Safety Data Sheet

According to Annex II to REACH - Regulation 2015/830

SECTION 1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Code: **DRAP091**
Product name **EP FIX HP COMP A**

1.2. Relevant identified uses of the substance or mixture and uses advised against

Intended use **Part of a structural adhesive**

1.3. Details of the supplier of the safety data sheet

Name **DRACO ITALIANA S.p.A.**
Full address **Via Monte Grappa, 11 D-E**
District and Country **20067 Tribiano (MI)**
Italia
Tel. +39 02.90632917
Fax +39 02.90631976

e-mail address of the competent person responsible for the Safety Data Sheet **info@draco-edilizia.it**

1.4. Emergency telephone number

For urgent inquiries refer to **Centro Antiveleni di Bergamo 800883300 (Azienda Ospedaliera Papa Giovanni XXII)**
Centro Antiveleni di Firenze 0557947819 (Az. Osp. "Careggi" U.O. Tossicologia Medica)
Centro Antiveleni di Foggia 80018345 (Az. Osp. Univ. Foggia)
Centro Antiveleni di Milano 0266101029 (Osp. Niguarda Ca' Granda)
Centro Antiveleni di Napoli 0817472870 (Az. Osp. "A. Cardarelli")
Centro Antiveleni di Pavia 038224444 (CAV Centro Nazionale di Informazione Tossicologica)
Centro Antiveleni di Roma 063054343 (CAV Policlinico "A. Gemelli")
Centro Antiveleni di Roma 0649978000 (CAV Policlinico "Umberto I")
Centro Antiveleni di Roma 06 68593726 (CAV "Osp. Pediatrico Bambino Gesù" Dip. Emergenza e Accettazione DEA)

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in (EC) Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of (EU) Regulation 2015/830. Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard classification and indication:

Eye irritation, category 2	H319	Causes serious eye irritation.
Skin irritation, category 2	H315	Causes skin irritation.
Skin sensitization, category 1	H317	May cause an allergic skin reaction.
Hazardous to the aquatic environment, chronic toxicity, category 2	H411	Toxic to aquatic life with long lasting effects.

2.2. Label elements

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms:

SECTION 2. Hazards identification ... / >>

Signal words: Warning

Hazard statements:

H319	Causes serious eye irritation.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H411	Toxic to aquatic life with long lasting effects.
EUH205	Contains epoxy constituents. May produce an allergic reaction.

Precautionary statements:

P280	Wear protective gloves / eye protection / face protection.
P273	Avoid release to the environment.
P391	Collect spillage.
P261	Avoid breathing dust / fume / gas / mist / vapours / spray.
P333+P313	If skin irritation or rash occurs: Get medical advice / attention.
P337+P313	If eye irritation persists: Get medical advice / attention.

Contains: 1-chloro-2,3-epoxypropane
C12-C14-alkyl glycidyl ethers (Oxirane, mono [(C12-14-alkyloxy) methyl] derivs)
BisphenolF diglycidylether

2.3. Other hazards

On the basis of available data, the product does not contain any PBT or vPvB in percentage ≥ than 0,1%.

SECTION 3. Composition/information on ingredients

3.2. Mixtures

Contains:

Identification	x = Conc. %	Classification 1272/2008 (CLP)
Quartz		
CAS *14808-60-7*	30 ≤ x < 50	**Substance with a community workplace exposure limit.**
EC *238-878-4*		
INDEX		
1-chloro-2,3-epoxypropane		
CAS *25068-38-6*	9 ≤ x < 25	**Eye Irrit. 2 H319, Skin Irrit. 2 H315, Skin Sens. 1 H317, Aquatic Chronic 2 H411**
EC *500-033-5*		
INDEX		
Reg. no. *01-2119456619-26*		
C12-C14-alkyl glycidyl ethers (Oxirane, mono [(C12-14-alkyloxy) methyl] derivs)		
CAS *68609-97-2*	3 ≤ x < 9	**Skin Irrit. 2 H315, Skin Sens. 1 H317**
EC *271-846-8*		
INDEX		
Reg. no. *Polymer (art. 2(9), art. 6(3))*		
BisphenolF diglycidylether		
CAS *9003-36-5*	3 ≤ x < 9	**Skin Irrit. 2 H315, Skin Sens. 1 H317, Aquatic Chronic 2 H411**
EC *500-006-8*		
INDEX		
Reg. no. *01-2119454392-40*		
Phosphoric acid		
CAS *7664-38-2*	0 ≤ x < 0,5	**Skin Corr. 1B H314, Eye Dam. 1 H318**
EC *231-633-2*		
INDEX *015-011-00-6*		
Reg. no. *01-2119485924-24-XXXX*		

The full wording of hazard (H) phrases is given in section 16 of the sheet.

Quartz
The substance Quarzo (CAS 14808-60-7), present as such or as part of a mineral filler, is not classified by the supplier as dangerous. However, the supplier declares a percentage of Alpha Quartz (crystalline silica) lower than 1%. The supplier then classifies the Alpha quartz (crystalline silica) as H372 (STOT RE 1). In order to allow a safe use of the mixture, useful information is reported for completeness both to check personal exposure (section 8) and toxicological information (section 11) regarding Quarzo alfa (crystalline silica).

SECTION 4. First aid measures

4.1. Description of first aid measures

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. If problem persists, seek medical advice.
SKIN: Remove contaminated clothing. Wash immediately with plenty of water. If irritation persists, get medical advice/attention. Wash contaminated clothing before using it again.
INHALATION: Remove to open air. In the event of breathing difficulties, get medical advice/attention immediately.
INGESTION: Get medical advice/attention. Induce vomiting only if indicated by the doctor. Never give anything by mouth to an unconscious person, unless authorised by a doctor.

In case of contact with the skin:
Remove the material from the skin immediately by washing with soap and water. Remove contaminated clothing and shoes while you are washing. Call a doctor if the irritation persists. Wash the clothes before reusing them.

In case of eye contact:
Wash your eyes abundantly with water for a few minutes. If using, remove the contact lenses after the first 1-2 minutes. Continue washing for several minutes longer. If you experience effects consult a doctor, preferably an ophthalmologist. The appropriate emergency eye wash must be available in the work areas.

In case of ingestion:
Don't induce vomiting. Call a doctor and/or transport immediately to the emergency room.

In case of inhalation:
Transport the person to the fresh air. In case of respiratory arrest, practice artificial respiration.

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

Specific information on symptoms and effects caused by the product are unknown.

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

Information not available

SECTION 5. Firefighting measures

5.1. Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT
The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.
UNSUITABLE EXTINGUISHING EQUIPMENT
None in particular.

Phosphoric acid
CO2, dust or water spray. Extinguish large fires with water spray or alcohol resistant foam.

5.2. Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE
Do not breathe combustion products.

Phosphoric acid
Hazardous combustion products: phosphorus oxides.
Combustion produces heavy smoke.
Do not inhale explosion and combustion gases.

During a fire, smoke can contain the original material as well as combustion products of various compositions that can be toxic or irritating.
Dangerous combustion products can include, but not limited to: phenolic compounds. Carbon monoxide. Dioxide.

5.3. Advice for firefighters

GENERAL INFORMATION

SECTION 5. Firefighting measures ... / >>

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS
Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

Move away non-staff. Isolate the danger zone and prohibit access to those who are not authorized. Wet completely with water to cool and prevent it from re-entering. When the material is melted, do not use direct water flows. Use finely sprayed water or foam. Cold environments with water to circumscribe the area of the fire. Carbon dioxide extinguishers or chemical extinguishers kept handy can be used for small fires. Wear positive pressure breathing apparatus and fire protective clothing.

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Block the leakage if there is no hazard.
Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

6.2. Environmental precautions

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

6.3. Methods and material for containment and cleaning up

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.
Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

6.4. Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Before handling the product, consult all the other sections of this material safety data sheet. Avoid leakage of the product into the environment. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat.

Phosphoric acid
Use only suitable materials for transport, storage and handling.
Avoid contact with skin and eyes, inhalation of vapors, mist or dust.
Do not use empty containers before they have been cleaned.
Before transfer operations, make sure that there are no incompatible residual materials in the containers.
Provide for industrial hygiene measures.

7.2. Conditions for safe storage, including any incompatibilities

Store only in the original container. Store the containers sealed, in a well ventilated place, away from direct sunlight. Keep containers away from any incompatible materials, see section 10 for details.

Phosphoric acid
Keep packaging tightly closed
Keep away from food, drink and feed.
Incompatible materials: alkalis, reducing agents, metals (see also Section 10).
Suitable packaging materials: stainless steel, polyolefin.
Ensure good ventilation.
Storage class: 8B Deposit class (TRGS 510): 8B

7.3. Specific end use(s)

Information not available

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Regulatory References:

FRA	France	Valeurs limites d'exposition professionnelle aux agents chimiques en France. ED 984 - INRS
ITA	Italia	Decreto Legislativo 9 Aprile 2008, n.81
GBR	United Kingdom	EH40/2005 Workplace exposure limits (Fourth Edition 2020)
EU	OEL EU	Directive (EU) 2019/1831; Directive (EU) 2019/130; Directive (EU) 2019/983; Directive (EU) 2017/2398; Directive (EU) 2017/164; Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC; Directive 98/24/EC; Directive 91/322/EEC.
	TLV-ACGIH	ACGIH 2020

Quartz

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations	
		mg/m3	ppm	mg/m3	ppm		
VLEP	FRA	0,1				RESP	
WEL	GBR	0,1				RESP	
OEL	EU	0,1				INHAL	Quarzo alfa (Dir. 2017/2398)
TLV-ACGIH		3					Polveri tot. fraz. respirabile
TLV-ACGIH		10				INHAL	Polveri tot. fraz. inalabile
TLV-ACGIH		0,025				RESP	Quarzo alfa

C12-C14-alkyl glycidyl ethers (Oxirane, mono [(C12-14-alkyloxy) methyl] derivs)

Predicted no-effect concentration - PNEC

Normal value in fresh water	0,0072	mg/l
Normal value in marine water	0,00072	mg/l
Normal value for fresh water sediment	66,77	mg/kg
Normal value for marine water sediment	6,677	mg/kg
Normal value for water, intermittent release	0,072	mg/l
Normal value of STP microorganisms	10	mg/l
Normal value for the terrestrial compartment	80,12	mg/kg

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral		40 mg/kg/d	1 mg/kg/d			68 mg/kg/d	1,7 mg/kg/d	
Inhalation	2,9 mg/m3	7,6 mg/m3	1,46 mg/m3	4,1 mg/m3	9,8 mg/m3	29 mg/m3	0,98 mg/m3	13,8 mg/m3
Skin		10 mg/kg/d		2,35 mg/kg/d		17 mg/kg/d		3,9 mg/kg/d

Phosphoric acid

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
VLEP	ITA	1		2		
WEL	GBR	1		2		
OEL	EU	1		2		
TLV-ACGIH		1		3		SKIN

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Inhalation			0,73 mg/m3		2 mg/m3		1 mg/m3	

Legend:
(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.
VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified.

SECTION 8. Exposure controls/personal protection ... / >>

Quartz
Respect the legal exposure limits in the workplace for any type of airborne dust (eg total dust, respirable dust, respirable crystalline silica powder).
In Europe, the binding LEP (occupational exposure limit) for respirable crystalline silica dust has been set by Directive (EU) 2017/2398 to 0.1 mg / m3, measured as TWA (Time Weighted Average, time-weighted average concentration) over 8 hours.

Phosphoric acid
The toxicity of phosphoric acid is linked to its acidic nature. A generic PNEC (water) cannot be derived as the effects are highly dependent on the pH of the receiving waters and its repelling ability is highly variable.

8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.
When choosing personal protective equipment, ask your chemical substance supplier for advice.
Personal protective equipment must be CE marked, showing that it complies with applicable standards.
Provide an emergency shower with face and eye wash station.
HAND PROTECTION
Protect hands with category III work gloves (see standard EN 374).
The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability.
The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.
SKIN PROTECTION
Wear category II professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.
EYE PROTECTION
Wear airtight protective goggles (see standard EN 166).
RESPIRATORY PROTECTION
If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, use a mask with a type A filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.
Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.
If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.
ENVIRONMENTAL EXPOSURE CONTROLS
The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.
Product residues must not be indiscriminately disposed of with waste water or by dumping in waterways.

Quartz
In case of prolonged exposure to airborne dust concentrations, wear a respiratory protection device that meets the requirements of European or national legislation. The use of partial or complete facial masks with filters against particles of category 2 or 3 (FP2 - FP3) is recommended. See EN 143: 2000 - Respiratory protective devices. Particles filters

Phosphoric acid
Suitable respirator: use protective mask with ABEK-P2 filter.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties		Value		Information
Appearance		paste		
Colour		white		
Odour		odourless		
Odour threshold		Not available		
pH		Not determined		
Melting point / freezing point		Not available		
Initial boiling point		Not available		
Boiling range		Not available		
Flash point	>	60	°C	
Evaporation rate		Not available		
Flammability (solid, gas)		Not available		
Lower inflammability limit		Not available		

SECTION 9. Physical and chemical properties ... / >>

Upper inflammability limit	Not available
Lower explosive limit	Not available
Upper explosive limit	Not available
Vapour pressure	Not available
Vapour density	Not available
Relative density	1,65 g/cm3
Solubility	partially soluble in water
Partition coefficient: n-octanol/water	Not determined
Auto-ignition temperature	Not available
Decomposition temperature	Not available
Viscosity	Not available
Explosive properties	Not available
Oxidising properties	Not available

9.2. Other information

VOC (Directive 2010/75/EC) : 0,25 % - 4,10 g/litre

SECTION 10. Stability and reactivity

10.1. Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

Phosphoric acid
It can give violent reaction. In contact with water an exothermic reaction may occur. In contact with reactive metals (mild steel, aluminum, etc.) hydrogen (explosive) may develop. Reaction with reducing agents.

10.2. Chemical stability

The product is stable in normal conditions of use and storage.

10.3. Possibility of hazardous reactions

No hazardous reactions are foreseeable in normal conditions of use and storage.

Phosphoric acid
When mixing with water, do not allow the mixture to reach too high temperatures. Add the acid in water slowly and with simultaneous stirring.
Dangerous reactions with metals (formation of hydrogen), alkalis (alkaline solutions), reducing agents, ammonia, fluorine, sulfur trioxide, phosphorus pentoxide.

10.4. Conditions to avoid

None in particular. However the usual precautions used for chemical products should be respected.

Phosphoric acid
Avoid exposing the product to high temperatures

10.5. Incompatible materials

Phosphoric acid
Ammonia. Reactive metals. Strong bases.

10.6. Hazardous decomposition products

Phosphoric acid
Toxic phosphorus compounds.

SECTION 11. Toxicological information

Phosphoric acid
The product is corrosive, therefore extremely irritated to the eyes, skin and mucous membranes, it can cause serious damage.

11.1. Information on toxicological effects

SECTION 11. Toxicological information ... / >>

Quartz
Notes on QUARTZ (fine fraction):

Prolonged and / or massive exposure to dust containing respirable crystalline silica can cause silicosis, a nodular fibrosis of the lungs due to the deposition in the alveoli of respirable particles of crystalline silica. Given that the European Union at the time of drafting this safety data sheet does not classify crystalline silica (alpha quartz) as a dangerous substance and that at the moment there are no requests for changes by Member States, the following is notified: Lo IARC (International Agency for Research on Cancer) has included crystalline silica as a human carcinogen since 1997, but stated that human carcinogenicity was not detected in all the industrial circumstances studied. Carcinogenicity may be dependent on the intrinsic characteristics of silica or external factors that can change its biological activity "(IARC Monographs on the evaluation of Caricinogenic Risk to Humans, volume 68 Silica, Silicates, Dust and Organic Fibers - Lyon, 15-22 Oct. 96) The IOM (Institute of Occupational Medicine), stated that "the data resulting from the completed epidemiological investigation are inadequate to determine whether crystalline silica is to be considered carcinogenic to men, it is also possible to note a predisposition to the development of lung cancer in silicotic subjects although it is not possible to determine a direct effect of silica in it "(Scientific Opinion on the Effects of Airborne Silica, A. Pilkington et al., Report TM / 96/08, Institute of Occupational Medicine, Edinburgh Jan, 99) . The S.C.O.E.L. (Scientific Committee on Occupational Exposure Limits) in 2002 stated that "the main effect in humans of silica dust is silicosis. There is sufficient information to conclude that the relative risk of cancer is increased in people with silicosis (and apparently not in workers without silicosis exposed to quartz dust in quarries or in the ceramic industry). On the other hand, preventing the onset of silicosis will also reduce the risk of cancer ... "On April 25, 2006 was signed a Voluntary Agreement between the social partners (Social Dialogue Agreement on Silica) at European level, on how to prevent from adopt, in the sectors concerned, to prevent the risks deriving from exposure to respirable crystalline free silica dusts. The agreement entered into force on 25 October 2006.

For crystalline free silica, Directive (EU) 2017/2398 sets a limit value for occupational exposure of 0.1 mg / m3 and includes work involving risks of exposure to carcinogens, including work involving exposure to crystalline silica dust breathable generated by a manufacturing process ". The problem of exposure to Silica Libera Cristallina (SLC) in the workplace is particularly significant, as this risk agent is present in numerous work activities. SLC is in fact extremely common in nature and used in a wide range of civil and industrial products. The International Agency for Research on Cancer has classified it as a certain carcinogen (group 1) as early as 1997, has reassessed its toxicity data in 2010 confirming its carcinogenicity (Volume 100, part C, IARC Monograph). Source: www.dors.it

Opinion of the Industrial Minerals Association (IMA), 2014:
Since 2010, in accordance with the CLP Regulation, since a harmonized classification for silica is not available, manufacturers of industrial minerals have jointly assessed that the GHS classification for quartz (fine fraction) and cristobalite (fine fraction) is STOT RE category 1 for silicosis risk. As a consequence of this classification, substances and mixtures containing crystalline silica (fine fraction), in the form of identified impurities, additive or single constituent, are classified as: STOT RE 1, if the concentration of quartz (fine fraction) or cristobalite (fine fraction) is 10% or more; STOT RE 2, if the concentration of quartz (fine fraction) or cristobalite (fine fraction) is between 1 and 10%; If quartz (fine fraction) or cristobalite (fine fraction) in mixtures and substances is less than 1%, no classification is required by law. The decision on the classification of products containing crystalline silica (fine fraction) takes into account the availability of these fine particles.
If a product exists in a form that prevents the fraction of fine particles from becoming airborne (for example in liquid form), this will be taken into account in the classification decision. Therefore, manufacturers of industrial minerals believe that when a mineral classified as STOT RE1 or STOT RE2 due to its fine fraction content of crystalline silica is incorporated into a mixture in liquid form, the fine fraction is no longer available and the classification it would not be justified. [IMA Europe © 2014, http://www.crystallinesilica.eu/content]

Metabolism, toxicokinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

Information not available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Information not available

Interactive effects

Information not available

ACUTE TOXICITY

ATE (Inhalation) of the mixture:	Not classified (no significant component)
ATE (Oral) of the mixture:	Not classified (no significant component)
ATE (Dermal) of the mixture:	Not classified (no significant component)

SECTION 11. