

SAFETY DATA SHEET

According to European Regulation (CE) 2015/830

Version 6 - October 2021

SECTION 1- IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY

1.1.- Product identifier

Name: **"rb bertomeu" beco F-Plus Concentrated**

Chemical name : Liquid substance hazardous for the environment.
N.E.P. (Alkylamines, Hydrocarbons)

Type : This product is a **mixture** with Polyamines of alkyl chain, Surfactants and liquid Magnesium (molecules – trade secret) soluble in hydrocarbons.

Use: **Additive for Marine Diesel Oil and Gas Oil, Heavy Fuel Oil and Crude Oil.**

Transport Information: UN 3082, Class 9, PG. III
TARIC: 3811 90 00

1.2.- Manufacturer data

Manufacturer : rb bertomeu, S.L.
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SECTION 2- HAZARDS IDENTIFICATION

2.1.- Classification of the substance or mixture

Result classification: The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification H302
H315
H318
H372
H410

See Section 16 for the full text of the statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

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2.2.- Label elements

Labels according to Regulation (CE) No. 1272 / 2008 [CLP/GHS]

Hazard pictograms:**Signal word:** Danger**Danger warnings:**

H302	Harmful if swallowed.
H318	Causes serious eye damage.
H372	Causes damage to organs through prolonged or repeated exposure.
H410	Very toxic to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.

Precautionary statements:

General	P101 - If medical advice is needed, have product container or label at hand. P102 - Keep out of reach of children. P103 - Read label before
Prevention	P260 - Do not breathe vapor. P270 - Do not eat, drink or smoke when using this product. P273 - Avoid release to the environment. P280 - Wear protective gloves/protective clothing/eye protection / face protection.
Response	P301 + P310 + P331 - IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting. P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
Storage	P405 – Store locked up. P412 - Do not expose to temperatures exceeding 50 °C/122 °F.
Disposal	P501 - Dispose of contents / container according to the local, regional, national and international law.
Hazardous ingredients	Alkyl chain polyamines / surfactants Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)
Supplemental label elements	EUH066 - Repeated exposure may cause skin dryness or cracking.
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	Restricted for professional users.

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Packaging special requirements:

Containers to be fitted with child-resistant fastenings	Yes, applicable.
Tactile warning of danger	Yes, applicable.

2.3.- Other hazards

Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII	No. P: Not applicable. B: No T: Yes.
Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII	No vP: Not applicable. vB: No.
Other hazards which do not result in classification	None known.

SECTION 3- COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient	%	CAS number	Classification
Soluble Magnesium carboxylate / Magnesium Organic salts of Fatty acids (molecules-trade secret) soluble in hydrocarbons	>15 <75	67701-23-9	H302, H315, H319
Alkyl chain polyamines / Surfactants	>15 <60	68911-35-3	Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Eye Dam.1; H318 Aquatic Chronic 1, H410
Hydrocarbons, C10-C13, nalkanes, isoalkanes, cyclics, aromatics (2-25%)	>5 <40	64742-82-1	Aquatic Chronic 3; H412 Asp. Tox. 1, H304, STOT RE 1, H372

See Section 16 for the full text of the statements declared above.



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SECTION 4- FIRST AID MEASURES

4.1.-Description of first aid measures

Inhalation:	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. Do not induce vomiting.
Ingestion:	Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Skin contact	Thoroughly wash the skin with a 0.5% solution of acetic acid in water and then with soap and water, or with a recognized skin cleanser. Immediate medical treatment is necessary since untreated skin corrosions are difficult and slow to heal. Wear off the contaminated clothes and shoes. Continue to rinse for at least 10 minutes. Consult a doctor after exposure or in case of discomfort. Wash the clothes before using them again. Thoroughly clean footwear before reusing it.
Eye contact:	Immediately flush eyes with a 0.5% solution of acetic acid in water for a few minutes. Later, wash with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Protect the undamaged eye. Get medical attention.
Protection of first-aiders	No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

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

Potential acute health effects

Eye contact:	No specific data.
Inhalation:	No specific data.
Skin contact:	Adverse symptoms may include the following: irritation, dryness, cracking
Ingestion:	Adverse symptoms may include the following: nausea or vomiting

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

Notes to physician: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments: No specific treatment.

SECTION 5- FIREFIGHTING MEASURES**5.1.- Extinguishing media**

Suitable: Use dry chemical, CO₂ water spray (fog) or foam

Not suitable: Do not use water jet that could spread the fire.

