

COMPANY



Graphenstone® Four2Four Premium

1.1 Product identifier: Four2Four Premium UFI Code: AFM5-C0TQ-700G-YRPF 1.2 Relevant identified uses of the substance or mixture and uses advised against: Relevant use: Primer Uses advised against: All uses not specified in this section or in section 7.3 1.3 Details of the supplier of the safety data sheet: Industria Española para el Desarrollo e Investigación 2100, S.A. (IEDISA) c/ Carpintero, 25 41520 El Viso del Alcor - Sevilla - Spain Tel.: +34 955 292 068 / +34 693 026 242 Email: info@graphenstone.com Web: http://www.graphenstone.com Emergency telephone number: +34 693 026 242 Timetable: 8:00-14:00 and 15:00-18:00 1.4 SECTION 2: HAZARDS IDENTIFICATION Classification of the substance or mixture: CLP Regulation nº 1272/ 2008:

SECTION 1: IDENTIFICATION OF THE SUBSTANCE OR THE MIXTURE AND OF PARTNERSHIP OF THE

Classification of the substance or mixture: CLP Regulation nº 1272/ 2008: Classification of this product has been carried out in accordance with CLP Regulation nº 1272/ 2008. Eye Irrit. 2: Eye irritation, category 2, H319 Skin Sens. 1: Skin sensitization, Category 1, H317

2.2 Label elements: CLP Regulation nº 1272/ 2008 ATTENTION



Hazard statements:

Eye Irrit. 2: H319 - Causes serious eye irritation Skin Sens. 1: H317 - May produce an allergic reaction on the skin

Precautionary statements:

P101: If medical advice is needed, have product container or label at hand

P102: Keep out of reach of children P264: Wash thoroughly after handling

P280: Wear protective gloves/ protective clothing/ eye protection/ face protection

P302+ P352: IN CASE OF CONTACT WITH SKIN: Wash with plenty of water

P305+ P351+ P338: IN CASE OF CONTACT WITH EYES: Rinse with water carefully for several minutes. Remove contact lenses when they are present and can be done easily. Keep washing.

P501: Dispose of contents and / or their container according to the separated collection system used in your municipality

Additional information:

EUH208: Contains 2,4,7,9-tetramethyldec-5-ino-4,7-diol. May produce an allergic reaction

Substances that contribute to the classification: 2,4,7,9-tetramethyldec-5-ino-4,7-diol.

2.3 Other hazards:

Non-applicable





SEC	CTION 3: COMPOSITIO	DN/INFORMATIO	N ON INGREDIENTS		
3.1	Substance: Non-applicable.				
3.2	Mixture: Chemical description: M Components: According f		al substances. on (EC) No. 1907/2006 (point 3), the product pres	ents:	
	Identification		Chemical name / classification		Concentration
	CAS: 126-86-3	2,4,7,9-tetrametildec-5-in	o-4,7-diol	Autoclasificad	
1	CE: 204-809-1 ndex: No aplicable REACH: 01-2119954390-39-XXXX	Regulation 1272/2008	Aquatic Chronic 3: H412; Eye Dam. 1: H318; Skin Sens. 1B: H317 - Peligro	< <u>1</u> >	< 1 %

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures:

Symptoms as a result of intoxication can occur after exposure, so in case of doubt, direct exposure to the chemical or persistence of discomfort request medical attention, showing the SDS of this product.

By inhalation:

This product is not classified as hazardous through inhalation, however, it is recommended in case of intoxication symptoms to remove the person affected from the area of exposure, provide clean air and keep at rest. Request medical attention if symptoms persist.

By skin contact:

It is a product not classified as dangerous in contact with the skin. However, it is recommended in case of contact with the skin to remove contaminated clothing and shoes, rinse the skin or shower the affected person if necessary with plenty of cold water and neutral soap. In case of important condition go to the doctor.

By eye contact:

Rinse eyes thoroughly with lukewarm water for at least 15 minutes. Do not allow the person affected to rub or close eyes. In case the accident victim wears contact lenses, they should be removed as long as they are not attached to the eyes, otherwise there could be additional damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS of the product.

