Safety data sheet
complying with Regulation 1907/2006/EC (REACH Regulation), EU 2020/878 and Regulation No 1272/2008/EC (CLP)

Printing date 10.04.2024 Version number 6 (replaces version 5) Revision: 10.04.2024

*
SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name: PENETRON® CR-90
UFI: MP50-N0VN-900S-GH9K

1.2 Relevant identified uses of the substance or mixture and uses advised against
No further relevant information available.
Application of the substance / the mixture: Polymer-modified concrete resurfacer

1.3 Details of the supplier of the safety data sheet
Manufacturer/Supplier:
PENETRON HELLAS S.A.
50, THRAKOMAKEDONON AV., 136 79 ACHARNES, GREECE
TEL.: +30 210 2448250 - FAX: + 30 210 2476803
Email: info@penetron.gr Site: www.penetron.gr

1.4 Emergency telephone number:

European Emergency Tel.: 112

*
SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
Classification according to Regulation EC No 1272/2008 CLP:

GHS05 corrosion

Eye Dam. 1 H318 Causes serious eye damage.

GHS07

Skin Irrit. 2 H315 Causes skin irritation.
Skin Sens. 1 H317 May cause an allergic skin reaction.

2.2 Label elements
Labelling according to Regulation EC No 1272/2008 CLP:
The product is classified and labelled according to the CLP regulation.
Hazard pictograms:

GHS05 GHS07

Signal word: Danger

Hazard-determining components of labelling:
Cement, portland, chemicals

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Hazard statements:
H315 Causes skin irritation.
H318 Causes serious eye damage.
H317 May cause an allergic skin reaction.

Precautionary statements

P102	Keep out of reach of children.
P261	Avoid breathing dust.
P264	Wash thoroughly after handling.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P302+P352	IF ON SKIN: Wash with plenty of water and soap.
P310	Immediately call a POISON CENTER/doctor.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P362+P364	Take off contaminated clothing and wash it before reuse.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other hazards
Results of PBT and vPvB assessment
The product does not contain ingredients that are considered either persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.
PBT: Not applicable.
vPvB: Not applicable.
Determination of endocrine-disrupting properties
The product does not contain substances included in the list established in accordance with Article 59(1) of REACH for endocrine disrupting properties or has not been identified as having endocrine disrupting properties according to the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or higher than 0.1%.

*
SECTION 3: Composition/information on ingredients

3.2 Mixtures
Description: Mixture: consisting of the following components.

Ingredients according Regulation (EU) 2020/878:		
CAS: 65997-16-2 EINECS: 266-045-5 Reg.nr.: 01-2119989490-26-XXXX	Cement, alumina, chemicals Eye Irrit. 2, H319	10-30%
CAS: 65996-69-2 EINECS: 266-002-0 Reg.nr.: 01-2119487456-25-0049	Slags, ferrous metal, blast furnace	10-30%
CAS: 65997-15-1 EINECS: 266-043-4	Cement, portland, chemicals Eye Dam. 1, H318; Skin Irrit. 2, H315; Skin Sens. 1B, H317; STOT SE 3, H335	10-15%
CAS: 14808-60-7 EINECS: 238-878-4	quartz substance with a Community workplace exposure limit	<0.1%

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SVHC
This product does not contain candidate substances of very high concern at a concentration ≥0.1% (Regulation (EC) No 1907/2006 (REACH), Article 59)
Additional information:
Quartz (SiO_2): Contains less than 1% of respirable quartz (ø <50 mm)
For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures
General information:
Take affected persons out into the fresh air.
Seek immediate medical advice.
After inhalation:
If breathing is difficult, remove to fresh air. Restore breathing. Keep warm and quiet.
In case of unconsciousness place patient stably in side position for transportation.
Supply fresh air; consult doctor in case of complaints.
After skin contact:
Immediately wash with water and soap and rinse thoroughly.
In case of discomfort, consult a doctor.
After eye contact:
Immediately flush eyes 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.
Get medical attention if irritation occurs.
Avoid strong water jet-risk of cornea damage, consult a doctor.
After swallowing:
Rinse the mouth. Do not induce vomiting.
Drink plenty of water and provide fresh air. Call for a doctor immediately.
Consult the doctor immediately and show the label or this Safety Data Sheet.
4.2 Most important symptoms and effects, both acute and delayed
Eyes: Conjunctivitis and Keratitis, may developed after repeated contact with eyes.
Skin: Prolonged contact may cause dermatitis and drying of skin.
Inhalation: Conditions such as bronchitis and emphysema have been reported after many years of exposure to Portland cement. Prolonged and repeated exposure to quartz can result in lung disease (i.e., Silicosis) and/or lung cancer.
Hazards
Medical Conditions Which May Be Aggravated: Pre-existing upper respiratory and lung diseases such as, but no limited to, bronchitis, emphysema and asthma.
4.3 Indication of any immediate medical attention and special treatment needed
No further relevant information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media
Suitable extinguishing agents: CO_2, powder or water spray.
5.2 Special hazards arising from the substance or mixture No further relevant information available.
5.3 Advice for firefighters
Protective equipment:
Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

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Cool closed containers exposed to fire by spraying water.
Additional information
Collect contaminated fire fighting water separately. It must not enter the sewage system.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:
Wear protective equipment. Keep unprotected persons away.
Avoid formation of dust.
Avoid contact with skin and eyes.
Avoid inhalation of dust.
Ensure adequate ventilation.
6.1.1 For non-emergency personnel Avoid contact with dripping or leaking material
6.1.2 For emergency responders
First-aid responders must wear protectice clothing, gloves, goggles and respiratory device with filter type A.
6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.
6.3 Methods and material for containment and cleaning up: Pick up mechanically.
6.4 Reference to other sections:
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
Avoid contact with skin, eyes and clothing.
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
Avoid dust inhalation.
Do not eat, drink or smoke when using this product.
Wash your hands before each break and after finishing work.
Information about fire - and explosion protection: No special measures required.
7.2 Conditions for safe storage, including any incompatibilities
Storage: Store the product in closed original containers in a well-ventilated room.
Requirements to be met by storerooms and receptacles:
Store in a cool location.
Keep only the original container or in a suitable container for this kind of product
Information about storage in one common storage facility: Not required.
Further information about storage conditions: Keep out of the reach of children.
7.3 Specific end use(s) No further relevant information available.

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SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:	
CAS: 14808-60-7 quartz	
BOELV (EU)	Long-term value: 0.1* mg/m³ *respirable fraction

DNELs
(CAS: 65997-16-2) Cement, alumina, chemicals
Workers:

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Inhalation - Systemic effects, Long-term exposure: 2.5 mg/m³
Inhalation - Systemic effects, Acute/short-term exposure: 5 mg/m³
PNECs
(CAS: 65997-16-2) Cement, alumina, chemicals
Fresh water: 260 mg/L
Fresh water (intermittent releases): 260 mg/L
STP: 10 mg/L
(CAS: 65996-69-2) Slags, ferrous metal, blast furnace
Fresh water: 5 g/L
Fresh water (intermittent releases): 5 g/L
Seawater: 0,5 g/L
STP: 10 g/L
Soil: 1000 mg/kg soil dw

8.2 Exposure controls

8.2.1. Appropriate engineering controls Provide adequate ventilation.

Individual protection measures, such as personal protective equipment
General protective and hygienic measures:
Wash hands before breaks and at the end of work.
Keep away from foodstuffs, beverages and feed.
Do not eat, drink or smoke while using the product.
Avoid inhalation of dust.
Remove contaminated clothes and wash before reusing them.
Avoid contact with skin and eyes.
Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Hand protection

Protective gloves resistant to chemicals (standard EN 374-1)

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
Material of gloves
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a mixture of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
Penetration time of glove material
The determined penetration times according to EN 16523-1:2015 are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to 50% of the penetration time, is recommended.

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Eye/face protection

Safety glasses with side-shields (frame goggles) (e.g. EN 166)

Body protection:

Protective work clothing

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SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information	
Physical state	Solid
Colour:	Grey
Odour:	Light
Odour threshold:	Not determined
Melting point/freezing point:	Not determined
Boiling point or initial boiling point and boiling range	Not determined
Flammability	Not applicable
Lower and upper explosion limit	
Lower:	Not determined
Upper:	Not determined
Flash point:	Not applicable
Auto-ignition temperature:	Not specified
Decomposition temperature:	Not determined
pH	11
Viscosity:	
Kinematic viscosity	Not determined
Dynamic:	Not determined
Solubility	
water:	Not determined
Partition coefficient n-octanol/water (log value)	Not determined
Vapour pressure:	Not determined
Density and/or relative density	
Density:	Not determined
Relative density	Not determined
Vapour density	Not determined

9.2 Other information

Appearance:	
Form:	Powder
Important information on protection of health and environment, and on safety.	
Ignition temperature:	Product is not selfigniting.
Explosive properties:	Product does not present an explosion hazard.

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Change in condition	
Fusion temperature / range:	
Oxidising properties	Not classified as an oxidizer according to CLP Regulation 1272/2008/EC.
Evaporation rate	Not determined

Information with regard to physical hazard classes

Explosives	Void
Flammable gases	Void
Aerosols	Void
Oxidising gases	Void
Gases under pressure	Void
Flammable liquids	Void
Flammable solids	Void
Self-reactive substances and mixtures	Void
Pyrophoric liquids	Void
Pyrophoric solids	Void
Self-heating substances and mixtures	Void
Substances and mixtures, which emit flammable gases in contact with water	Void
Oxidising liquids	Void
Oxidising solids	Void
Organic peroxides	Void
Corrosive to metals	Void
Desensitised explosives	Void

SECTION 10: Stability and reactivity

10.1 Reactivity No further relevant information available.
10.2 Chemical stability
Thermal decomposition / conditions to be avoided Stable at environment temperature.
10.3 Possibility of hazardous reactions No dangerous reactions known.
10.4 Conditions to avoid No further relevant information available.
10.5 Incompatible materials No further relevant information available.
10.6 Hazardous decomposition products No dangerous decomposition products known.

