




ERUNE 40 SC
Fungicide - Concentrated Suspension (SC)

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

- 1.1 Product identifier:** ERUNE 40 SC
Fungicide - Concentrated Suspension (SC)
Contains 400g/L or 37,7% (w/w) of Pyrimethanil.
- 1.2 Relevant identified uses of the substance or mixture and uses advised against:**
Relevant uses: Fungicide for agricultural use. For professional user only.
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:**
Ascenza Agro, SA
Avenida do Rio Tejo, Herdade das Praias
2910-440 Setúbal - Portugal
Phone.: +351265710100 - Fax: +351265710105
agroseguranca@ascenza.com
http://www.ascenza.com
- 1.4 Emergency telephone number:** +30 2 10 779 3777
Poisons Information Centre - Children's Hospital P&A Kyriakou, 11762 Athens

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 2: Hazardous to the aquatic environment, long-term hazard, Category 2, H411
- 2.2 Label elements:**
CLP Regulation (EC) No 1272/2008:
- 
- Hazard statements:**
Aquatic Chronic 2: H411 - Toxic to aquatic life with long lasting effects
- Precautionary statements:**
P101: In case you need medical advice, always carry product or its label
P405+P102: Store locked up. Keep out of reach of children.
P270: Do not eat, drink or smoke when using this product.
P301+P330+P331: IN CASE OF SWALLOW: Rinse mouth. Do not provoke vomit
P302+P352+P333+P313: IN CASE OF SKIN CONTACT: Wash with plenty of water. If an irritation is observed on skin or a rash appears get medical advice.
P303+P361+P353: IN CASE OF SKIN CONTACT: Remove all clothes infested with the product. Rinse skin with water.
P362+P364: Take off contaminated clothing. Wash it before reuse.
P304+P340: In case of inhalation: Remove patient from exposed area.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310: Call a POISON CENTER/ doctor
Antidote: There is no specific antidote. Follow symptomatic treatment.
P501: Dispose of contents/container according to national regulation.
- Supplementary information:**
EUH208: Contains 1,2-benzisothiazol-3(2H)-one. May produce an allergic reaction
EUH401: To avoid risks to human health and the environment, comply with the instructions for use.

- CONTINUED ON NEXT PAGE -



ERUNE 40 SC
Fungicide - Concentrated Suspension (SC)

SECTION 2: HAZARDS IDENTIFICATION (continued)

SP1: Do not contaminate water with the product or its container. (Do not rinse application equipment near surface waters / Avoid contamination through sewage systems from streets.)

SPe2: To protect aquatic organisms do not apply on heavy, clay non-drained soils.

SPe3: To protect aquatic organisms leave from surface waters:

- A vegetative buffer zone of 10 meters in strawberry
- A vegetative buffer zone of 10 meters for early applications on vines or an unsprayed buffer zone of 10 meters or an unsprayed buffer zone of 5 meters combined with 50% drift reducing nozzles for late applications on vines.
- A vegetative buffer zone of 20 meters in lettuce.

For greenhouse uses (temporary greenhouse construction)

SPe3: To protect aquatic organisms respect a:

- 10 m buffer zone including 10 m of vegetated filter strip to surface water bodies (strawberry, single and multiple applications)
- 10 m buffer zone including 10 m of vegetated filter strip to surface water bodies (tomatoes/ aubergine/ peppers, single application)
- 20 m buffer zone including 20 m of vegetated filter strip to surface water bodies (tomatoes/ aubergine/ peppers, multiple application)
- 20 m buffer zone including 20 m of vegetated filter strip to surface water bodies (lettuce)

2.3 Other hazards:

Product fails to meet PBT/vPvB criteria

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance:

Non-applicable

3.2 Mixture:

Chemical description: Organic compounds

Components:

