

TERRA SORB COMPLEX**SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING.****1.1 Product identifier.**

Product Name: TERRA SORB COMPLEX
Product Code: F0123, F0347, F0808, F0587, F0890, F0868, F1631, F1632, F2655, F2667, F2703, F2723, F2727, F2755, F2759 and other codes that are being added with the same composition
UFI: HH00-X054-P004-SAC4

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

Professional use

Agricultural use

Uses advised against:

Uses other than those recommended.

1.3 Details of the supplier of the safety data sheet.

Company: **BIOIBERICA SAU**
Address: C/ Antic Camí de Tordera 109-119
City: 08389 - Palafolls
Province: Barcelona
Telephone: +34 937 650 390
Fax: +34 934 909 711
E-mail: reach@bioiberica.com
Web: www.bioiberica.com

1.4 Emergency telephone number:(Available 24h)

Bioiberica, SAU. *Palafolls* - ESPAÑA 34-93-765 03 90

Country	Link to the information	Other relevant information
Austria	https://goeg.at/Vergiftungsinformation	NEW https://goeg.at/viz
Belgium	https://www.poisoncentre.be/	
Bulgaria	https://www.moew.government.bg/bg/prevantivn-a-dejnost/himichni-vestestva/klasifikaciya-clp/nacionalen-centur-po-toksikologiya/	The service is available 24/7 and the communication language is Bulgarian
Croatia	https://www.imi.hr/hr/jedinica/centar-za-kontrolu-otrovanja/	Telephone no +3851 2348 342. Information available 24/7 inCroatian and English.
Cyprus	http://www.mlsi.gov.cy/mlsi/dli/dliup.nsf/All/44E02FF962E75D0DC2257DDA00288E83?OpenDocument - Greek	Phone number: 1401
	http://www.mlsi.gov.cy/mlsi/dli/dliup.nsf/All/5D40BF12EB C2295BC2257E1100479BA9?OpenDocument - English	
Czech Republic	https://www.cenia.cz/odborna-podpora/reach/bezpecnostni-listy/	
Denmark	https://www.bispebjerghospital.dk/giftlinjen/Sider/default.aspx	Danish Poison Center (Giftlinjen): +45 8212 1212

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Estonia	https://www.terviseamet.ee/en/chemical-and-product-safety/data-for-safety-data-sheet	
Finland	https://www.hus.fi/en/medical-care/medical-services/Poison%20Information%20Centre/Pages/default.aspx	Open 24 hours a day 0800 147 111 (the call is free of charge) 09 471 977
France	https://reach-info.ineris.fr/Numero_orfila	
Germany	https://www.reach-clp-biozid-helpdesk.de/DE/REACH/Sicherheitsdatenblatt/Sicherheitsdatenblatt-EN/Emergency-Telephone-number.html	
Greece	https://echa.europa.eu/documents/10162/23019181/poison_info_centre_en.pdf/58b0f281-a6f8-4362-a0b9-faad57c7fcff	
Hungary	https://www.nnk.gov.hu/index.php/kemiai-biztonsages-kompetens-hatosagi-fo/egeszsegugyi-toxikologiai-tajekoztato-szolgalat	+36-80-201-199 (0-24h, free of charge)
Iceland	http://www.landspitali.is/?PageID=14556	
Ireland	https://www.poisons.ie/	
Italy	https://preparatipericolosi.iss.it/cav.aspx	
Latvia	https://www.meteo.lv/en/lapas/environment/chemical-substances-/reach/reach_en?&id=1483&nid=410	
Liechtenstein	-	
Lithuania	http://www.apsnuodijau.lt/	+370 (85) 2362052
Luxembourg	https://www.centreantipoisons.be/entreprises/english/how-declare/declarations-grand-duchy-luxembourg	(+352) 8002 5500 Free telephone number with a 24/7 access. Experts answer allurgency questions on dangerous products in French, Dutch and English.
Malta	https://deputyprimeminister.gov.mt/en/Pages/health.aspx	
Netherlands	https://www.umcutrecht.nl/nl/Subsites-nl/Nationaal-Vergiftigingen-Informatie-Centrum-(NVIC)/Productinformatie/Informatiesheet-product-notification	NVIC: +31 (0)88 755 8000: Only for the purpose of informing medical personnel in case of acute intoxications' or in Dutch: 'Uitsluitend bestemd om professionele hulpverleners te informeren bij acute vergiftigingen
Norway	https://helsenorge.no/Giftinformasjon	
Poland	-	
Portugal	https://www.inem.pt/category/servicos/centro-de-informacao-antivenenos/	Portugal CIAV phone number: +351 800 250 250
Romania	-	Phone number: +40213183606
Slovakia	http://www.ntic.sk/ntic_en.php?adr=safetydata	Phone number: +421 2 5477 4166
Slovenia	-	Phone number: 112

