










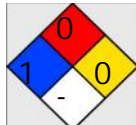
MATERIAL SAFETY DATA SHEET

In accordance with the requirements of the OSHA Hazard Communication Standard, 29CFR 1910.1200

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		BRUGAL TOC 013 G Code: 41211											
Version: 5		Revision: 24/05/2017		Previous revision: 13/02/2017 Date of printing: 26/07/2017									
SECTION 1 : IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING													
1.1	PRODUCT IDENTIFIER: BRUGAL TOC 013 G Code: 41211												
1.2	RELEVANT IDENTIFIED USES AND USES ADVISED AGAINST: <u>Intended uses (main technical functions):</u> Pasivante de metales. [X] Industrial [] Professional [] Consumers <u>Uses advised against:</u> This product is not recommended for any use or sector of use industrial, professional or consume other than those previously listed as 'Intended or identified uses'. <u>Restrictions on manufacture, placing on market and use:</u> Nor restricted.												
1.3	DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET: PROCOAT TECNOLOGIAS, S.L. Avda. de la Industria, 4 - P.I. Pla del Camí - 08297 - Castellgalí (Barcelona) Phone: +01 773.249.4210 D - Fax: +01 773.388.0893 <u>E-mail address of the person responsible for the safety data sheet:</u> e-mail: dkelley@teccoat.com												
1.4	EMERGENCY TELEPHONE NUMBER: 800-424-9300 (Domestic North America - Chemtrec)												
SECTION 2 : HAZARDS IDENTIFICATION													
2.1	HMIS HAZARD RATINGS: <table border="1" data-bbox="438 779 622 878"> <tr> <td>1</td> <td>HEALTH</td> </tr> <tr> <td>0</td> <td>FLAMMABILITY</td> </tr> <tr> <td>2</td> <td>REACTIVITY</td> </tr> <tr> <td>B</td> <td>PPE</td> </tr> </table> <div style="margin-left: 400px;"> (1) Slight health hazard (0) Minimal flammability hazard (2) Moderate physicochemical hazard (B) Safety glasses and gloves </div> <p>Note: HMIS Hazard Ratings involve data and interpretations that may vary from company to company. They are intended only for rapid, general identification of the magnitude of the specific hazard. To deal adequately with the safe handling of the material, all the information contained in this MSDS must be considered.</p> <p>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.</p>					1	HEALTH	0	FLAMMABILITY	2	REACTIVITY	B	PPE
1	HEALTH												
0	FLAMMABILITY												
2	REACTIVITY												
B	PPE												
2.2	LABEL ELEMENTS: <div style="display: flex; align-items: center;">  <div> This product is labelled with the signal word WARNING </div> </div> <p><u>Hazard statements:</u> H319 Causes serious eye irritation. H315 Causes skin irritation. H412 Harmful to aquatic life with long lasting effects.</p> <p><u>Precautionary statements:</u> P337+P313 If eye irritation persists: Get medical advice/attention. P280B Wear protective gloves and eye protection. P362 Take off contaminated clothing. P303+P361+P353-P352-P312 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash with plenty of soap and water. Call a POISON CENTER or doctor/physician if you feel unwell. P305+P351+P338-P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician. P273-P501c Avoid release to the environment. Dispose of contents/container as hazardous waste.</p> <p><u>Supplementary statements:</u> None.</p> <p><u>Hazardous ingredients:</u> None in a percentage equal to or higher than the limit for the name.</p>												
2.3	OTHER HAZARDS: Hazards which do not result in classification but which may contribute to the overall hazards of the mixture: <u>Other physicochemical hazards:</u> No other relevant adverse effects are known. <u>Other adverse human health effects:</u> No other relevant adverse effects are known. <u>Other negative environmental effects:</u> Does not contain substances that fulfil the PBT criteria.												

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SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS		
3.1	<u>SUBSTANCES:</u> Not applicable (mixture).	
3.2	<u>MIXTURES:</u> This product is a mixture. <u>Chemical description:</u> Solution of hydroxylated acrylic resin in aqueous media. <u>HAZARDOUS INGREDIENTS:</u> Substances taking part in a percentage higher than the exemption limit:	
	<div> 1 < 2,5 % <u>Hexafluorotitanic acid</u> CAS: 17439-11-1 , EC: 241-460-4 Danger: Met. Corr. 1:H290 Acute Tox. (inh.) 3:H331 Acute Tox. (skin) 3:H311 Acute Tox. (oral) 3:H301 Skin Corr. 1B:H314</div>	
	<div> 1 < 2,5 % <u>Orthophosphoric acid</u> CAS: 7664-38-2 , EC: 231-633-2 Danger: Met. Corr. 1:H290 Skin Corr. 1B:H314</div>	
	<u>Impurities:</u> Does not contain other components or impurities which will influence the classification of the product. <u>Reference to other sections:</u> For more information, see sections 8, 11, 12 and 16.	