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

Identification	Chemical name/Classification	Concentration
CAS: 53112-28-0 EC: -- Index: 612-240-00-9 REACH: (I)	Pyrimethanil (ISO) ⁽¹⁾ Regulation 1272/2008 Aquatic Chronic 2: H411	ATP ATP01 37.7 %
CAS: 68512-35-6 EC: 614-548-9 Index: -- REACH: (VI)	Lignin, alcali, reaction products with formaldehyde and sodium bisulfite ⁽¹⁾ Regulation 1272/2008 Eye Irrit. 2: H319; STOT SE 3: H335 - Warning	Self-classified 2,5 - <10 %
CAS: 68131-39-5 EC: 500-195-7 Index: -- REACH: Non-available	Alcohols, C12-15, ethoxylated ⁽¹⁾ Regulation 1272/2008 Acute Tox. 4: H302; Aquatic Acute 1: H400; Eye Dam. 1: H318 - Danger	Self-classified <1 %
CAS: 2634-33-5 EC: 220-120-9 Index: 613-088-00-6 REACH: (II)	1,2-benzisothiazol-3(2H)-one ⁽¹⁾ Regulation 1272/2008 Acute Tox. 4: H302; Aquatic Acute 1: H400; Eye Dam. 1: H318; Skin Irrit. 2: H315; Skin Sens. 1: H317 - Danger	ATP CLP00 <1 %

⁽¹⁾ Substances presenting a health or environmental hazard which meet criteria laid down in Regulation (EU) No. 2015/830

To obtain more information on the hazards of the substances consult sections 8, 11, 12, 15 and 16.

- CONTINUED ON NEXT PAGE -



SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS (continued)

Other information:

Identification	M-factor	
	1,2-benzisothiazol-3(2H)-one CAS: 2634-33-5 EC: 220-120-9	Acute
	Chronic	1

Identification	Specific concentration limit
1,2-benzisothiazol-3(2H)-one CAS: 2634-33-5 EC: 220-120-9	% (w/w) >=0,05; Skin Sens. 1 - H317

- (i) Substance considered registered under Article 15 (1) of Regulation 1907/2006;
- (ii) Substance considered as registered under Article 15 (2) of Regulation (EC) No 1907/2006;
- (iii) Substance exempted from registration under Article 2 (9) of Regulation 1907/2006;
- (iv) Substance exempt from registration under Article 2 (7) (a) of Regulation (EC) No 1907/2006;
- (v) Substance exempted from registration under Article 6 (1) of Regulation (EC) No 1907/2006;
- (vi) Substance exempted from registration under Article 2 (7) (b) of Regulation (EC) No 1907/2006;
- (vii) Substance exempted from registration under Article 2 (7) (c) of Regulation (EC) No 1907/2006

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 water for at least 15 minutes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, in which case removal could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS for 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.

(Pyrimethanil):

Ingestion - gastrointestinal disorder: nausea, vomiting, diarrhea, abdominal pain. Inhalation – respiratory problems; increase in bronchial secretions. Contact – slight irritation of the eyes, skin and mucous; watering of eyes; conjunctivitis; contact dermatitis.

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

Provide supportive care and symptomatic treatment. If swallowed induce vomiting or provide a gastric wash, administrate activated charcoal or saline laxative (type: sodium or magnesium sulphate or similar).

SECTION 5: FIREFIGHTING MEASURES

5.1 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. IT IS NOT RECOMMENDED to use tap water as an extinguishing agent.

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:

- CONTINUED ON NEXT PAGE -



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,...).

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:

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 spill product (See section 8). Evacuate the area and keep out those who do not have protection.

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.- Precautions for safe manipulation

Comply with the current legislation concerning the prevention of industrial risks. Keep containers hermetically sealed. Control spills and residues, destroying them with safe methods (section 6). Avoid leakages from the container. Maintain order and cleanliness where dangerous products are used.

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 to prevent ergonomic and toxicological risks

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

Maximum time: 24 Months

B.- General conditions for storage

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:

(Pirimethanil): ADI: 0.17 mg/kg of b.w./day; AOEL: 0.12 mg/kg of b.w./day

- CONTINUED ON NEXT PAGE -



ERUNE 40 SC
Fungicide - Concentrated Suspension (SC)

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Substances whose occupational exposure limits have to be monitored in the workplace

There are no occupational exposure limits for the substances contained in the product

DNEL (Workers):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Alcohols, C12-15, ethoxylated (C12-15 PARETH-7) CAS: 68131-39-5 EC: 500-195-7	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	2080 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	294 mg/m ³	Non-applicable

DNEL (General population):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Alcohols, C12-15, ethoxylated (C12-15 PARETH-7) CAS: 68131-39-5 EC: 500-195-7	Oral	Non-applicable	Non-applicable	25 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	1250 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	87 mg/m ³	Non-applicable

PNEC:

Identification				
Alcohols, C12-15, ethoxylated (C12-15 PARETH-7) CAS: 68131-39-5 EC: 500-195-7	STP	10000 mg/L	Fresh water	0,0446 mg/L
	Soil	1 mg/kg	Marine water	0,0446 mg/L
	Intermittent	0,0446 mg/L	Sediment (Fresh water)	41,3 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	41,3 mg/kg

8.2 Exposure controls:

A.- General security and hygiene measures in the work place



As a preventative measure it is recommended to use basic Personal Protective Equipment, with the corresponding <<CE marking>> in accordance with Directive 89/686/EC. 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



Disposable mask with P2 filter.

C.- Specific protection for the hands


Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory hand protection	Protective gloves against minor risks		EN ISO 374-1 EN 420+A1	Replace gloves in case of any sign of damage. For prolonged periods of exposure to the product for professional users/industrials, we recommend using CE III gloves.

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

D.- Ocular and facial protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory face protection	Panoramic glasses against splash/projections.		EN 166	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
	Work clothing		EN 1149 -5 EN 13034+A1 EN ISO 13688	Replace before any evidence of deterioration. For periods of prolonged exposure to the product for professional/industrial users CE III is recommended.

- CONTINUED ON NEXT PAGE -





ERUNE 40 SC
Fungicide - Concentrated Suspension (SC)

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Pictogram	PPE	Labelling	CEN Standard	Remarks
	Anti-slip work shoes		EN ISO 20347 EN ISO 20345 EN 13832-3	Replace before any evidence of deterioration. For periods of prolonged exposure to the product for professional/industrial users CE III is recommended.

F.- Additional emergency measures

Emergency measure	Standards	Emergency measure	Standards
 Emergency shower	ANSI Z358-1 ISO 3864-1	 Eyewash stations	DIN 12 899 ISO 3864-1

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):	0 % weight
V.O.C. density at 20 °C:	0 kg/m ³ (0 g/L)
Average carbon number:	Non-applicable
Average molecular weight:	Non-applicable

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

Appearance:

Physical state at 20 °C:	Liquid
Appearance:	Suspension
Colour:	Dark Beige
Odour:	Uncharacteristic
Odour threshold:	Not available

Volatility:

Boiling point at atmospheric pressure:	Not available
Vapour pressure at 20 °C:	Not available
Vapour pressure at 50 °C:	Not available
Evaporation rate at 20 °C:	Not available

Product description:

Density at 20 °C:	1.06
Relative density at 20 °C:	Not available
Dynamic viscosity at 20 °C:	(1704-363.6) cP (10-100) rpm
Kinematic viscosity at 20 °C:	Not available
Kinematic viscosity at 40 °C:	Not available
Concentration:	Not available
pH:	7, 7 at 1 %
Vapour density at 20 °C:	Not available
Partition coefficient n-octanol/water 20 °C:	Not available
Solubility in water at 20 °C:	Not available

- CONTINUED ON NEXT PAGE -



ERUNE 40 SC
Fungicide - Concentrated Suspension (SC)

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)

Solubility properties:	Not available
Decomposition temperature:	Not available
Melting point/freezing point:	Not available
Explosive properties:	Not explosive
Oxidising properties:	Not Oxidising

Flammability:

Flash Point:	108°C
Flammability (solid, gas):	Non-applicable
Autoignition temperature:	601 °C
Lower flammability limit:	Not available
Upper flammability limit:	Not available

Explosive:

Lower explosive limit:	Not available
Upper explosive limit:	Not available

9.2 Other information:

Surface tension at 20 °C:	32.1mN/m
Refraction index:	Not available

As for the remaining characteristics, data is not presented because it is not available, in accordance with the registration studies and intrinsic characteristics of the products.

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 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	Not applicable	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 (CO₂), carbon monoxide and other organic compounds.

SECTION 11: TOXICOLOGICAL INFORMATION

- CONTINUED ON NEXT PAGE -



SECTION 11: TOXICOLOGICAL INFORMATION (continued)

11.1 Information on toxicological effects:

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

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 dangerous for skin contact. For more information see section 3.
- Contact with the eyes: Based on available data, the classification criteria are not met. However, it does contain substances classified as dangerous for this effect. For more information see section 3.

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

- Carcinogenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for the effects mentioned. For more information see section 3.
IARC: Silicon dioxide (RCS < 1%) (3)
- Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
- Reproductive toxicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

E- Sensitizing effects:

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

Other information:



ERUNE 40 SC
Fungicide - Concentrated Suspension (SC)

SECTION 11: TOXICOLOGICAL INFORMATION (continued)

Acute toxicity (ERUNE 40 SC):

Acute Oral LD50: >2500 mg/kg b.w. (Rats);
Acute Dermal LD50: >2000 mg/kg b.w. (Rats)
Acute Inhalation LC50 (4h): Not available

Acute Effects (ERUNE 40 SC):

Skin corrosion/ irritation: Mild irritant
Serious eye damage/irritation: Minimal irritant
Respiratory sensitisation: No information available Skin sensitisation: Not sensitising (Guinea pigs)

Chronic effects (Pyrimethanil):

Repeated dose toxicity: Not demonstrated
Carcinogenicity: Not observed
Mutagenicity: Not observed
Toxicity for reproduction: Not observed

Specific toxicology information on the substances:

Identification	Acute toxicity		Genus
	LD50 oral	LD50 dermal	
Pyrimethanil (ISO) CAS: 53112-28-0 EC: --	LD50 oral	4149/ 5971 mg/kg	Male/ Female Rats
	LD50 dermal	>5000 mg/kg	Rats
	LC50 inhalation	>1.98 mg/L (4 h)	Rats
Lignin, alcali, reaction products with formaldehyde and sodium bisulfite CAS: 68512-35-6 EC: 614-548-9	LD50 oral	>2000 mg/kg	
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation	Non-applicable	
Alcohols, C12-15, ethoxylated (C12-15 PARETH-7) CAS: 68131-39-5 EC: 500-195-7	LD50 oral	>2000 mg/kg	
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation	>20 mg/L	
1,2-benzisothiazol-3(2H)-one CAS: 2634-33-5 EC: 220-120-9	LD50 oral	500 mg/kg	Rat
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation	>5 mg/L	

Acute Toxicity Estimate (ATE mix):

ATE mix		Ingredient(s) of unknown toxicity
Oral	>2000 mg/kg (Calculation method)	Non-applicable
Dermal	>2000 mg/kg (Calculation method)	Non-applicable
Inhalation	>20 mg/L (4 h) (Calculation method)	Non-applicable

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity:

Identification	Acute toxicity		Species	Genus
	LC50	EC50		
Pyrimethanil (ISO) CAS: 53112-28-0 EC: --	LC50	10.56 mg/L (96h)	Rainbow trout	Fish
	EC50	2.9 mg/L (48 h)	<i>Daphnia magna</i>	Crustacean
	EC50	5.84 mg/l (96h)	Green alga	Algae

- CONTINUED ON NEXT PAGE -



ERUNE 40 SC
Fungicide - Concentrated Suspension (SC)

SECTION 12: ECOLOGICAL INFORMATION (continued)

