mg/cm2**	
Derived no-effect level, workers: - Local effects, acute and chronic:						
1,2-benzisothiazol-3(2H)-one	- (a)	- (c)	- (a)	- (c)	- (a)	- (c)
Mixture CIT EC 247-500-7 MIT EC 220-239-6 (3:1)	- (a)	- (c)	- (a)	- (c)	- (a)	- (c)
	DNEL Inhalation mg/m3		**DNEL Cutaneous mg/kg bw/d**		**DNEL Oral mg/kg bw/d**	
Derived no-effect level, general population: - Systemic effects, acute and chronic:						
1,2-benzisothiazol-3(2H)-one	- (a)	- (c)	- (a)	- (c)	- (a)	- (c)
Mixture CIT EC 247-500-7 MIT EC 220-239-6 (3:1)	- (a)	- (c)	- (a)	- (c)	- (a)	- (c)
	DNEL Inhalation mg/m3		**DNEL Cutaneous mg/cm2**		**DNEL Eyes mg/cm2**	
Derived no-effect level, general population: - Local effects, acute and chronic:						
1,2-benzisothiazol-3(2H)-one	- (a)	- (c)	- (a)	- (c)	- (a)	- (c)
Mixture CIT EC 247-500-7 MIT EC 220-239-6 (3:1)	- (a)	- (c)	- (a)	- (c)	- (a)	- (c)

(-) - DNEL not available (without data of registration REACH).

PREDICTED NO-EFFECT CONCENTRATION (PNEC):

	PNEC Fresh water mg/l	PNEC Marine mg/l	PNEC Intermittent mg/l
Predicted no-effect concentration, aquatic organisms: - Fresh water, marine water and intermitent release:			
1,2-benzisothiazol-3(2H)-one	-	-	-
Mixture CIT EC 247-500-7 MIT EC 220-239-6 (3:1)	-	-	-
	PNEC STP mg/l	**PNEC Sediments mg/kg dry weight**	**PNEC Sediments mg/kg dry weight**
- Wastewater treatment plants (STP) and sediments in fresh- and marine water:			
1,2-benzisothiazol-3(2H)-one	-	-	-
Mixture CIT EC 247-500-7 MIT EC 220-239-6 (3:1)	-	-	-
	PNEC Air mg/m3	**PNEC Soil mg/kg dry weight**	**PNEC Oral mg/kg bw/d**
Predicted no-effect concentration, terrestrial organisms: - Air, soil and effects for predators and humans:			
1,2-benzisothiazol-3(2H)-one	-	-	-
Mixture CIT EC 247-500-7 MIT EC 220-239-6 (3:1)	-	-	-

(-) - PNEC not available (without data of registration REACH).

8.2 EXPOSURE CONTROLS:

ENGINEERING MEASURES:

Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction.

Protection of respiratory system:
Protection of eyes and face: # *It is recommended to dispose of water taps or sources with clean water close to the working area.*
Protection of hands and skin: # *It is recommended to dispose of water taps or sources with clean water close to the working area. Barrier creams may help to protect the exposed areas of the skin. Barrier creams should not be applied once exposure has occurred.*

OCUPATIONAL EXPOSURE CONTROLS: Directive 89/686/EEC~96/58/EC:
As a general measure on prevention and safety in the work place, we recommend the use of a basic personal protection equipment (PPE), with the corresponding EC marking. For more information on personal protective equipment (storage, use, cleaning, maintenance, type and characteristics of the PPE, protection class, marking, category, CEN norm, etc..), you should consult the informative brochures provided by the manufacturers of PPE.

Mask:	# *No.*
Goggles: ✓	# *Safety goggles with suitable lateral protection (EN166). Clean daily and disinfect at regular intervals in accordance with the instructions of the manufacturer.*
Face shield:	No.
Gloves: ✓	# *Gloves resistant against chemicals (EN374). When it can be a repeated or prolonged contact, it is recommended to use gloves with a protection level 5 or higher, with a breakthrough time >240 min. When you only expects a short contact, it is recommended to use gloves with a protection level 2 or higher, with a breakthrough time >30 min. The breakthrough time of the selected glove material should be in accordance with the pretended period of use. There are several factors (for example, temperature), they do in practice the period of use of a protective gloves resistant against chemicals is clearly lower than the established standard EN374. Due to the wide variety of circumstances and possibilities, we must have in mind the manual of instructions from manufacturers of gloves. The gloves should be immediately replaced when any sign of degradation is noted.*
Boots:	No.
Apron:	No.
Clothing:	# *No.*

Thermal hazards:
Not applicable (the product is handled at room temperature).