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Spain	https://www.miteco.gob.es/es/calidad-y-evaluacion-ambiental/temas/productos-quimicos/portal-reach-clp/novedades/detalle_novedades.aspx?id=tc:30-193752-16	National Emergency Telephone Number of Spanish Poison Centre: +34 91 562 04 20 The information will be provided in Spanish (available 24h/365days): health personnel & general public (poisoning cases)
Sweden	https://giftinformation.se/service meny/in-english/chemical-products--information-to-manufacturers-and-suppliers/	

SECTION 2: HAZARDS IDENTIFICATION.
2.1 Classification of the substance or mixture.

In accordance with Regulation (EU) No 1272/2008:

Repr. 1B : May damage fertility or the unborn child.

2.2 Label elements.
Labelling in accordance with Regulation (EU) No 1272/2008:

Pictograms:



Signal Word:

Danger

Hazard statements:

H360FD May damage fertility. May damage the unborn child.

P statements:

P102	Keep out of reach of children.
P270	Do not eat, drink or smoke when using this product.
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P281	Use personal protective equipment as required.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P405	Store locked up.
P501	Dispose of contents/container according to local legislation

Contains:

disodium octaborate tetrahydrate

2.3 Other hazards.

The mixture does not contain substances classified as PBT.

The mixture does not contain substances classified as vPvB.

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The mixture does not contain any endocrine disrupting properties substances.

In normal use conditions and in its original form, the product itself does not involve any other risk for health and the environment.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS.
3.1 Substances.

Not Applicable.

3.2 Mixtures.

Substances posing a danger to health or the environment in accordance with the Regulation (EC) No. 1272/2008, assigned a Community exposure limit in the workplace, and classified as PBT/vPvB or included in the Candidate List:

Identifiers	Name	Concentrate	(*)Classification - Regulation (EC) No 1272/2008	
			Classification	Specifics concentration limits and Acute toxicity estimate
Index No: 005-020-00-3 CAS No: 12280-03-4 EC No: 234-541-0 Registration No: 01-2119490860-33-XXXX	disodium octaborate tetrahydrate	0.3 - 10 %	Repr. 1B, H360FD	-
Index No: 026-003-01-4 CAS No: 7782-63-0 EC No: 231-753-5	iron (II) sulfate (1:1) heptahydrate, sulfuric acid, iron(II) salt (1:1), heptahydrate, ferrous sulfate heptahydrate	1 - <10 %	Acute Tox. 4 *, H302 - Eye Irrit. 2, H319 - Skin Irrit. 2, H315	Skin Irrit. 2, H315: C ≥ 25 %
CAS No: 5949-29-1	Citric acid	1 - <10 %	Eye Irrit. 2, H319	-

(*)The complete text of the H phrases is given in section 16 of this Safety Data Sheet.

*, ** See Regulation (EC) No. 1272/2008, Annex VI, section 1.2.

SECTION 4: FIRST AID MEASURES.
4.1 Description of first aid measures.

Delayed effects may occur after the exposure to the product.

Inhalation.