Identification	Acute toxicity		Species	Genus
Alcohols, C12-15, ethoxylated (C12-15 PARETH-7) CAS: 68131-39-5 EC: 500-195-7	LC50	0.59 mg/L (96 h)	<i>Pleuronectes platessa</i>	Fish
	EC50	0.14 mg/L (48 h)	<i>Daphnia magna</i>	Crustacean
	EC50	Non-applicable		
1,2-benzisothiazol-3(2H)-one CAS: 2634-33-5 EC: 220-120-9	LC50	0.1 - 1 mg/L (96 h)		Fish
	EC50	0.1 - 1 mg/L		Crustacean
	EC50	0.1 - 1 mg/L		Algae

Acute toxicity:

Aquatic invertebrates acute EC50 (48 h): 8.67 F.P. mg /L (*Daphnia magna*)

Algae acute EC50 (72 h): 11 mg F.P./L (*Pseudokirchneriella subcapitata*)

Birds acute Oral LD50: >2000 mg/kg b.w. (Bobwhite quail and Mallard ducks) (Pyrimethanil)

Bee oral LD50: >100 µg/bee (Pyrimethanil); >108.6 µg a.i./bee (i.e. 111.0 µg a.i./bee with the relative density of 1.06 corrected)

Bee contact LD50: >100 µg a.i./bee (i.e. 102.8 µg a.i./bee with the relative density of 1.06 corrected)

Aquatic plants CE50 (14 d): NA

Chronic toxicity:

Fish chronic NOEC: NA (Pyrimethanil)

Aquatic invertebrates chronic NOEC (48h): 4.5 mg F.P./l (*Daphnia magna*)

Algae chronic NOEC: <0.8 mg F.P./L (*Pseudokirchneriella subcapitata*)

12.2 Persistence and degradability:

Identification	Degradability		Biodegradability	
	1,2-benzisothiazol-3(2H)-one CAS: 2634-33-5 EC: 220-120-9	BOD5	Non-applicable	Concentration
COD		Non-applicable	Period	28 days
BOD5/COD		Non-applicable	% Biodegradable	0 %

(Pyrimethanil):

- Soil: Moderately persistent in soil. Typical and Lab DT50: 55 d; DT50 Field: 29.5 d.

- Water: Moderately fast chemical degradation in water-sediment systems, DT50: 80 d. Slow chemical degradation in water phase only, DT50: 16.5 d.

12.3 Bioaccumulative potential:

Identification	Bioaccumulation potential	
	Pyrimethanil (ISO) CAS: 53112-28-0 EC: --	BCF
Pow Log		2.8
Potential		Moderate
1,2-benzisothiazol-3(2H)-one CAS: 2634-33-5 EC: 220-120-9	BCF	2
	Pow Log	1.45
	Potential	Low

12.4 Mobility in soil:

Identification	Absorption/desorption		Volatility	
	Pyrimethanil (ISO) CAS: 53112-28-0 EC: --	Koc	835	Henry
Conclusion		Low	Dry soil	No
Surface tension		Non-applicable	Moist soil	No

12.5 Results of PBT and vPvB assessment:

Product fails to meet PBT/vPvB criteria

12.6 Other adverse effects:

Not described

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods:

- CONTINUED ON NEXT PAGE -



SECTION 13: DISPOSAL CONSIDERATIONS (continued)

Code	Description	Waste class (Regulation (EU) No 1357/2014)
02 01 08*	agrochemical waste containing hazardous substances	Dangerous

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

HP14 Ecotoxic

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. We do not recommend disposal down the drain. 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 2019 and RID 2019:



- 14.1 UN number:** UN3082
- 14.2 UN proper shipping name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Pyrimethanil (ISO))
- 14.3 Transport hazard class(es):** 9
Labels: 9
- 14.4 Packing group:** III
- 14.5 Environmental hazards:** Yes
- 14.6 Special precautions for user**
Special regulations: 274, 335, 375, 601
Tunnel restriction code: Non-applicable
Physico-Chemical properties: see section 9
Limited quantities: 5 L
- 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code:** Non-applicable

Transport of dangerous goods by sea:

With regard to IMDG 39-18:



- 14.1 UN number:** UN3082
- 14.2 UN proper shipping name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Pyrimethanil (ISO))
- 14.3 Transport hazard class(es):** 9
Labels: 9
- 14.4 Packing group:** III
- 14.5 Environmental hazards:** Yes
- 14.6 Special precautions for user**
Special regulations: 335, 969, 274
EmS Codes: F-A, S-F
Physico-Chemical properties: see section 9
Limited quantities: 5 L
Segregation group: Non-applicable
- 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code:** Non-applicable

Transport of dangerous goods by air:

With regard to IATA/ICAO 2020:

- CONTINUED ON NEXT PAGE -



SECTION 14: TRANSPORT INFORMATION (continued)



- 14.1 UN number:** UN3082
14.2 UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Pyrimethanil (ISO))
14.3 Transport hazard: 9
 Labels: 9
14.4 Packing group: III
14.5 Environmental hazards: Yes
14.6 Special precautions for user:
 Physico-Chemical properties: see section 9
14.7 Transport in bulk according to Annex II of Marpol and the IBC Code: Non-applicable

Note 1: ADR/ RID/ IMDG/ IATA Limited Quantities Exemption: Combined packages with a total weight not greater than 30 kg are exempt provided each individual package do not exceed 5 Lt/5kg.

Note 2: Special Provision 375 of the ADR (2019) (for Environmentally Hazardous Substances, which do not meet the criteria to be included in other classes): When carried in single or combination packages of 5L or 5kg per single or inner packaging or less are not subject to ADR provided packaging meets general requirements (4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8).

Special Provision 2.10.2.7 of IMDG (2016) - Marine pollutants packaged in single or combination packaging containing a net quantity per single or inner packaging of 5 l or less for liquids or having a net mass per single or inner packaging of 5 kg or less for solids are not subject to any other provisions of this Code relevant to marine pollutants provided the packaging meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8. In the case of marine pollutants also meeting the criteria for inclusion in another hazard class all provisions of this Code relevant to any additional hazards continue to apply.

Special Provision A197 of IATA (2019) (for Environmentally Hazardous Substances, which do not meet the criteria to be included in other classes): These substances when transported single or combination packaging of 5 L or less for liquids or having a net mass of 5 kg or less for solids, are not subject to any other provisions of these Regulations provided the packaging meet general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8.

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 1,2-benzisothiazol-3(2H)-one.

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: 1,2-benzisothiazol-3(2H)-one (Product-type 2, 6, 9, 10, 11, 12, 13)

REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Non-applicable

Seveso III:

Section	Description	Lower-tier requirements	Upper-tier requirements
E2		200	500

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

Non-applicable

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

Regulation (EU) No 528/2012 of the European Parliament and of the Council of 22 May 2012 concerning the making available on the market and use of biocidal products

Other information:

15.2 Chemical safety assessment:

The supplier has not carried out evaluation of chemical safety.

- CONTINUED ON NEXT PAGE -



SECTION 16: OTHER INFORMATION

Legislation related to safety data sheets:

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 (Regulation (EC) No 2015/830)

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

Non-applicable

Texts of the legislative phrases mentioned in section 2:

H411: Toxic to aquatic life with long lasting effects

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:

Aquatic Chronic 2: H411 - Toxic to aquatic life with long lasting effects

Classification procedure:

Aquatic Chronic 2: Calculation method

Advice related to training:

Minimal 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: 5-day biochemical oxygen demand

BCF: Bioconcentration factor

LD50: Lethal Dose 50

LC50: Lethal Concentration 50

EC50: Effective concentration 50

Log-POW: Octanol-water partition coefficient

Koc: Partition coefficient of organic carbon

Other information:

Content review: The sections / sub sections marked with (➤) were changed with relevant information, from the previous version.

Cod.: PF-190-C (SAP40F)

The information contained in this safety data sheet is based on sources, technical knowledge and current legislation at European and state level, without being able to guarantee its accuracy. This information cannot be considered a guarantee of the properties of the product, it is simply a description of the security requirements. The occupational methodology and conditions for users of this product are not within our awareness or control, and it is ultimately the responsibility of the user to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information on this safety data sheet only refers to this product, which should not be used for needs other than those specified.

- END OF SAFETY DATA SHEET -