ENVIRONMENTAL EXPOSURE CONTROLS:
Avoid any spillage in the environment.

Spills on the soil: Prevent contamination of soil.

Spills in water: Harmful to aquatic organisms. May cause long-term adverse effects on the aquatic environment. Do not allow to escape into drains, sewers or water courses.
- Water Control Act: # *Este producto contiene las siguientes sustancias incluidas en la lista de sustancias prioritarias en el ámbito de la política de aguas, según la Directiva 2000/60/CE~2013/39/UE: Diurón.*

Emissions to the atmosphere: Not applicable.

SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES:

Appearance

- Physical state	:	Liquid.		
- Colour	:	# *See the colour in the package.*		
- Odour	:	Characteristic		
- Odour threshold	:	Not available (mixture).		
pH-value				
- pH	:	8.5 ± 0.5	at 20ºC	
Change of state				
- Melting point	:	# *Not available*		
- Initial boiling point	:	> 100.	ºC at 760 mmHg	
Density				
- Relative density	:	1.3 ± 0.02	at 20/4ºC	Relative water
Stability				
- Decomposition temperature	:	Not available		
Viscosity:				
- Dynamic viscosity	:	55. ± 5.	Poise 23ºC	
Volatility:				
- Vapour pressure	:	# *17.5*	mmHg at 20ºC	
- Vapour pressure	:	12.2	kPa at 50ºC	
Solubility(ies)				
- Solubility in water:	:	Miscible		
- Solubility in oils and fats:	:	# *Not available*		
Flammability:				
- Flash point	:	# *Not flammable*		
- Autoignition temperature	:	Not applicable (do not support combustion).		

Explosive properties:
Not available.
Oxidizing properties:
Not classified as oxidizing product.

9.2 OTHER INFORMATION:

- Heat of combustion	:	# *1671.*	Kcal/kg
- Solids	:	# *52.6*	% Weight
- VOC (supply)	:	19.9	g/l

The values indicated do not always coincide with product specifications. The data for the product specifications can be found in the technical data sheet of the same. For additional information concerning physical and chemical properties related to safety and environment, see sections 7 and 12.

SECTION 10 : STABILITY AND REACTIVITY

10.1 REACTIVITY:
Corrosivity to metals: It is not corrosive to metals.
Pyrophorical properties: It is not pyrophoric.

10.2 CHEMICAL STABILITY:
Stable under recommended storage and handling conditions.

10.3 POSSIBILITY OF HAZARDOUS REACTIONS:
Possible dangerous reaction with oxidizing agents.

10.4 CONDITIONS TO AVOID:
Heat: Keep away from sources of heat.
Light: If possible, avoid direct contact with sunlight.
Air: Not applicable.
Pressure: Not applicable.
Shock: Not applicable.

10.5 INCOMPATIBLE MATERIALS:
Keep away from oxidixing agents, from strongly alkaline and strongly acid materials.

10.6 HAZARDOUS DECOMPOSITION PRODUCTS:
As consequence of thermal decomposition, hazardous products may be produced: sulfur oxides.

SECTION 11 : TOXICOLOGICAL INFORMATION

No experimental toxicological data on the preparation is available. The toxicological classification for these mixture has been carried out by using the conventional calculation method of the Regulation (EC) No. 1272/2008~605/2014 (CLP).

11.1 INFORMATION ON TOXICOLOGICAL EFFECTS:

ACUTE TOXICITY:

Dose and lethal concentrations for individual ingredients :	DL50 (OECD 401) mg/kg oral	DL50 (OECD 402) mg/kg cutaneous	CL50 (OECD 403) mg/m3.4h inhalation
1,2-benzisothiazol-3(2H)-one	1020. Rat	> 2000. Rat	> 2050. Rat
Pyrithione zinc	269. Rat	3380. Rat	> 1030. Rat
Mixture CIT EC 247-500-7 MIT EC 220-239-6 (3:1)	67. Rat	140. Rat	> 1230. Rat

No observed adverse effect level
Not available
Lowest observed adverse effect level
Not available

INFORMATION ON LIKELY ROUTES OF EXPOSURE: Acute toxicity:

Routes of exposure	Acute toxicity	Cat.	Main effects, acute and/or delayed
Inhalation: **Not classified**	ATE > 20000 mg/m3	-	# *Not classified as a product with acute toxicity if inhaled (based on available data, the classification criteria are not met).*
Skin: **Not classified**	ATE > 2000 mg/kg	-	# *Not classified as a product with acute toxicity in contact with skin (based on available data, the classification criteria are not met).*
Eyes: **Not classified**	Not available	-	# *Not classified as a product with acute toxicity by eye contact (lack of data).*
Ingestion: **Not classified**	ATE > 5000 mg/kg	-	# *Not classified as a product with acute toxicity if swallowed (based on available data, the classification criteria are not met).*

CORROSION / IRRITATION / SENSITISATION :

Danger class	Target organs	Cat.	Main effects, acute and/or delayed
Respiratory corrosion/irritation: Not classified	-	-	Not classified as a product corrosive or irritant by inhalation (based on available data, the classification criteria are not met).
Skin corrosion/irritation: Not classified	-	-	Not classified as a product corrosive or irritant in contact with skin (based on available data, the classification criteria are not met).
Serious eye damage/irritation: Not classified	-	-	Not classified as a product corrosive or irritant in contact with eyes (based on available data, the classification criteria are not met).
Respiratory sensitisation: Not classified	-	-	Not classified as a product sensitising by inhalation (based on available data, the classification criteria are not met).
Skin sensitisation: Not classified	-	-	Not classified as a product sensitising by skin contact (based on available data, the classification criteria are not met).

· Contains 1,2-benzisothiazol-3(2H)-one, mixture CIT EC 247-500-7 MIT EC 220-239-6 (3:1). May produce an allergic reaction.

ASPIRATION HAZARD:

Danger class	Target organs	Cat.	Main effects, acute and/or delayed
Aspiration hazard: **Not classified**	-	-	Not classified as a product hazardous by aspiration (based on available data, the classification criteria are not met).

SPECIFIC TARGET ORGANS TOXICITY (STOT): Single exposure (SE) and/or Repeated exposure (RE):
Not classified as a dangerous product for target organs (based on available data, the classification criteria are not met).

CMR EFFECTS:
Carcinogenic effects: # *Is not considered as a carcinogenic product.*
Genotoxicity: # *Is not considered as a mutagenic product.*
Toxicity for reproduction: # *Do not harm fertility. Do not harm the fetus developping.*
Effects via lactation: Not classified as a hazardous product for children breast-fed.

DELAYED AND IMMEDIATE EFFECTS AS WELL AS CHRONIC EFFECTS FROM SHORT AND LONG-TERM EXPOSURE:
Routes of exposure: # *Not available.*
Short-term exposure: May irritate the eyes and skin.
Long-term or repeated exposure: # *Not available.*

INTERACTIVE EFFECTS:
Not available.

INFORMATION ABOUT TOXICOCINETICS, METABOLISM AND DISTRIBUTION:
Dermal absorption: Not available.
Basic toxicokinetics: Not available.

ADDITIONAL INFORMATION:
Not available.

SECTION 12 : ECOLOGICAL INFORMATION

No experimental ecotoxicological data on the preparation as such is available. The ecotoxicological classification for these mixture has been carried out by using the conventional calculation method of the Regulation (EC) No. 1272/2008~605/2014 (CLP).