Take the victim into open air; keep them warm and calm. If breathing is irregular or stops, perform artificial respiration.

Eye contact.

Remove contact lenses, if present and if it is easy to do. Wash eyes with plenty of clean and cool water for at least 10 minutes while pulling eyelids up, and seek medical assistance.

Skin contact.

Remove contaminated clothing. Wash skin vigorously with water and soap or a suitable skin cleaner. NEVER use solvents or thinners.

Ingestion.

If accidentally ingested, seek immediate medical attention. Keep calm. NEVER induce vomiting.

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

Long-term chronic exposure may result in injury to certain organs or tissues.

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

In case of doubt or when symptoms of feeling unwell persist, get medical attention. Never administer anything orally to persons who are unconscious. Keep the person comfortable. Turn him/her over to the left side and stay there while waiting for medical care.

SECTION 5: FIREFIGHTING MEASURES.

The product is NOT classified as flammable, in case of fire the following measures should be taken:

5.1 Extinguishing media.**Suitable extinguishing media:**

Extinguisher powder or CO₂. In case of more serious fires, also alcohol-resistant foam and water spray.

Unsuitable extinguishing media:

Do not use a direct stream of water to extinguish. In the presence of electrical voltage, you cannot use water or foam as extinguishing media.

5.2 Special hazards arising from the substance or mixture.**Special risks.**

Exposure to combustion or decomposition products can be harmful to your health.

5.3 Advice for firefighters.

Use water to cool tanks, cisterns, or containers close to the heat source or fire. Take wind direction into account. Prevent the products used to fight the fire from going into drains, sewers, or waterways.

Fire protection equipment.

According to the size of the fire, it may be necessary to use protective suits against the heat, individual breathing equipment, gloves, protective goggles or facemasks, and boots.

SECTION 6: ACCIDENTAL RELEASE MEASURES.**6.1 Personal precautions, protective equipment and emergency procedures.**

For exposure control and individual protection measures, see section 8.

6.2 Environmental precautions.

Product not classified as hazardous for the environment, avoid spillage as much as possible.

6.3 Methods and material for containment and cleaning up.

Contain and collect spillage with inert absorbent material (earth, sand, vermiculite, Kieselguhr...) and clean the area immediately with a suitable decontaminant.

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Deposit waste in closed and suitable containers for disposal, in compliance with local and national regulations (see section 13).

6.4 Reference to other sections.

For exposure control and individual protection measures, see section 8.

For later elimination of waste, follow the recommendations under section 13.

SECTION 7: HANDLING AND STORAGE.**7.1 Precautions for safe handling.**

For personal protection, see section 8.

In the application area, smoking, eating, and drinking must be prohibited.

Follow legislation on occupational health and safety.

Never use pressure to empty the containers. They are not pressure-resistant containers. Keep the product in containers made of a material identical to the original.

7.2 Conditions for safe storage, including any incompatibilities.

Store according to local legislation. Observe indications on the label. Store the containers in a dry and well-ventilated place, far from sources of heat and direct solar light. Keep in its original packaging, avoiding extreme conditions of humidity and temperature. Keep far away from ignition points. Keep away from oxidising agents and from highly acidic or alkaline materials. Do not smoke. Prevent the entry of non-authorized persons. Once the containers are open, they must be carefully closed and placed vertically to prevent spills.

The product is not affected by Directive 2012/18/EU (SEVESO III).

7.3 Specific end use(s).

Agricultural use

Professional use

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION.**8.1 Control parameters.**

The product does NOT contain substances with Professional Exposure Environmental Limit Values. The product does NOT contain substances with Biological Limit Values.

8.2 Exposure controls.**Measures of a technical nature:**

Provide adequate ventilation, which can be achieved by using good local exhaust-ventilation and a good general exhaust system.

