

1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier

conGraph® GND-20

Company Identification: Supplier

MORTEROS TUDELA VEGUÍN, S.A.

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Emergency number

Emergencies (24h attention): 112

Recommended use

Grounding systems

2. HAZARDS IDENTIFICATION

Classification of the mixture

- Skin irritation (category 2)
- Skin sensitisation (category 1B)
- Irreversible eye damage (category 1)
- STOT Single exposure (category 3):
respiratory tract irritation.

Other hazards

CONGRAPH GND-20 does not meet the criteria for PBT or vPvB in accordance with Annex XIII of REACH (Regulation (EC) No 1907/2006).

Labelling



H315: Provoca irritación cutánea / Causes skin irritation.

H317: Puede provocar una reacción alérgica en la piel / May cause an allergic skin reaction.

H318: Provoca lesiones oculares graves / Causes serious eye damage.

H335: Puede irritar las vías respiratorias / May cause respiratory irritation.

P261: Evitar respirar el polvo/aerosol / Avoid breathing dust/spray.

P280: Llevar guantes/prendas/gafas/máscaras de protección / Wear protective gloves/protective clothing/eye protection/faceprotection.

P302+P352: EN CASO DE CONTACTO CON LA PIEL. Lavar con agua y jabón abundantes / IF ON SKIN: Wash with plenty of soap and water.

P305+P351+P338: EN CASO DE CONTACTO CON LOS OJOS. Aclarar cuidadosamente con agua durante varios minutos. Quitar las lentes de contacto, si lleva y resulta fácil. Seguir aclarando / IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P321: Se necesita un tratamiento específico / Specific treatment is needed.

P501: Eliminar el contenido/recipiente conforme a la reglamentación aplicable / Dispose of contents/ container in accordance with regulation.



Danger

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	EINECS Nº	%	Classification	H Phrase	Notes
Foundry coke	266-010-4	≥ 50%	Skin irritation, Cat 2	H315	
			Irreversible eye damage, Cat 2	H319	
			STOT Single exposure, Cat 3: inhalation	H335	
Cement	266-043-4	20% - 50%	Skin irritation, Cat 2	H315	
			Skin sensitisation, Cat 1B	H317	
			Irreversible eye damage, Cat 1	H318	
			STOT Single exposure, Cat 3: inhalation	H335	

NOTE: The full texts of the H phrases indicated here can be consulted in section 16 of this safety data sheet.

4. FIRST AID MEASURES

Description of first aid measures

- Normally no medical assistance is required.
- If the situation that had given rise to the exposure persists, the use of personal protective equipment by the people who provide first aid should be considered.
- If in doubt, or if symptoms persist, call a doctor.
- Never make an unconscious person swallow anything or induce vomiting.

Eye Contact

- Do not rub eyes.
- Remove contact lenses, if present and easy to do.
- Immediately flush eyes with running water for at least 15 minutes while forcing eyelids open during flushing.
- Consult an ophthalmologist.

Skin Contact

- Powder:
 - Wash the skin with soap and water.
- Slurry:
 - Remove contaminated clothing.
 - Wash the skin with soap and water.

Inhalation

- Move the affected person to a ventilated place.

Ingestion

- Do not induce vomiting.
- Rinse mouth.

Most important symptoms and effects, both acute and delayed:

- Repeated inhalation of dust from the material in concentrations above VLA/ED of the substances contained in the mixture over a long period of time increases the risk of developing lung diseases.
- Prolonged contact of the powder with damp skin without adequate protection can cause irritation or contact dermatitis.
- Prolonged contact without adequate protection with the wet mixture can cause severe burns that already develop without pain.

Indication of any immediate medical attention and special treatment needed

- In case medical attention is needed, take this safety data sheet with you.

5. FIRE FIGHTING MEASURES

Extinguishing media

- In case of fire, does not limit the use of extinguishing agents.

Información adicional

- May burn if exposed to temperatures above 700°C.

Recommendations for firefighting staff

- Avoid dispersion of dust.
- Use respiratory protection.
- Use extinguishing media appropriate to the surrounding fire conditions.

Specific hazards arising from the mixture

- In the event of a fire, keep people away from the source of ignition and extinguish with plenty of water.
- Incomplete combustion in fire can lead to the emission of carbon monoxide (toxic).

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

- Avoid breathing dust. Use respiratory protection (FPP2) in poorly ventilated places and / or with high levels of dust concentration.
- Avoid contact with eyes and skin. Wear safety glasses, protective gloves and closed work clothes.

Environmental precautions

- Prevent it from entering sewers or water courses.

For emergency responders

- No emergency procedures or additional measures are required compared to those given for the rest of the personnel.