By ingestion/ aspiration:

Do not induce vomiting, in the event of keeping the head tilted forward to avoid aspiration. Keep the patient at rest. Rinse the mouth and throat, as there is a possibility that they have been affected in ingestion.

4.2 Main symptoms and effects, acute and delayed:

Acute and delayed effects are indicated in sections 2 and 11.

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





SECTION 5: FIRE-FIGHTING MEASURES

5.1 Extinguishing media:

Non-flammable product under normal conditions of storage, handling and use. In case of inflammation as a result of handling, storage or improper use any type of extinguishing agent can be used (ABC Powder, water...), according to the regulation of fire protection installations (R.D. 1942/1993 and subsequent modifications). It is NOT RECOMMENDED to use water jet as an extinguishing agent.

5.2 Special hazards arising from the substance or mixture:

As a consequence of combustion or thermal decomposition, reaction byproducts are generated that can be highly toxic and, consequently, can present a high risk to health.

5.3 Advice for firefighters:

Depending on the magnitude of the fire it may be necessary to use full protective clothing and individual respiratory equipment. Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit...) in accordance with R.D.486/ 1997 and subsequent modifications

Additional provisions:

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Destroy any source of ignition. In case of fire, refrigerate the storage containers and tanks for products susceptible to inflammation, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:

Isolate leakage as long as it does not pose an additional risk to people who perform this function. In the event of potential exposure with the spilled product, the use of personal protection elements is mandatory. (See section 8) Evacuate the area and keep out those who do not have protection.

6.2 Precautions relating to environment:

Avoid spillage into the aquatic environment because it contains substances dangerous to it. Contain the product absorbed / collected in sealable containers. Notify the competent authority in case of large spillages in the aquatic environment.

6.3 Methods and material for containment and cleaning:

It is recommended:

Absorb the spillage using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. For any concern related to disposal consult section 13.

6.4 Reference to other sections:

See sections 8 and 13.





SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling:

A.- General precautions

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

B.- Technical recommendations for the prevention of fires and explosions.

Product is non-flammable under normal conditions of storage, manipulation and use. It is recommended to transfer at slow speeds to avoid the generation of electrostatic charges that can affect flammable products. Consult section 10 for information on conditions and materials that should be avoided.

C.- Technical recommendations to prevent ergonomic and toxicological risks.

For exposure control consult section 8. Do not eat, drink or smoke in the work areas; Wash your hands after each use, and remove contaminated clothing and protective equipment before entering the eating areas.

D.- Technical recommendations to prevent environmental risks.

It is recommended to have absorbent material available at close proximity to the product (See section 6.3)

7.2 Conditions for safe storage, including any incompatibilities:

A.- Technical measures for storage, including (R.D.379/2001): Non-applicable Classification Non-applicable Minimum Temp: 5 °C Maximum Time: 12 months B.- General conditions for storage.

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see section 10.5

7.3 Specific end users:

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters:

Substances whose occupational exposure limit values have to be controlled in the work environment (I NSHT 2017): There are no environmental limit values for the substances that make up the product

DNEL (Workers):

_			Short e	xposure	Long e	exposure
	Identification		Systematic	Local	Systematic	Local
	,4,7,9-tetramethyldec-5-ino-4,7-diol	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	AS: 126-86-3	Cutaneous	1.5 mg/kg	Non-applicable	0.5 mg/kg	Non-applicable
C	E: 204-809-1	Inhalation	5.28 mg/m ³	Non-applicable	1.76 mg/m ³	Non-applicable

DNEL (Population):

		Short exp	osure	Long ex	posure
Identification		Systematic	Local	Systematic	Local
	Oral	0.75 mg/kg	Non-applicable	0.25 mg/kg	Non-applicable
CAS: 126-86-3 CE: 204-809-1	Cutaneous	0.75 mg/kg	Non-applicable	0.25 mg/kg	Non-applicable
204-009-1	Inhalation	1.29 mg/m ³	Non-applicable	0.43 mg/m ³	Non-applicable

PNEC:

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Identification				
,4,7,9-tetramethyldec-5-ino-4,7-diol	STP	7 mg/l	Fresh water	0.04 mg/l
AS: 126-86-3	Soil	0.028 mg/kg	Salt water	0.004 mg/l
E: 204-809-1	Intermittent	0.04 mg/l	Sediment (fresh water)	0.32 mg/kg
	Oral	Non-applicable	Sediment (salt water)	0.032 mg/kg





8.2 Exposure controls:

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

As a preventive measure, the use of basic personal protective equipment is recommended, with the corresponding "CE marking" according to R.D.1407 / 1992 and subsequent modifications. For more information on personal protection equipment (storage, use, cleaning, maintenance, protection class...) consult the information leaflet provided by the EPI manufacturer. The indications contained in this point refer the pure product. The protection measures for the diluted product may vary depending on its degree of dilution, use, method of application, etc. To determine the obligation to install emergency showers and/or eyewash in the warehouses will be taken into account the regulations regarding the storage of chemical products applicable in each case. For more information see section 7.1 and 7.2.

All information contained herein is a recommendation which needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal.

B.- Respiratory protection.

It will be necessary to use protective equipment in case of fog formation or in case of exceeding the professional exposure limits if they exist (See Section 8.1).

С	S	pecific	protection	of	hands.	
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	Pictogram	PPE	Labeling	CEN Standard	Remarks
	Mandatory hand protection	Protective gloves against minor risks	CATI		Replace any signs of deterioration. For prolonged periods of exposure to the product for professional/industrial users, the use of CE III gloves is recommended, in accordance with standards EN 420 and EN 374
Si	nce the product is a	mixture of several subs	tances, the resista	nce of the glove material of	an not be calculated in advance

with total reliability and therefore to be checked prior to the application.

D.	- Ocular and facial p	protection			
	Pictogram	PPE	Labeling	CEN Standard	Remarks
	Mandatory face protection	Panoramic glasses against splashes and/or projections		EN 166:2001 EN ISO 4007:2012	Clean daily and disinfect periodically according to the manufacturer's instructions. It is recommended in case of risk of splashes
F	 Corporal protection 	n			

Pictogram	PPE	E	Labeling	CEN Standard	Remarks
	Wor	k wear	CATI		Replace any signs of deterioration. For prolonged periods of exposure to the product for professional / industrial us- ers, CE III is recommended, according to EN ISO 6529:2001, EN ISO 6530:2005, EN ISO 13688:2013, EN 464:1994.
	Anti-slip w	vork footwear	CE	EN ISO 20347:2012	Replace any signs of deterioration. For prolonged periods of exposure to the product for professional / industrial us- ers, CE III is recommended, according to EN ISO 20345 and EN 13832-1
Additional emerg	gency measu	res			
Emergency n	neasure	S	andards	Marked	Standards

Emergency measure	Standards	Marked	Standards
Emergency shower	ANSI Z358-1 ISO 3864-1: 2002	Eyewash station	DIN 12 899 ISO 3864-1:2002

Environmental exposure controls:

Under Community legislation for the protection of the environment, it is recommended to avoid spilling both the product and its packaging into the environment. For additional information see section 7.1.D

Volatile organic compounds:

In application of R.D.117 / 2003 and subsequent modification (Directive 2010/75 / EU), this product has the following characteristics:

V.O.C. (Supply): 0.05% weight V.O.C. density at 20°C: 0.55 g/l





SEC	FION 9: PHYSICALAND CHEMICAL PF	ROPERTIES
9.1	Information on basic physical and chemica To complete the information see the technical s Physical appearance:	
	Appearance	Liquid
	Odor	Undetermined
	Volatility:	
	Boiling point at atmospheric pressure:	100 °C
	Vapour pressure at 20 °C:	Non-applicable
	Vapour pressure at 50 °C:	<300000 Pa (<300 kPa)
	Evaporation rate at 20 °C:	Non-applicable*
	Product description:	
	Density at 20 °C:	1350 kg/m ³
	Relative density at 20 °C:	1.35
	Dynamic viscosity at 20 °C:	Non-applicable*
	pH:	8.5
	Vapour density at 20 °C:	Non-applicable*
	Partition coefficient n-octanol/water at 20 °C:	Non-applicable*
	Solubility in water at 20 °C:	Non-applicable*
	Solubility properties:	Non-applicable*
	Explosive properties:	Non-applicable*
	Oxidizing properties:	Non-applicable*
	Flammability:	
	Flashpoint:	Not flammable
	Flammability (solid, gas):	Non-applicable*
		* Not relevant due to the nature of the product, not providing information property of its hazards.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity:

Hazardous reactions are not expected if the technical instructions for the storage of chemical products are met. See section 7.