*
SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
Acute toxicity Based on available data, the classification criteria are not met.

LD/LC50 values relevant for classification:

Dermal	LD50	> 2000 (rabbit)
Oral	LD50	> 2000 (rat)
Inhalative	LD50	> 5 mg/l (rat)

Skin corrosion/irritation Causes skin irritation.
Serious eye damage/irritation Causes serious eye damage.
Respiratory or skin sensitisation May cause an allergic skin reaction.
Germ cell mutagenicity Based on available data, the classification criteria are not met.
Carcinogenicity Based on available data, the classification criteria are not met.
Reproductive toxicity Based on available data, the classification criteria are not met.

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STOT-single exposure Based on available data, the classification criteria are not met.
STOT-repeated exposure Based on available data, the classification criteria are not met.
Aspiration hazard Based on available data, the classification criteria are not met.
Additional toxicological information:
Repeated dose toxicity Based on available data, the classification criteria are not met.
11.2 Information on other hazards
Endocrine disrupting properties
The product does not contain substances included in the list established in accordance with Article 59(1) of REACH for endocrine disrupting properties or has not been identified as having endocrine disrupting properties according to the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or higher than 0.1%.

None of the ingredients is listed.

*
SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity:	
LC50(96 h)	>100 mg/l (fish)

12.2 Persistence and degradability No further relevant information available.
12.3 Bioaccumulative potential
BCF: < 500
log Kow: < 4.
12.4 Mobility in soil No further relevant information available.
12.5 Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.
12.6 Endocrine disrupting properties
The product does not contain substances included in the list established in accordance with Article 59(1) of REACH for endocrine disrupting properties or has not been identified as having endocrine disrupting properties according to the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or higher than 0.1%.
12.7 Other adverse effects
Additional ecological information:
General notes: Must not reach sewage water or drainage ditch undiluted or unneutralised.

*
SECTION 13: Disposal considerations

13.1 Waste treatment methods
Recommendation

Dispose according to National Regulations.

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Contact manufacturer for recycling information.

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European waste catalogue	
HP4	Irritant - skin irritation and eye damage
HP13	Sensitising

Uncleaned packaging:
Recommendation:
Disposal must be made according to official regulations.
Packaging may be reused or recycled after cleaning.

SECTION 14: Transport information

14.1 UN number or ID number	Unenforceable. Not classified as dangerous for transport.
ADR, ADN, IMDG, IATA	Void
14.2 UN proper shipping name	
ADR, ADN, IMDG, IATA	Void
14.3 Transport hazard class(es)	
ADR, ADN, IMDG, IATA	
Class	Void
14.4 Packing group	
ADR, IMDG, IATA	Void
14.5 Environmental hazards:	Not applicable.
14.6 Special precautions for user	Not applicable.
14.7 Maritime transport in bulk according to IMO instruments	Not applicable.
UN "Model Regulation":	Void

*
SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
REACH Regulation 1907/2006/EC
Regulation (EU) 2020/878
CLP Regulation 1272/2008/EC
The product contains less than 2 ppm (0,0002 w/w) Cr (VI) according to Annex XVII of REACH Regulation.
The product contains less than 1% respirable quartz (ø <50 microns) and therefore it is not subject to be classified as harmful to health.
Directive 98/24/EC on the protection of health and safety of workers from the risks related to chemicals agents at work.
Council Directive 94/33/EC on the protection of young people at work, as ammended.
Directive 92/85/EEC on the introduction of measures to encourage improvements in the safety and health at work of pregnant workers and workers who have recently given birth or are breastfeeding, as ammended

Directive 2012/18/EU
Named dangerous substances - ANNEX I The substance is not included in Annex I.
REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3, 47

DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II
None of the ingredients is listed.

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REGULATION (EU) 2019/1148

Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

None of the ingredients is listed.

Annex II - REPORTABLE EXPLOSIVES PRECURSORS

None of the ingredients is listed.

Regulation (EC) No 273/2004 on drug precursors

None of the ingredients is listed.

Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

None of the ingredients is listed.

National regulations:

Other regulations, limitations and prohibitive regulations

Substances of very high concern (SVHC) according to REACH, Article 57

It doesn't contain substances of very high concern (SVHC).

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

*
SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Relevant phrases

H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.

Classification according to Regulation (EC) No 1272/2008

Skin corrosion/irritation Serious eye damage/irritation Skin sensitisation	The classification of the mixture is generally based on the calculation method using substance data according to Regulation (EC) No 1272/2008.

Department issuing SDS:

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Version number of previous version: 5

Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances

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CAS: Chemical Abstracts Service (division of the American Chemical Society)
DNEL: Derived No-Effect Level (REACH)
PNEC: Predicted No-Effect Concentration (REACH)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
SVHC: Substances of Very High Concern
vPvB: very Persistent and very Bioaccumulative
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Dam. 1: Serious eye damage/eye irritation – Category 1
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
Skin Sens. 1: Skin sensitisation – Category 1
Skin Sens. 1B: Skin sensitisation – Category 1B
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

*** Data compared to the previous version altered.**