5.2.- Special hazards arising from the substance or mixture

Hazards from the substance or mixture	In a fire or if heated, a pressure increase will occur and the container may burst. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
Hazardous thermal decomposition products	No specific data.

5.3.- Advice for firefighters

Special protective actions for fire-fighters	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Special protective equipment for fire-fighters	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
Fire-fighting measures	May form explosive mixtures with air.
Additional information	No

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

For non-emergency personnel	No action should be taken that involves a personal risk or without adequate training. Evacuate the surroundings. Do not let unnecessary personnel enter without protection. Do not touch or walk on spilled material. Turn off every ignition source. No flares, no smoke, no flames in the area of risk. Avoid breathing vapor or mist. Provide adequate ventilation. Wear an appropriate breathing apparatus when the ventilation
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	system is inadequate. Wear appropriate personal protective equipment.
For emergency responders	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2.- Environmental precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

6.3.- Methods and materials for containment and cleaning up

Small spill	Stop the leak if this presents no risk. Remove containers from the spill area. Dilute with water and scrub if it is soluble in water. Alternatively, or if it is insoluble in water, absorb with an inert dry material and place in a suitable waste container. Use spark proof tools and explosion-proof equipment. For disposal use an authorized contractor.
Large spill	Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product.

6.4.- Reference to other sections

See Section 1 for emergency contact information.

See Section 8 for information on appropriate personal protective equipment.

See Section 13 for additional waste treatment information.

SECTION 7- HANDLING AND STORAGE

The information collected in this section contains data and guidance of a generic nature. The list of identified uses in Section 1 should be consulted to collect the specific information on available use that is collected under the exposure scenario(s), if the substance had them.



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7.1 Precautions for safe handling

Protective measures	Wear appropriate personal protective equipment (See Section 8). Do not breathe vapors or mists. Do not eat. Avoid contact with eyes, skin and clothing. To avoid it's releasing into the environment. Keep it in its original packaging or in an approved alternative one manufactured in a compatible material, keeping it closed when not in use. Empty containers retain product residues and can be hazardous. Do not reuse the container.
Advice on general occupational hygiene	Eating, drinking or smoking should be prohibited in the places where this product is handled, stored or treated. Workers should wash their hands and face before eating, drinking or smoking. Remove protective equipment and contaminated clothes before entering areas where you eat. See also Section 8 for additional information on hygienic measures.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in a separate and approved area. Store in the original container protected from direct sunlight in a dry, cool and well-ventilated area, separated from incompatible materials (see Section 10) and food and drink. Save under lock and key Eliminate all sources of ignition. Stay away from oxidizing materials. Keep the container tightly closed and sealed until the moment of use. Open containers should be carefully closed and kept upright to avoid spills. Do not store in unlabeled containers. Use an adequate safety container to avoid contamination of the environment. Entry prohibited to any unauthorized person. Reacts with copper, aluminum, zinc and its alloys.

7.3 Specific end use(s)

Uses: **Additive for Marine Diesel Oil and Gas Oil, Heavy Fuel Oil and Crude Oil.**

Reduces the consumption in **engines, gas turbines, boilers/steam generators (SG), dryers and furnaces.**

Asphaltenes, coal and sludge **dispersant. Demulsifier**, decants water. **Detergent**, keeps the injectors clean. Enhances combustion and reduces the emission of unburned particles. Reduces sludge and the trigger rate at the sewage treatment plants. It keeps the filters clean. Removes algae and fungi. Vanadium and Sodium corrosion inhibitor. **Improves the lubricity** for injection in Low Sulphur Diesel (LSD) normas ASTM D6079 (HFRR) / ISO 1216.

Saves fuel.

Recommendations: Check the dose to be used, since it depends on the fuel's quality and other parameters.

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SECTION 8- EXPOSURE CONTROLS / PERSONAL PROTECTION

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

8.1 Control parameters**Professional Exposure limit**

Product/ingredient name	Exposure limits
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	INSHT (Spain, 1/2017). Absorbed through the skin. VLA-ED: 50 ppm 8 hours. VLA-EC: 580 mg/m ³ 15 minutes. VLA-ED: 290 mg/m ³ 8 hours. VLA-EC: 100 ppm 15 minutes.

Recommended monitoring procedures

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required 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 monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Derived No effect levels (DNEL)

Product/ingredient name	Final use	Exposure	Potential effects on health	Value
Alkyl chain polyamines / surfactants	Personnel	Inhalation	Long term - systemic effects.	0.035 mg/m ³

Concentrations planned without effect (PNEC)

Product/ingredient name	Environmental compartment	Value
Alkyl chain polyamines / surfactants	Freshwater	0.010 mg/l
	Wastewater treatment plant	0.251 mg/l
	Freshwater sediment	1.72 mg/kg
	Floor	10 mg/kg



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8.2 Exposure controls

Appropriate engineering controls	If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
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Individual protection measures

Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection	Ocular protective equipment complying with approved standards should be used when a risk assessment indicates that it is necessary, in order to avoid any exposure to liquid splashes, drizzles, gases or dust. If contact is possible, the following protection should be used, unless the rating indicates a higher degree of protection: safety glasses with side protection. Recommended: Protective glasses tight. In case of contact with the eyes, wash them immediately with 0.5% acetic acid solution in water for a few minutes, then rinse with plenty of water for as long as possible.

Skin protection

Hand protection	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
Body protection	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Recommended: Use suitable protective equipment. Wear protective gloves.
Other skin protection	Suitable protective footwear.
Respiratory protection	Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. Recommended: If operating conditions cause high vapor concentrations or the TLV is exceeded, use supplied-air respirator.
Environmental exposure controls	Emissions from ventilation equipment or work processes must be verified to verify that they meet the requirements of environmental protection legislation. In some cases, to reduce emissions to an acceptable level, it will be necessary to use smoke scrubbers, filters or modify the design of the process equipment.

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SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES**General information:**

Physical state	Liquid
Color	Yellow – Ambre transparent
Odor	Ammonia and hydrocarbon
pH at 15° C (1 gr/1000 gr H ₂ O)	10
Boiling point and boiling range (°C)	175 - 205
Flash point (°C)..	> 65 (C.C.)
Auto-ignition temperature (°C)	240
Upper/lower flammability or explosive limits	Lower: 0.6 % - Upper : 7.0 %
Vapor pressure	0.05 kPa (room temperature)
Vapor relative density	4.15 (air=1)
Density at 15°C. (Kg/m ³)	890-910
Solubility in water	Insoluble in cold water and hot water.
Solubility in hydrocarbons	Soluble in fuel oil, diesel oil or crude oil
Viscosity at 15°C (cSt)	< 50
Cloud point (°C).....	< -15

SECTION 10 – STABILITY AND REACTIVITY

10.1 Reactivity	No specific test data related to reactivity available for this product or its ingredients.
10.2 Chemical stability	The product is stable.
10.3 Possibility of hazardous reactions	Under normal conditions of storage and use, hazardous reactions will not occur.
10.4 Conditions to avoid	No specific data
10.5 Incompatible materials	Materials to be avoided: Strong Oxidants.
10.6 Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced. No dangerous decomposition product is not known.

SECTION 11 – TOXICOLOGICAL INFORMATION**11.1 Information on toxicological effects****Acute toxicity**

Product/ingredient name	Result	Species	Score	Exposure
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	CL50 Inhalation Vapor	Rat	13100 mg/m ³	4 hours
	DL 50 Dermal	Rat	>3400 mg/kg	-
	DL 50 Oral	Rat	>15000mg/kg	-
Alkyl chain polyamines / surfactants	DL50 Oral	Rat	>300-2000 mg/kg	

Conclusion / summary : Not available.

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Irritation/Corrosion/Sensitization

Product/ingredient name	Result	Species	Score	Exposure	Obs.
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	Skin – Edema	Rabbit	1	-	-
	Skin - Erythema/Eschar	Rabbit	1.2	-	-
	Eyes- Edema in conjunctive	Rabbit	0.3	-	-
	Eyes – Red conjunctive	Rabbit	0	-	-
	Eyes – Opacity of the cornea	Rabbit	0	-	-
Alkyl chain polyamines / surfactants	Causes burns	Rabbit	-	-	-

Conclusion / summary:

Eyes: Vapor can cause irritation and itchy eyes. Causes severe burns to the eyes.**Skin:** Burns may occur several hours after the product has been removed. The symptoms may be delayed. Causes severe burns of the skin. The product can be absorbed through the skin.**Respiratory:** Inhalation of aerosols can cause irritation of the mucous membranes. Thermal decomposition can lead to the release of irritating gases and vapors.**Ingestion:** Harmful if swallowed. It causes burns. May be fatal in case of ingestion and penetration in the respiratory tract.**Mutagenicity**

Product/ingredient name	Test	Experiment	Result
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	-	Experiment: In vitro Subject: Bacteria	Negative
	-	Experiment: In vitro Subject: Mammalian-Animal	Negative

Conclusion / summary : No known significant effects or critical hazards.

Carcinogenicity

Conclusion / summary : No known significant effects or critical hazards.

Reproductive toxicity

Product/ingredient name	Maternal toxicity	Fertility	Development toxin	Species	Dose	Exposure
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	Negative	Negative	-	Rat	Inhalation: ≥1720 mg/m ³	-

Conclusion / summary : Not available

Teratogenicity

Conclusion / summary : No known significant effects or critical hazards.

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Specific target organ toxicity (STOT) - single exposure

Conclusion / summary: Not available

Specific target organ toxicity (STOT) - repeated exposure

Product/ingredient name	Category	Exposition	Destination organs
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	Category 1	Inhalation	Central nervous system (CNS)

Aspiration hazard

Product/ingredient name	Result
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure: Not available**Potential acute health effects**

Eye contact : No known significant effects or critical hazards.

Inhalation : No known significant effects or critical hazards.

Skin contact : Defatting to the skin. May cause skin dryness and irritation

Ingestion : May be fatal if swallowed and enters airways.

Symptoms related to the physical, chemical and toxicological characteristics**Eye contact:** No specific data.**Inhalation:** No specific data.**Skin contact:** Adverse symptoms may include the following:

irritation

dryness

cracking

Ingestion: Adverse symptoms may include the following:

nausea or vomiting

Delayed and immediate effects and also chronic effects from short and long term exposure**Short term exposure**

Potential immediate effects: Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects: Not available.

Potential delayed effects: Not available.



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Potential chronic health effects

Product/ingredient name	Result	Species	Dose	Exposure
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	Sub-acute NOAEL Oral	Rat	>1056 mg/kg	90 days
	Sub-chronic NOAEL Dermic	Rat	>495 mg/m ³	90 days
	Sub-chronic NOAEL gas inhalation	Rat	690 ppm	90 days

Conclusion / summary : Not available.

General: Causes damage to organs through prolonged or repeated exposure if inhaled. Prolonged or repeated contact can dry the skin and lead to irritation, cracking and / or dermatitis.

Carcinogenicity: No known significant effects or critical hazards.

Mutagenicity: No known significant effects or critical hazards.

Teratogenicity: No known significant effects or critical hazards.

Developmental effects No known significant effects or critical hazards

Effects over fertility: No known significant effects or critical hazards.

Other information: Not available.

SECTION 12 – ECOLOGICAL INFORMATION

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-25%) Alkyl chain polyamines / surfactants	Acute EC50 10 to 100 mg/l	Algae	72 hours
	Acute CL50 100 to 200 mg/l	Daphnia - Daphnia magna	48 hours
	Acute CL50 10 to 100 mg/l	Fish - Oncorhynchus mykiss	96 hours
	Chronic NOEC 0,28 mg/l	Daphnia - Daphnia magna	21 days
	Chronic NOEC 0,091 mg/l	Fish - Oncorhynchus mykiss	28 days
	CL50 0.1 to 1 mg/l	Fish – Brachydanio rerio	96 hours
	CE50 0.01 to 0.1 mg/l	Daphnia - Daphnia magna	48 hours
	CE50 0.01 to 0.1 mg/l	Algae – Desmodesnus subspicatus	72 hours
	CE10 0.01 to 0.1 mg/l	Algae – Desmodesnus subspicatus	72 hours
	NOEC >0.001 to 0.01 mg/l	Daphnia - Daphnia magna	21 days

Conclusion / summary : Not available.

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12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	OECD	75% - Readily – 28 days	-	-

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	-	-	Readily

Conclusion / summary : Not available.

12.3 Bio accumulative potential

Product/ingredient name	LogP _{ow}	FBC	Potential
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	-	10 to 2500	High
Alkyl chain polyamines / surfactants	-	-	Unlikely

12.4 Mobility in soil**Partition coefficient**soil/water (K_{oc}) : Not available.

Mobility: Not available.

12.5 Results of PBT and vPvB

PBT: No.

P: Not applicable. B: No T: Yes.

vPvB: Not available.

vP: Not applicable. vB: No.

12.6 Other adverse effects

No known significant effects or critical hazards.



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SECTION 13 – DISPOSAL CONSIDERATIONS

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Methods for waste treatment

Product

Methods of disposal Avoid or minimize the generation of waste when possible. The disposal of this product, its solutions and any derivative must always comply with the requirements of environmental protection and waste disposal legislation and all the requirements of local authorities. Discard leftovers and non-recyclable products through an authorized contractor for disposal. Waste should not be disposed of through the untreated sewer unless it is compatible with the requirements of all authorities with jurisdiction. The product should not be allowed to enter drains, pipes or the ground (floors).