Concentration:	100 %
Uses:	Professional use Agricultural use
Breathing protection:	
PPE:	Filter mask for protection against gases and particles.
Characteristics:	«CE» marking, category III. The mask must have a wide field of vision and an anatomically designed form in order to be sealed and watertight.
CEN standards:	EN 136, EN 140, EN 405



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Maintenance:	Should not be stored in places exposed to high temperatures and damp environments before use. Special attention should be paid to the state of the inhalation and exhalation valves in the face adaptor.
Observations:	Read carefully the manufacturer's instructions regarding the equipment's use and maintenance. Attach the necessary filters to the equipment according to the specific nature of the risk (Particles and aerosols: P1-P2-P3, Gases and vapours: A-B-E-K-AX), changing them as advised by the manufacturer.
Filter Type needed:	A2

Hand protection:	
PPE:	Non-disposable protective gloves against chemicals.
Characteristics:	«CE» marking, category III. Check the list of chemicals for which the glove has been tested.
CEN standards:	EN 374-1, EN 374-2, EN 374-3, EN 420
Maintenance:	A schedule for the periodical replacement of gloves should be established in order to guarantee their replacement before pollutants permeate them. The use of contaminated gloves could be more dangerous than not using gloves, since the pollutant can gradually accumulate in the glove's material.
Observations:	They are to be replaced whenever tears, cracks or deformations are observed or when exterior dirt could reduce their strength.



Material:	PVC (polyvinyl chloride)	Breakthrough time (min.):	> 480	Material thickness (mm):	0,35
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Eye protection:	
PPE:	Protective goggles with built-in frame.
Characteristics:	«CE» marking, category II. Eye protector with built-in frame for protection against dust, smoke, fog and vapour.
CEN standards:	EN 165, EN 166, EN 167, EN 168
Maintenance:	Visibility through lenses should be ideal. Therefore, these parts should be cleaned daily. Protectors should be disinfected periodically following the manufacturer's instructions.
Observations:	Some signs of wear and tear include: yellow colouring of the lenses, superficial scratching of the lenses, scraping etc.



Skin protection:	
PPE:	Chemical protective clothing
Characteristics:	«CE» marking, category III. Clothing should fit properly. The level of protection must be set according to a test parameter called BT (Breakthrough Time), which indicates how long it takes for the chemical to pass through the material.
CEN standards:	EN 464, EN 340, EN 943-1, EN 943-2, EN ISO 6529, EN ISO 6530, EN 13034
Maintenance:	In order to guarantee uniform protection, follow the washing and maintenance instructions provided by the manufacturer.
Observations:	The protective clothing's design should facilitate correct positioning, staying in place without moving for the period of use expected, bearing in mind environmental factors as well as any movement or position the user might adopt while carrying out the activity.



PPE:	Anti-static safety footwear against chemicals.
Characteristics:	«CE» marking, category III. Check the list of chemicals against which the footwear is resistant.
CEN standards:	EN ISO 13287, EN 13832-1, EN 13832-2, EN 13832-3, EN ISO 20344, EN ISO 20345
Maintenance:	For correct maintenance of this kind of safety footwear, it is necessary to observe the instructions specified by the manufacturer. The footwear should be replaced as soon as any sign of damage is observed.
Observations:	The footwear should be cleaned regularly and dried when damp, although it should not be placed too close to a source of heat in order to avoid any sharp changes in temperature.



SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES.

9.1 Information on basic physical and chemical properties.

Physical state: Liquid

Colour: Brown

Odour: Characteristic

Odour threshold: Not applicable/Not available due to the nature/properties of the product