		BRUGAL TOC 013 G Code: 41211			
SECTION 4 : FIRST AID MEASURES					
4.1	DESCRIPTION OF FIRST-AID MEASURES:  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. Lifeguards should pay attention to self-protection and use the recommended protective equipment if there is a possibility of exposure. Wear protective gloves when administering first aid.				
	Route of exposure	Symptoms and effects, acute and delayed	Description of first-aid measures		
	<u>Inhalation:</u>	Normally does not produce symptoms.	Remove the patient out of the contaminated area into the fresh air. If breathing is irregular or stops, administer artificial respiration. If the person is unconscious, place in appropriate recovery position. Keep the patient warm and at rest until medical attention arrives.		
	<u>Skin:</u> 	Skin contact causes redness.	Remove immediately contaminated clothing. Wash thoroughly the affected area with plenty of cold or lukewarm water and a solution of 5% sodium bicarbonate. Finally, rewash the affected area with soap and water.		
	<u>Eyes:</u> 	Contact with the eyes produces redness and pain.	Remove contact lenses. Rinse eyes copiously by irrigation with plenty of clean, fresh water for at least 15 minutes, holding the eyelids apart, until the irritation is reduced. Call a physician immediately.		
	<u>Ingestion:</u>	If swallowed, may cause irritation of the mouth, throat and esophagus.	If swallowed, seek immediate medical attention. Due to its acid condition, the effects can be reduced to a minimum by drinking plenty of water, to which milk of magnesia has been added. Do not induce vomiting, due to the risk of aspiration. Keep the patient at rest.		
4.2	MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED: The main symptoms and effects are indicated in sections 4.1 and 11				
4.3	INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED: <u>Notes to physician:</u> Treatment should be directed at the control of symptoms and the clinical condition of the patient. <u>Antidotes and contraindications:</u> 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, phosphorus oxides, formaldehyde. Irritant. Exposure to combustion or decomposition products may be a hazard to health.			 ANSI/NFPA 704: Health: 1 Flammability: 0 Reactivity: 0 Special key: -	
5.3	ADVICE FOR FIREFIGHTERS: <u>Special protective equipment:</u> 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. <u>Other recommendations:</u> 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.). Transfer to a suitable container for recovery or elimination. Neutralize with carbonate or sodium bicarbonate. Keep the remains in a closed container. Finally, clean up the area with plenty of water.				
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.				

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SECTION 7 : HANDLING AND STORAGE		
7.1	<p><u>PRECAUTIONS FOR SAFE HANDLING:</u> Comply with the existing legislation on health and safety at work. <u>General recommendations:</u> Avoid any type of leakage or escape. Keep the container tightly closed. <u>Recommendations for the prevention of fire and explosion risks:</u> 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 there are not necessary any equipment and protective systems intended for use in potentially explosive atmospheres. Also they are not applicable the provisions on the detailed requirements for electrical installations in locals with risk of fire or explosion. <u>Recommendations for the prevention of toxicological risks:</u> Do not eat, drink or smoke while handling. After handling, wash hands with soap and water. For exposure controls and personal protection measures, see section 8. <u>Recommendations for the prevention of environmental contamination:</u> 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.</p>	
7.2	<p><u>CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES:</u> # Prevent unauthorized access. Keep away from sources of heat. If possible, avoid direct contact with sunlight. Keep container in a well-ventilated place. In order to avoid leakages, the containers, after use, should be closed carefully and placed in a vertical position. Keep container tightly closed. For more information, see section 10. <u>Class of store</u> : According to current legislation. <u>Maximum storage period</u> : 6. months <u>Temperature interval</u> : min: 5. °C, max: 40. °C (recommended). <u>Incompatible materials:</u> Keep away from oxidizing agents, alkalis, amines, alcohols, ketones, metals. <u>Type of packaging:</u> According to current legislation.</p>	
7.3	<p><u>SPECIFIC END USES:</u> For the use of this product do not exist particular recommendations apart from that already indicated.</p>	



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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 assessing 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	<u>Year</u>	<u>TLV-TWA</u>		<u>TLV-STEL</u>		<u>Remarks</u>
		ppm	mg/m3	ppm	mg/m3	
Orthophosphoric acid	1976	-	1.0		3.0	

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

BIOLOGICAL LIMIT VALUES:

Not available

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8.2	<p><u>EXPOSURE CONTROLS:</u></p> <p><u>ENGINEERING MEASURES:</u></p> <div style="display: flex; align-items: center;">    <div style="margin-left: 10px;"> <p>Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction.</p> </div> </div> <p><u>Protection of respiratory system:</u> Avoid the inhalation of product.</p> <p><u>Protection of eyes and face:</u> It is recommended to install emergency eye baths close to the working area.</p> <p><u>Protection of hands and skin:</u> It is recommended to install emergency showers 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.</p> <p><u>OCUPATIONAL EXPOSURE CONTROLS: Directive 89/686/EEC-96/58/EC:</u></p> <p>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, etc.), you should consult the informative brochures provided by the manufacturers of PPE.</p> <table border="1" style="width: 100%;"> <tr> <td style="width: 20%;"><u>Mask:</u></td> <td>No.</td> </tr> <tr> <td> <u>Goggles:</u>   </td> <td>Safety goggles with suitable lateral protection (OSHA 29CFR 1910.133). Clean daily and disinfect at regular intervals in accordance with the instructions of the manufacturer.</td> </tr> <tr> <td><u>Face shield:</u></td> <td>No.</td> </tr> <tr> <td> <u>Gloves:</u>   </td> <td>Gloves resistant against chemicals (OSHA 29CFR 1910.132). 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 OSHA 29CFR 1910.132. 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.</td> </tr> <tr> <td><u>Boots:</u></td> <td>No.</td> </tr> <tr> <td><u>Apron:</u></td> <td>No.</td> </tr> <tr> <td><u>Clothing:</u></td> <td>No.</td> </tr> </table> <p><u>Thermal hazards:</u> Not applicable (the product is handled at room temperature).</p> <p><u>ENVIRONMENTAL EXPOSURE CONTROLS:</u> Avoid any spillage in the environment.</p> <p><u>Spills on the soil:</u> Prevent contamination of soil.</p> <p><u>Spills in water:</u> 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.</p> <p><u>Emissions to the atmosphere:</u> Not applicable.</p>		<u>Mask:</u>	No.	<u>Goggles:</u>  	Safety goggles with suitable lateral protection (OSHA 29CFR 1910.133). Clean daily and disinfect at regular intervals in accordance with the instructions of the manufacturer.	<u>Face shield:</u>	No.	<u>Gloves:</u>  	Gloves resistant against chemicals (OSHA 29CFR 1910.132). 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 OSHA 29CFR 1910.132. 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.	<u>Boots:</u>	No.	<u>Apron:</u>	No.	<u>Clothing:</u>	No.
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<u>Apron:</u>	No.															
<u>Clothing:</u>	No.															

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SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

9.1	<p>INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES:</p> <p><u>Appearance</u></p> <ul style="list-style-type: none"> - Physical state : Liquid. - Colour : White. - Odour : Characteristic - Odour threshold : Not available (mixture). <p><u>pH-value</u></p> <ul style="list-style-type: none"> - pH : Not available <p><u>Change of state</u></p> <ul style="list-style-type: none"> - Melting point : Not available - Boiling interval : # 100* - 354* °C at 760 mmHg <p><u>Density</u></p> <ul style="list-style-type: none"> - Vapour density : Not available - Relative density : 1.09 at 20/4°C Relative water <p><u>Stability</u></p> <ul style="list-style-type: none"> - Decomposition temperature : # Not available (technical impossibility to obtain the data). <p><u>Viscosity:</u></p> <ul style="list-style-type: none"> - Viscosity (flow time) : Not available <p><u>Volatility:</u></p> <ul style="list-style-type: none"> - Evaporation rate : Not applicable - Vapour pressure : Not available <p><u>Solubility(ies)</u></p> <ul style="list-style-type: none"> - Solubility in water : Miscible - Liposolubility : Not available (mixture untested). <p><u>Flammability:</u></p> <ul style="list-style-type: none"> - Flash point : Não inflamável °C - Autodignition temperature : Not applicable (do not support combustion). <p><u>Explosive properties:</u></p> <p>Not available.</p> <p><u>Oxidizing properties:</u></p> <p>Not classified as oxidizing product.</p> <p>*Estimated values based on the substances composing the mixture.</p>
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9.2	<p>OTHER INFORMATION:</p> <ul style="list-style-type: none"> - Heat of combustion : # 3275* Kcal/kg - Solids : 53.7 % Weight <p>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.</p>
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SECTION 10 : STABILITY AND REACTIVITY