10.2 Chemical stability:

Chemically stable under the conditions of storage, handling and use.

10.3 Possibility of hazardous reactions:

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressures are not expected

10.4 Conditions to avoid:

Applicable for handling and storage at room temperature:

Shock and friction	Contact with air	Heating	Sunlight	Humidity
Non-applicable	Non-applicable	Avoid direct incidence	Avoid direct incidence	Non-applicable

10.5 Incompatible materials:

Acids	Water	Combustive materials	Combustible materials	Others
Avoid strong acids	Non-applicable	Avoid direct incidence	Caution	Avoid alkalis or strong bases

10.6 Hazardous decomposition products:

See section 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO2), carbon monoxide and other organic compounds.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects:

The experimental information related to the toxicological properties of the product itself is not available.

Dangerous effects for health:





In case of exposure that is repetitive, prolonged or at concentrations higher than recommended by the occupational exposure limits, it may result in adverse effects on health depending on the means of exposure: A.- Ingestion (acute effect): Acute toxicity: Based on available data, the classification criteria are not met, however, presents substances classified as dangerous by ingestion. For more information see section 3. Corrosivity/Irritability: The ingestion of a considerable dose can cause throat irritation, abdominal pain, nausea and vomiting. B- Inhalation (acute effect): - Acute toxicity: Based on available data, the classification criteria are not met, however, presents substances classified as dangerous by inhalation. For more information see section 3. Corrosivity/Irritability: Based on available data, the classification criteria are not met, however, presents substances classified as dangerous for this effect. For more information see section 3 C- Contact with the skin and the eyes (acute effect): - Contact with the skin: Produces cutaneous inflammation. - Contact with the eyes: Produces serious eye damage after contact. D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction): - Carcinogenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for the effects mentioned. For more information see section 3. - Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3. Reproductive toxicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3. F- Sensitizing effects: - Respiratory: Based on available data, the classification criteria are not met, not presenting substances classified as dangerous with sensitizing effects above the limits set out in point 3.2 of Regulation (EC) 2015/ 830. For more information see section 2, 3 and 15. - Cutaneous: Prolonged skin contact can lead to episodes of allergic contact dermatitis. F- Specific target organ toxicity (STOT) - single exposure: Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous for inhalation. For more information see section 3. G- Specific target organ toxicity (STOT)-repeated exposure: Specific target organ toxicity (STOT)-repeated exposure: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3. Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3. H- Aspiration hazard: - Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3. Additional information: Non-applicable Specific toxicology information on the substances: Non-applicable





SECTION 12: ECOLOGICAL INFORMATION

The Experimental information related to the eco-toxicological properties of the product itself is not available.

12.1 Toxicity:

Identification		cute toxicity	Species	Genus
2,4,7,9-tetramethyldec-5-ino-4,7-diol CAS: 126-86-3 CE: 204-809-1	LC50	10-100 mg/l (96 h)	Lepomis macrochirus	Fish
	EC50	10-100 mg/l	Daphnia magna	Crustacean
	EC50	10-100 mg/l	Scenedesmus subspicatus	Alga

12.2 Persistence and degradability: Not available

12.3 Bio-accumulative potential: Undetermined

12.4 Mobility in soil:

Undetermined

12.5 Results of PBT and vPvB assessment: Non-applicable

12.6 Other adverse effects: Not described

a described

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods:

Code	Description	Waste class (Regulation (EU) No 1357/ 2014)
1709 04	Mixed construction and demolition wastes other than those specified in codes 17 09 01, 17 09 02 and 17 09 03	No dangerous

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

Non-applicable

Waste management (disposal and evaluation)

Consult the authorized waste service manager on assessment and disposal operations in accordance with Annex 1 and Annex 2 (Directive 2008/ 98/ EC, Law 22/ 2011). As under 15 01 (2014/ 955/ EU) of the code and in case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-dangerous residue. We do not recommended disposal down the drain. See section 6.2.