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Melting point: Not applicable/Not available due to the nature/properties of the product
Freezing point: Not applicable/Not available due to the nature/properties of the product
Boiling point or initial boiling point and boiling range: Not applicable/Not available due to the nature/properties of the product
Flammability: Not applicable/Not available due to the nature/properties of the product
Lower explosion limit: Not applicable/Not available due to the nature/properties of the product
Upper explosion limit: Not applicable/Not available due to the nature/properties of the product
Flash point: > 60 °C
Auto-ignition temperature: Not applicable/Not available due to the nature/properties of the product
Decomposition temperature: Not applicable/Not available due to the nature/properties of the product
pH: 5.7 - 6.3 (100%)
Kinematic viscosity: Not applicable/Not available due to the nature/properties of the product
Solubility: Soluble
Hydrosolubility: Soluble
Liposolubility: Not applicable/Not available due to the nature/properties of the product
Partition coefficient n-octanol/water (log value): Not applicable/Not available due to the nature/properties of the product
Vapour pressure: Not applicable/Not available due to the nature/properties of the product
Absolute density: Not applicable/Not available due to the nature/properties of the product
Relative density: 1.31 - 1.37 g/mL
Relative vapour density: Not applicable/Not available due to the nature/properties of the product
Particle characteristics: Not applicable/Not available due to the nature/properties of the product

9.2 Other information

Viscosity: Not applicable/Not available due to the nature/properties of the product
Explosive properties: Not applicable/Not available due to the nature/properties of the product
Oxidizing properties: Not applicable/Not available due to the nature/properties of the product
Dropping point: Not applicable/Not available due to the nature/properties of the product
Blink: Not applicable/Not available due to the nature/properties of the product

SECTION 10: STABILITY AND REACTIVITY.**10.1 Reactivity.**

The product does not present hazards by their reactivity.

10.2 Chemical stability.

Stable under the recommended handling and storage conditions (see section 7).

10.3 Possibility of hazardous reactions.

The product does not present possibility of hazardous reactions.

10.4 Conditions to avoid.

Avoid any improper handling.

10.5 Incompatible materials.

Keep away from oxidising agents and from highly alkaline or acidic materials in order to prevent exothermic reactions.

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No decomposition if used for the intended uses.

SECTION 11: TOXICOLOGICAL INFORMATION.**11.1 Information on hazard classes as defined in Regulation (EC) N° 1272/2008.****Toxicological information about the substances present in the composition.**

Name	Acute toxicity			
	Type	Test	Kind	Value
Citric acid CAS No: 5949-29-1 EC No:	Oral	LD50	Rat	3000 mg/kg bw [1] [1] Oyo Yakuri. Pharmacometrics. Vol. 43, Pg. 561, 1992
	Dermal			
	Inhalation			

a) acute toxicity;

Not conclusive data for classification.

Acute Toxicity Estimate (ATE):

Mixtures:

ATE (Oral) = 8.333 mg/kg

b) skin corrosion/irritation;

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

c) serious eye damage/irritation;

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

d) respiratory or skin sensitisation;

Not conclusive data for classification.

e) germ cell mutagenicity;

Not conclusive data for classification.

f) carcinogenicity;

Not conclusive data for classification.

g) reproductive toxicity;

Product classified:

Reproductive toxicant, Category 1B: May damage fertility or the unborn child.

h) STOT-single exposure;

Not conclusive data for classification.

i) STOT-repeated exposure;

Not conclusive data for classification.

j) aspiration hazard;
Not conclusive data for classification.

11.2 Information on other hazards.

Endocrine disrupting properties

This product does not contain components with endocrine-disrupting properties with effects on human health.

Other information

There is no information available on other adverse health effects.

SECTION 12: ECOLOGICAL INFORMATION.

12.1 Toxicity.

Name	Ecotoxicity			
	Type	Test	Kind	Value
Citric acid CAS No: 5949-29-1 EC No:	Fish			
	Aquatic invertebrates	LC50	Crustacean	160 mg/l (48 h)
	Aquatic plants			

12.2 Persistence and degradability.

No information is available regarding the biodegradability of the substances present.

No information is available on the degradability of the substances present.

No information is available about persistence and degradability of the product.

12.3 Bioaccumulative potential.

Information about the bioaccumulation of the substances present.

Name	Bioaccumulation			
	Log Pow	BCF	NOECs	Level
Citric acid CAS No: 5949-29-1 EC No:	-1,57	-	-	Very low

12.4 Mobility in soil.

No information is available about the mobility in soil.