10.1	<p>REACTIVITY:</p> <p><u>Corrosivity to metals:</u> It is not corrosive to metals.</p> <p><u>Pyrophorical properties:</u> It is not pyrophoric.</p>
10.2	<p>CHEMICAL STABILITY:</p> <p>Stable under recommended storage and handling conditions.</p>
10.3	<p>POSSIBILITY OF HAZARDOUS REACTIONS:</p> <p>Possible dangerous reaction with oxidizing agents, alkalis, amines, alcohols, ketones, metals.</p>
10.4	<p>CONDITIONS TO AVOID:</p> <p><u>Heat:</u> # Keep away from sources of heat.</p> <p><u>Light:</u> If possible, avoid direct contact with sunlight.</p> <p><u>Air:</u> # The product is not affected by exposure to air, but should not be left the containers open.</p> <p><u>Pressure:</u> # Not relevant.</p> <p><u>Shock:</u> # The product is not sensitive to shocks, but as a recommendation of a general nature should be avoided bumps and rough handling to avoid dents and breakage of packaging, especially when the product is handled in large quantities, and during loading and download operations.</p>
10.5	<p>INCOMPATIBLE MATERIALS:</p> <p>Keep away from oxidizing agents, alkalis, amines, alcohols, ketones, metals.</p>
10.6	<p>HAZARDOUS DECOMPOSITION PRODUCTS:</p> <p>As consequence of thermal decomposition, hazardous products may be produced: hydrofluoric acid, phosphorus oxides, formaldehyde.</p>

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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 :

Orthophosphoric acid

DL50 (OECD 401)

mg/kg oral

2600. Rat

DL50 (OECD 402)

mg/kg cutaneous

2740. Rabbit

CL50 (OECD 403)

mg/m3.4h inhalation

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
<u>Inhalation:</u> 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).
<u>Skin:</u> 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).
<u>Eyes:</u> Not classified	Not available	-	Not classified as a product with acute toxicity by eye contact (lack of data).
<u>Ingestion:</u> Not classified	ATE > 2000 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
<u>Respiratory corrosion/irritation:</u> Not classified	-	-	Not classified as a product corrosive or irritant by inhalation (based on available data, the classification criteria are not met).
<u>Skin corrosion/irritation:</u> 	Skin 	Cat.2	IRRITANT: Causes skin irritation.
<u>Serious eye damage/irritation:</u> 	Eyes 	Cat.2	IRRITANT: Causes serious eye irritation.
<u>Respiratory sensitisation:</u> Not classified	-	-	Not classified as a product sensitising by inhalation (based on available data, the classification criteria are not met).
<u>Skin sensitisation:</u> Not classified	-	-	Not classified as a product sensitising by skin contact (based on available data, the classification criteria are not met).

ASPIRATION HAZARD:

Danger class	Target organs	Cat.	Main effects, acute and/or delayed
<u>Aspiration hazard:</u> 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 developing.

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: Not available.

Long-term or repeated exposure: Not available.

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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	<u>TOXICITY:</u>			
	<u>Acute toxicity in aquatic environment</u> for individual ingredients : Hexafluorotitanic acid Orthophosphoric acid	<u>CL50</u> (OECD 203) mg/L/96hours 172. Fishes 138. Fishes	<u>CE50</u> (OECD 202) mg/L/48hours 48. Daphnia 265. Daphnia	<u>CE50</u> (OECD 201) mg/L/72hours 11. Algae > 100. Algae
	<u>No observed effect concentration</u> Not available <u>Lowest observed effect concentration</u> Not available			
12.2	<u>PERSISTENCE AND DEGRADABILITY:</u> Not available.			
12.3	<u>BIOACCUMULATIVE POTENTIAL:</u> Not available.			
	<u>Bioaccumulation</u> for individual ingredients : Orthophosphoric acid	<u>logPow</u> -0.770	<u>BCF</u> L/kg 3.2 (calculated)	<u>Potential</u> Not available
12.4	<u>MOBILITY IN SOIL:</u> Not available.			
12.5	<u>RESULTS OF PBT AND VPVB ASSESMENT:</u> Annex XIII of Regulation (EC) no. 1907/2006: Does not contain substances that fulfill the PBT/vPvB criteria.			
12.6	<u>OTHER ADVERSE EFFECTS:</u> <u>Ozone depletion potential:</u> Not available. <u>Photochemical ozone creation potential:</u> Not available. <u>Earth global warming potential:</u> Not available. <u>Endocrine disrupting potential:</u> Not available.			