12.1 TOXICITY:

Acute toxicity in aquatic environment for individual ingredients :	CL50 (OECD 203) mg/l.96hours	CE50 (OECD 202) mg/l.48hours	CE50 (OECD 201) mg/l.72hours
1,2-benzisothiazol-3(2H)-one	1.2 Fishes	0.85 Daphnia	0.37 Algae
Pyrithione zinc	0.0026 Fishes	0.050 Daphnia	0.051 Algae
Mixture CIT EC 247-500-7 MIT EC 220-239-6 (3:1)	0.19 Fishes	0.16 Daphnia	0.018 Algae

No observed effect concentration
Not available
Lowest observed effect concentration
Not available

12.2 PERSISTENCE AND DEGRADABILITY:
Not available.

Aerobic biodegradation for individual ingredients :	DQO mgO2/g	%DBO/DQO 5 days 14 days 28 days	Biodegradability
1,2-benzisothiazol-3(2H)-one			Not easy
Pyrithione zinc		39.	Not easy
Mixture CIT EC 247-500-7 MIT EC 220-239-6 (3:1)			Inherently

12.3 BIOACCUMULATIVE POTENTIAL:
Not available.

Bioaccumulation for individual ingredients :	logPow	BCF L/kg	Potential
1,2-benzisothiazol-3(2H)-one	0.640	3.2 (calculated)	Unlikely, low
Pyrithione zinc	0.900	3.2 (calculated)	Unlikely, low
Mixture CIT EC 247-500-7 MIT EC 220-239-6 (3:1)	-0.830	3.2 (calculated)	No bioaccumulable

12.4 MOBILITY IN SOIL:
Not available.

12.5 RESULTS OF PBT AND VPVB ASSESMENT: Annex XIII of Regulation (EC) no. 1907/2006:
Does not contain substances that fulfill the PBT/vPvB criteria.

12.6 OTHER ADVERSE EFFECTS:
Ozone depletion potential: Not available.
Photochemical ozone creation potential: Not available.
Earth global warming potential: Not available.
Endocrine disrupting potential: Not available.

SECTION 13 : DISPOSAL CONSIDERATIONS

13.1 WASTE TREATMENT METHODS: # *Directive 2008/98/EC~Regulation (EU) no. 1357/2014:*
Take all necessary measures to prevent the production of waste whenever possible. Analyse possible methods for revaluation or recycling. Do not discharge into drains or the environment, dispose of at an authorised waste collection point. Waste should be handled and disposed of in accordance with current local and national regulations. For exposure controls and personal protection measures, see section 8.

Disposal of empty containers: # *Directive 94/62/EC~2005/20/EC, Decision 2000/532/EC~2014/955/EU:*
Emptied containers and packaging should be disposed of in accordance with currently local and national regulations. The classification of packaging as hazardous waste will depend on the degree of empting of the same, being the holder of the residue responsible for their classification,)in accordance with Chapter 15 01 of Decision 2000/532/EC, and forwarding to the appropriate final destination. With contaminated containers and packaging, adopt the same measures as for the product in itself.

Procedures for neutralising or destroying the product:
Authorised landfill in accordance with local regulations.

SECTION 14 : TRANSPORT INFORMATION

14.1 UN NUMBER: Not applicable

14.2 UN PROPER SHIPPING NAME: Not applicable

14.3
14.4 TRANSPORT HAZARD CLASS (ES) AND PACKING GROUP:

Transport by road (ADR 2015) and
Transport by rail (RID 2015):
Not reglamented

Transport by sea (IMDG 37-14):
Not reglamented

Transport by air (ICAO/IATA 2015):
Not reglamented

Transport by inland waterways (ADN):
Free.

14.5 ENVIRONMENTAL HAZARDS:
Not applicable.

14.6 SPECIAL PRECAUTIONS FOR USER:
Ensure that persons transporting the product know what to do in case of accident or spill. Always transport in closed containers that are in a vertical position and sure. Ensure adequate ventilation.

14.7 TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL 73/78 AND THE IBC CODE:
Not applicable.

SECTION 15 : REGULATORY INFORMATION

15.1 EU SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC:
The regulations applicable to this product generally are listed throughout this material safety data sheet.

Restrictions on manufacture, placing on market and use: See section 1.2

Control of the risks inherent in major accidents (Seveso III): See section 7.2

Tactile warning of danger: Not applicable (the classification criteria are not met).

Child safety protection: Not applicable (the classification criteria are not met).

VOC information on the label:
Contains VOC max. 20. g/l - The limit value 2004/42/CE-IIA cat. i) for the product ready for use is VOC max. 140. g/l (2010).

Legislación específica sobre productos biocidas:
Es de aplicación el Artículo 58 del Reglamento (UE) nº 528/2012~334/1014, relativo a la comercialización y el uso de biocidas (artículos tratados) y el Reglamento (CE) nº 1896/2000~1451/2007 sobre productos biocidas.

OTHER REGULATIONS:
Not available

15.2 CHEMICAL SAFETY ASSESSMENT:
For this mixture has not been carried out a chemical safety assessment.

SECTION 16 : OTHER INFORMATION

16.1

TEXT OF THE PHRASES AND NOTES REFERENCED IN SECTIONS 2 AND/OR 3:
Not applicable.

ADVICES ON ANY TRAINING APPROPRIATE FOR WORKERS:
It is recommended for all staff that will handle this product to carry out a basic training in occupational risk and prevention, in order to provide understanding and interpretation of material safety data sheets and labelling of products as well.

MAIN LITERATURE REFERENCES AND SOURCES FOR DATA:

· European Chemicals Agency: ECHA, http://echa.europa.eu/
· Access to European Union Law, http://eur-lex.europa.eu/
· Industrial Solvents Handbook, Ibert Mellan (Noyes Data Co., 1970).
· Threshold Limit Values, (AGCIH, 2014).

ABBREVIATIONS AND ACRONYMS:
List of abbreviations and acronyms that can be used (but not necessarily used) in this material safety data sheet:

· REACH: Regulation concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals.
· DSD: Dangerous Substances Directive.
· DPD: Dangerous Preparations Directive.
· GHS: Globally Harmonized System of Classification and Labelling of Chemicals of the United Nations.
· CLP: European regularion on Classificatin, Labelling amd Packaging of substances and chemical mixtures.
· EINECS: European Inventory of Existing Commercial Chemical Substances.
· ELINCS: European List of Notified Chemical Substances.
· CAS: Chemical Abstracts Service (Division of the American Chemical Society).
· UVCB: Substances of Unknown or Variable composition, complex reaction products or biological materials).
· SVHC: Substances of Very High Concern.
· PBT: Persistent, bioaccumulable and toxic substances.
· vPvB: Very persistent and very bioaccumulable substances.
· VOC: Volatile Organic Compounds.
· DNEL: Derived No-Effect Level (REACH).
· PNEC: Predicted No-Effect Concentration (REACH).
· LD50: Letal dose, 50 percent.
· LC50: Letal concentration, 50 percent.
· UN: United Nations Organisation.
· ADR: European agreement concerning the international carriage of dangeous goods by road.
· RID: Regulations concerning the international transport of dangeous goods by rail.
· IMDG: International Maritime code for Dangerous Goods.
· IATA: International Air Transport Association.
· ICAO: International Civil Aviation Organization.

MATERIAL SAFETY DATA SHEET REGULATIONS:
Material Safety Data Sheet in accordance with Article 31 of Regulation (EC) No. 1907/2006 (REACH) and Annex of Regulation (EU) No. 2015/830.

HISTORY:	Revision:
Version: 5	18/02/2013
Version: 6	29/08/2016

Modifications with respect to the previous Material Safety Data Sheet:
The possible legislative, contextual, numerical, methodological and normative changes with respect to the previous version are highlighted in this Material Safety Data Sheet by a mark # in red and italic.

The information of this Material Safety Data Sheet, is based on the present state of knowledge and on current UE and national laws, as the users' working conditions are beyond our knowledge and control. The product is not to be used for other purposes than those specified, without first obtaining written handling instruction. It is always the responsibility of the user to take all necessary steps in order to fulfil the demand laid down in the local rules and legislation. The information in this Material Safety Data Sheet is meant as a description of the safety requirements of the product and it is not to be considered as a guarantee of the product's properties.