The product must not be allowed to go into sewers or waterways.

Prevent penetration into the ground.

12.5 Results of PBT and vPvB assessment.

No information is available about the results of PBT and vPvB assessment of the product.

12.6 Endocrine disrupting properties.

This product doesn't contain components with environmental endocrine disrupting properties.

12.7 Other adverse effects.

No information is available about other adverse effects for the environment.

SECTION 13: DISPOSAL CONSIDERATIONS.**13.1 Waste treatment methods.**

Do not dump into sewers or waterways. Waste and empty containers must be handled and eliminated according to current, local/national legislation.

Follow the provisions of Directive 2008/98/EC regarding waste management.

SECTION 14: TRANSPORT INFORMATION.

Transportation is not dangerous. In case of road accident causing the product's spillage, proceed in accordance with point 6.

14.1 UN number or ID number.

Transportation is not dangerous.

14.2 UN proper shipping name.

Description:

ADR/RID: Not classified as hazardous for transport.

IMDG: Not classified as hazardous for transport.

ICAO/IATA: Not classified as hazardous for transport.

14.3 Transport hazard class(es).

Transportation is not dangerous.

14.4 Packing group.

Transportation is not dangerous.

14.5 Environmental hazards.

Transportation is not dangerous.

Transport by ship, FEm – Emergency sheets (F – Fire, S - Spills): Not applicable.

14.6 Special precautions for user.

Transportation is not dangerous.

14.7 Maritime transport in bulk according to IMO instruments.

Transportation is not dangerous.

SECTION 15: REGULATORY INFORMATION.**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture.**

The product is not affected by the Regulation (EC) No 1005/2009 of the European Parliament and of the Council of 16 September 2009 on substances that deplete the ozone layer.

Product classification according to Annex I of Directive 2012/18/EU (SEVESO III): N/A

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The product is not affected by Regulation (EU) No 528/2012 concerning the making available on the market and use of biocidal products.

The product is not affected by the procedure established Regulation (EU) No 649/2012, concerning the export and import of dangerous chemicals.

15.2 Chemical safety assessment.

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

SECTION 16: OTHER INFORMATION.

Complete text of the H phrases that appear in section 3:

H302	Harmful if swallowed.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H360FD	May damage fertility. May damage the unborn child.

Classification codes:

Acute Tox. 4 : Acute toxicity (Oral), Category 4

Eye Irrit. 2 : Eye irritation, Category 2

Repr. 1B : Reproductive toxicant, Category 1B

Skin Irrit. 2 : Skin irritant, Category 2

Changes regarding to the previous version:

In section 1.4 include telephones numbers/links of European anti-poisons centers.

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Physical hazards	On basis of test data
Health hazards	Calculation method
Environmental hazards	Calculation method

It is advisable to carry out basic training with regard to health and safety at work in order to handle this product correctly.

Abbreviations and acronyms used:

BCF: Bioconcentration factor.

CEN: European Committee for Standardization.

EC50: Half maximal effective concentration.

PPE: Personal protection equipment.

LC50: Lethal concentration, 50%.

LD50: Lethal dose, 50%.

NOEC: No observed effect concentration.

Key literature references and sources for data:

<http://eur-lex.europa.eu/homepage.html>

<http://echa.europa.eu/>

Regulation (EU) 2020/878.

Regulation (EC) No 1907/2006.

Regulation (EU) No 1272/2008.

The information given in this Safety Data Sheet has been drafted in accordance with COMMISSION REGULATION (EU) 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemical substances and mixtures (REACH).

The information in this Safety Data Sheet on the Preparation is based on current knowledge and on current EC and national laws, as far as the working conditions of the users is beyond our knowledge and control. The product must not be used for purposes other than those that are specified without first having written instructions on how to handle. It is always the responsibility of the user to take the appropriate measures in order to comply with the requirements established by current legislation. The information contained in this Safety Sheet only states a description of the safety requirements for the preparation, and it must not be considered as a guarantee of its properties.