SECTION 13 : DISPOSAL CONSIDERATIONS

13.1	<u>WASTE TREATMENT METHODS:</u> 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. <u>Disposal of empty containers:</u> 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 emptying of the same, being the holder of the residue responsible for their classification. With contaminated containers and packaging, adopt the same measures as for the product in itself. Emptied containers may retain product residues and vapours. Keep empty containers tightly closed. Do not refill or clean containers without proper instructions. The containers should be completely drained and stored in a safe way until they are appropriately reconditioned or disposed. Do not pressurize, cut, weld, sold, drill, grind or expose such containers to heat, flame, sparks, static electricity or other sources of ignition: They can explode and cause injury or death. Never remove labels from containers until they have been cleaned. Containers and packaging which have not been contaminated may be re-used. <u>Procedures for neutralising or destroying the product:</u> Authorised landfill in accordance with local regulations.
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In accordance with the requirements of the OSHA Hazard Communication Standard, 29CFR 1910.1200

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		BRUGAL TOC 013 G Code: 41211			
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: <u>Transport by road (ADR 2015) and</u> <u>Transport by rail (RID 2015):</u> Not regulated <u>Transport by sea (IMDG 37-14):</u> Not regulated <u>Transport by air (ICAO/IATA 2015):</u> Not regulated <u>Transport by inland waterways (ADN):</u> 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 in a vertical and secure position.				
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	<u>USA REGULATIONS:</u> <u>- Occupational Safety and Health Act (OSHA):</u> This product is not considered to be hazardous under the OSHA Hazard Communication Standard. <u>- Clean Air Act:</u> · 112(r) Hazardous air pollutants (HAP) (40CFR 68): No. <u>- Clean Water Act:</u> · 307 Hazardous water priority pollutants (HWPP): No. <u>- Comprehensive Environmental Response, Compensation and Liability Act (CERCLA):</u> This product contains the following Hazardous Substances for Emergency release notification (40CFR 302): Orthophosphoric acid: Reportable quantity (RQ): 5000 lbs. Releases of CERCLA hazardous substances, in quantities equal to or greater than their reportable quantity (RQ), are subject to reporting to the National Response Center under CERCLA. Such releases are also subject to state and local reporting under section 304 of Emergency Planning and Community Right-to-Know Act (EPCRA), also known as SARA Title III. <u>- Superfund Amendments and Reauthorization Act (SARA Title III):</u> · 302/304 Extremely Hazardous Substances (EHS) for Emergency release notification (40CFR 355): No. · 313 Reportable Ingredients (40CFR 372): No. · 311/312 Hazard Categories (40CFR 370): No. <u>- Toxic Substance Control Act (TSCA):</u> All chemical substances in this product comply with all applicable rules or order under TSCA. <u>- California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986):</u> This product does not contain chemical substances known to the State of California to cause cancer or reproductive toxicity. <u>OTHER REGULATIONS:</u> Not available				
15.2	<u>CHEMICAL SAFETY ASSESSMENT:</u> A chemical safety assessment has not been carried out for this mixture.				

	BRUGAL TOC 013 G Code: 41211	
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SECTION 16 : OTHER INFORMATION

- 16.1 TEXT OF THE PHRASES AND NOTES REFERENCED IN SECTIONS 2 AND/OR 3:
Hazard statements according the Regulation (EC) No. 1272/2008-605/2014 (CLP), Anexo III:
 H290 May be corrosive to metals. H301 Toxic if swallowed. H311 Toxic in contact with skin. H314 Causes severe skin burns and eye damage. H331 Toxic if inhaled.
Notes related to the identification, classification and labelling of the substances:
 Nota B : Ciertas sustancias, que se presentan en el mercado a diferentes concentraciones, tienen riesgos distintos según el grado de concentración.
- 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/>
 · Threshold Limit Values, (AGC IH, 2014).
- ABBREVIATIONS AND ACRONYMS:
 List of abbreviations and acronyms that can be used (but not necessarily used) in this material safety data sheet:
- GHS: Globally Harmonized System of Classification and Labelling of Chemicals of the United Nations.
 - CLP: European regulation on Classification, Labelling and Packaging of substances and chemical mixtures.
 - CAS: Chemical Abstracts Service (Division of the American Chemical Society).
 - UVCB: Substances of Unknown or Variable composition, complex reaction products or biological materials).
 - VOC: Volatile Organic Compounds.
 - LD50: Lethal dose, 50 percent.
 - LC50: Lethal concentration, 50 percent.
 - UN: United Nations Organisation.
 - ADR: European agreement concerning the international carriage of dangerous goods by road.
 - RID: Regulations concerning the international transport of dangerous 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 the requirements of the OSHA Hazard Communication Standard, 29CFR 1910.1200.
- HISTORY: Revision:
 Version: 4 13/02/2017
 Version: 5 24/05/2017
- 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.