Methods and material for containment and cleaning up

- Collect by mechanical means avoiding the formation of dust.
- Dispose of in clean, dry containers for later recovery and reprocessing.
- Clean the stained area with plenty of water.
- Dispose of recovered waste according to current local regulations.
- After setting, the product can be disposed of as an inert waste.

NOTE: The information in this section must be completed with that provided in sections 8 and 13.

7. HANDLING AND STORAGE

Precautions for safe handling

- Use in ventilated areas.
- Avoid the formation of dust.
- Wash hands and other exposed body areas with mild soap and water before eating, drinking or smoking and when leaving the workplace. Also remove contaminated protective clothing and equipment.
- Do not eat, drink or smoke in work areas.
- Within the period of use recommended by the manufacturer, the effectiveness of the Cr (VI) reducer is maintained, so its level will remain below the regulatory limits.

Specific end use(s).

- The recommendations contained in this safety data sheet refer to the use indicated in section 1.

Conditions for safe storage

- Store in a tightly closed container, in a dry and well-ventilated place.
- To prevent engulfment or suffocation, do not enter a confined space, such as a silo, bin, bulk truck, or other storage container or vessel that stores or contains material without taking the proper security measures.
- Keep away from fires and ignition sources.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

- Cement (EINECS N°: 266-043-4): VLA-ED = 10 mg/m³
- Particles (Inhalable fraction): VLA-ED = 10 mg/m³
- Particles (Respirable fraction): VLA-ED = 3 mg/m³

Personal exposure controls

- Avoid kneeling in fresh mortar or concrete wherever possible. If kneeling is absolutely necessary, then appropriate waterproof personal protective equipment must be worn.
- Do not eat, drink or smoke when working with the product.
- Use in ventilated areas and avoid dust formation.
- Eye protection: use eye protection glasses when there is a risk of dust or splashing.
- Skin protection:
 - Hands: Use watertight, wear- and alkali-resistant protective gloves. Wash hands during stops and at the end of work.
 - Body: Long-sleeved protective clothing and boots, as well as additional skincare products to protect skin from prolonged contact with the fresh mortar.
- Respiratory protection: wear a dust mask (FPP2) when dust clouds form or in poorly ventilated areas. In case of exposures greater than 1 hour, use motorized or autonomous equipment.

Environmental exposure controls

- According to available technology.

9. PHYSICAL AND CHEMICAL PROPERTIES

○ Appearance:	Solid
○ Colour:	Black
○ Odour:	Odourless
○ Odour threshold:	N/A
○ pH (in water):	11,5 - 12,5
○ Melting point:	> 450°C
○ Initial boiling point and boiling range:	N/A
○ Evaporation rate:	N/A
○ Flammability:	Not flammable
○ Flammability or explosive limits:	> 1.000 g/m ³
○ Flash point:	N/A
○ Vapour pressure:	N/A
○ Vapour density:	N/A
○ Density:	0,75 g/cm ³
○ Solubility:	Slightly soluble in water
○ Partition coefficient (n-octanol/water):	N/A
○ Auto-ignition temperature:	The product is not self-igniting
○ Decomposition temperature:	N/A
○ Viscosity:	N/A
○ Explosive properties:	Not explosive
○ Oxidizing properties:	N/A
○ Minimum ignition temperature (in layer):	> 400 °C
○ Minimum ignition temperature (in cloud):	> 900 °C

10. STABILITY AND REACTIVITY

Reactivity

- When mixed with water, product will harder into a stable mass that is not reactive in normal environments.
- In powdery state it reacts violently with oxidizing agents and whose aerosols are explosive in the presence of an ignition source.

Possibility of hazardous reactions

- Not known hazardous reactions.

Incompatible materials

- Contact with acids, ammonium salts, aluminum or other non-noble metals and strong oxidizing agents should be avoided.

Chemical stability

- Product is stable as long as it is properly stored (see Section 7).

Conditions to avoid

- Humid conditions during storage should be avoided.

Hazardous decomposition products

- It will not decompose into any hazardous products.

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

- Acute dermal toxicity (cement): rabbit – 24h contact – 2.000 mg/kg body weight – no lethality.
- Irritation: Based on the hazardous substances it contains, the material could cause serious eye damage and requires classification as a skin irritant. As with other powdered materials, a high concentration of dust can cause temporary irritation of the respiratory tract.
- Corrosion: no corrosive effects of the product are known.
- Sensitisation: some individuals exposed to fresh mortar paste may develop eczema, caused by the high pH inducing contact dermatitis. The response can appear in different ways, ranging from a mild rash to severe dermatitis. Due to the Cr (VI) reducing agent used, it is not likely that, within the recommended period of use, any sensitizing effect associated with said Cr (VI) will develop.
- Repeated dose toxicity: Chronic exposure to concentrations of respirable dust above occupational exposure limits can lead to coughing, shortness of breath, and chronic obstructive pulmonary disease (COPD).
- Carcinogenicity: No causal association has been established between product exposure and cancer.
- Mutagenicity: no specific data is available for this product.
 - Cement: there are no signs.
- Reproductive toxicity: no specific data is available for this product.
 - Cement: based on available data, the classification criteria are not met.