Legislative provisions related to waste management :

In accordance with Annex II of Regulation (EC) nº 1907/ 2006 (REACH) the community or state provisions related to waste management are stated.

Community legislation: Directive 2008/ 98/ CE, 2014/ 955/ UE, Regulation(EU) nº 1357/ 2014 National legislation: Law 22/ 2011

SECTION 14: TRANSPORT INFORMATION

- 14.1. Transport of dangerous goods by land: With regard to ADR 2015 by RID 2015: Exempt
- **14.2. Transport of dangerous goods by sea:** With regard to IMDG 38-16: Exempt
- 14.3. Transport of dangerous goods by air: With regard to IATA/ICAO 2017: Exempt





SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/ legislation specific for the substance or mixture: Substances candidates for authorization in Regulation (EC) 1907/2006 (REACH): Non-applicable Substances included in REACH Annex XI V (authorization list) and expiration date: Non-applicable Regulation (EC) 1005/2009, on substances that deplete the ozone layer: Non-applicable Active substances which have been included in Article 95 of Regulation (EU) No. 528/2012: Non-applicable REGULATION (EU) No 649/2012, relating to the export and import of dangerous chemical products: Non-applicable

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

Non-applicable

Specific provisions in terms of protecting people or the environment:

It is recommended to use the information included in this safety data sheet as input data in a risk assessment of local circumstances in order to establish the necessary risk prevention measures for the handling, use, storage and disposal of this product.

Other legislation:

Regulation (EC) nº 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labeling and packaging of Substances and mixtures, and amending and repealing Directives 67/548 / EEC and 1999/45 / EC and amending

Regulation (EC) nº 1907/ 2006

15.2 Chemical safety assessment:

The supplier has not carried out evaluation of chemical safety.





SECTION 16: OTHER INFORMATION

Legislation related to safety data sheets:

This safety data sheet has been designed in accordance with ANNEX II -Guide to the compilation of safety data sheets of Regulation (EC)

Nº 1907/ 2006 (Regulation (EC) Nº 2015/ 830)

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

Regarding to the previuos Version, SECTION 1.1, 1.4 and 3.2 has been modified.

Texts of the legislative phrases mentioned in section 2:

H317: May produce an allergic reaction on the skin

H319: Causes serious eye irritation

Texts of the legislative phrases mentioned in section 3:

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3.

CLP Regulation (EC) nº 1272/ 2008:

Aquatic Chronic 3: H412 - Harmful to aquatic life with long lasting effects Eye Dam. 1: H318 - Causes serious eye damage Skin Sens. 1: H317 - May produce an allergic reaction on the skin

Classification procedure:

Skin Sens. 1: Method of calculation Eye Irrit. 2: Method of calculation

Advice related to training:

Minimal training is recommended to prevent industrial risks for staff using this product, in order to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

Main bibliographic sources:

http://esis.jrc.ec.europa.eu http://echa.europa.eu http://eur-lex.europa.eu

Abbreviations and acronyms:

- ADR: European agreement concerning the international carriage of dangerous goods by road

- IMDG: International maritime dangerous goods code
- IATA: International Air Transport Association
- OACI: International Civil Aviation Organization
- COD: Chemical Oxygen Demand
- BOD5: 5-days biochemical oxygen demand
- BCF: Bioconcentration factor
- LD50: Lethal Dose 50
- LC50: Lethal Concentration 50
- EC50: Effective concentration 50
- Log POW: Octanol-water partition coefficient
- Koc: Partition coefficient of organic carbon

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The information contained in this Safety Data Sheet is based on sources, technical knowledge and current legislation at European and state level and cannot guarantee the accuracy of it. This information cannot be considered as a guarantee of the properties of the product, it is simply a description of the security requirements. The methodology and working conditions of the users of this product are beyond our knowledge and control, and it is always the user's ultimate responsibility to take the necessary measures to adapt to the legislative requirements regarding handling, storage, use and disposal of chemical products. The information in this safety data sheet only refers to this product, which should not be used for purposes other than those specified.