Hazardous waste The product classification may meet the criteria for a hazardous waste.

Packaging

Methods of disposal The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Special precautions This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.



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SECTION 14 –TRANSPORT INFORMATION

	ADR/RID	ADN	IMO/IMDG	IATA/DGR
14.1 UN number	3082	3082	3082	3082
14.2 UN proper shipping name	Environmentally hazardous substance, Liquid, N.O.S. (Alkyl amines, Hydrocarbons)			
14.3 Transport hazard class(es)	9  	9  	9  	9  
14.4 Packing group	III	III	III	III
14.5 Environmental hazards	Yes	Yes	Yes	Yes
14.6 Special precautions for user	<p>Hazard identification number: 90</p> <p>Classification code: M6. Aquatic environment pollutant</p> <p>Special provision: 375 - Package with less than 5 Kg-L. Not subject to ADR</p> <p>Limited quantities LQ7: 5 L</p> <p>Excepted quantities: E1 Max. 1L – 1 Kg.</p>	<p>Hazard identification number: 90</p> <p>Classification code: M6. Aquatic environment pollutant</p> <p>EmS: F-A, S-F</p>	<p>Hazard identification number: 90</p> <p>Classification code: M6. Aquatic environment pollutant</p> <p>Special provision: 2.10.2.7 - Package with less than 5 Kg-L. Not subject to IMDG/IMO</p> <p>Emergency schedules (EmS) F-A, S-F</p>	<p>Hazard identification number: 90</p> <p>Classification code: M6. Aquatic environment pollutant</p> <p>Special provision: A197 - Package with less than 5 Kg-L. Not subject to IATA/DGR</p> <p>Passenger and Cargo Aircraft Quantity limitation: 450 L Packaging instructions: 964</p> <p>Cargo Aircraft Only Quantity limitation: 450 L Packaging instructions: 964</p> <p>Excepted quantities: E1 Max. 1L – 1 Kg. Packaging instructions: Y964</p>

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

EU Regulation (EC) No. 1907/2006 (REACH)

Regulation (EC) No. 1272/2008 [CLP]

International Convention for the Prevention of Pollution from Ships, MARPOL 73 in its amended form.

International Maritime Dangerous Goods (Code IMDG) according to chapter VII of the International Convention for the Safety of Life at Sea, 1974.

Annex XIV - List of substances subject to authorization**Annex XIV**

None of the components are listed.

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles:

Not applicable

Other EU regulations**Europe inventory:** This material is listed or exempted.**Ozone depleting substances (1005/2009/EU)**

Not listed.

Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

Substances that may be used as drug precursors according to Regulations (EC) 273/2004 and 111/2005.

Ingredient name	Annex	Status
Not listed		

Seveso Directive

This product is controlled under the Seveso Directive.

International regulations**Chemical Weapon Convention List Schedules I, II & III Chemicals**

Not listed

Montreal Protocol (Annexes A, B, C, E)

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

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International lists**National inventory****Australia, Canada, China, United States, The Philipines, Malasya, New Zealand, Republic of Korea, Taiwan, Turkey:** This material is listed or exempted.**Japan :** **Japan inventory (ENCS):** Not determined.**Japan inventory (ISHL):** Not determined.**15.2 Chemical Safety Assessment:** Not available**SECTION 16: OTHER INFORMATION****Abbreviations and acronyms**

ATE = Acute Toxicity Estimate

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]

DNEL = Derived No Effect Level

EUH statement = CLP-specific Hazard statement

PNEC = Predicted No Effect Concentration

RRN = REACH Registration Number

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
STOT RE 1, H372	Expert judgment
Aquatic Chronic 1, H410	Expert judgment

Full text of abbreviated H statements

H302	Harmful if swallowed.
H318	Causes serious eye damage.
H372	Causes damage to organs through prolonged or repeated exposure
H410	Very toxic to aquatic life with long lasting effects.

Full text of classifications [CLP/GHS]

EUH066	EUH066 - Repeated exposure may cause skin dryness or cracking.
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Disclaimer :

- The information contained herein is based on the knowledge acquired by "rb bertomeu, SL" so far. No responsibility or warranty, express or implied as to its accuracy nor that the information is complete.
- Information in Sections 2 and 9 should not be taken as product warranty specifications. It is generic data enough approximate to be taken into account from the point of view of safety.