12. ECOLOGICAL INFORMATION

Toxicity

- There are no known negative effects on the environment once the product has set.

Bioaccumulative potential

- Not relevant. After hardening, product presents no toxicity risks.

Results of PBT and vPvB assessment

- N/A

Persistence and degradability

- Not biodegradable.

Mobility in soil

- Not relevant. After hardening, product presents no toxicity risks.

Other adverse effects

- The spillage of the product in the water can cause an increase of the pH.

13. DISPOSAL CONSIDERATION

Waste treatment methods

- The product can be collected and reprocessed.
- It should not be disposed of together with strong oxidizing agents.
- The product must be disposed of following current local regulations as construction waste.
- Do not pour into sewers or water courses.
- Empty containers and packaging can be recycled.
- Containers and packaging with product must be disposed of in the same way as the product.

14. TRANSPORT INFORMATION

- This product is not hazardous and not subject to classification and labeling for transport in accordance with the United Nations standard regulations (ADR, RID and ADN), the IMDG code (sea) and the ICAO technical instructions (air).
- Bulk cargoes must be sheeted or covered.

15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the mixture

- The product is a mixture according to REACH and is not subject to registration.
- In accordance with the REACH Regulation and Order PRE / 1954/2004, the product contains in the recommended period of use a Cr (VI) content of less than 2 ppm.
- Legal regulations:
 - Commission Regulation (EU) No. 453/2010, of May 20, 2010, amending Regulation (EC) No. 1907/2006 of the European Parliament and of the Council, regarding registration, evaluation, authorization and the restriction of chemical substances and preparations (REACH).
 - Regulation (EC) n° 1272/2008 of the European Parliament and of the Council, of December 16, 2008, on classification, labeling and packaging of substances and mixtures, and which modifies and repeals Directives 67/548 / EEC and 1999/45 / CEE and Regulation (CE) n° 1907/2006 is modified.
 - Regulation (EC) No. 1907/2006 of the European Parliament and of the Council, relative to the registration, evaluation, authorization and restriction of chemical substances and preparations (REACH), which creates the European Agency for Substances and Preparations Chemicals, Directive 1999/45 / EC is amended and Council Regulation (EEC) No. 793/93 and Commission Regulation (EC) No. 1488/94 are repealed, as well as Council Directive 76/769 / EEC and Commission Directives 91/155 / EEC, 93/67 / EEC, 93/105 / EC and 2000/21 / EC.
 - Directive 1999/45 / EC of the European Parliament and of the Council, of May 31, 1999, on the approximation of the legal, regulatory and administrative provisions of the Member States relating to the classification, packaging and labeling of dangerous preparations.

16. OTHER INFORMATION

- These indications are based on the state of our knowledge at the time of editing the document. They do not constitute a guarantee as to the properties of the product.
- It is the responsibility of the user to take adequate protection measures.
- Previous version: 01/29/2019. Changes introduced in sections 5, 9 and 10.
- Abbreviations and acronyms:

- ADN European Agreements on the transport of Dangerous goods by inland waterways.
- ADR European Agreements on the transport of Dangerous goods by Road.
- EC50 Half maximal effective concentration.
- EINECS European Inventory of Existing Commercial Chemical Substances.
- ICAO International Civil Aviation Organization's.
- IMDG International agreement on the Maritime transport of Dangerous Goods.
- LC50 Median lethal dose.
- N/A Not applicable.
- NOEC No observed effect concentration.
- PBT Persistent, bio-accumulative and toxic.
- ppm Parts per million.
- REACH Registration, Evaluation and Authorisation of Chemicals (Regulation (EC) n° 1907/2006.
- RID European Agreements on the transport of Dangerous goods by Railway.
- SDS Safety Data Sheet.
- STOT Specific Target Organ Toxicity
- VLA/ED Occupational Limit Value - Daily Exposure.
- vPvB Very persistent, very bio-accumulative.

- H and P Phrases:

- H315 Causes skin irritation.
- H318 Causes serious eye damage.
- H335 May cause respiratory irritation.
- P261 Avoid breathing dust/ fumes, gas, mist, vapours, spray.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P302+P352 IF CONTACT WITH SKIN: Wash with plenty of soap and water.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P321 Specific treatment required.
- P501 Dispose of contents/container to adequate product waste site.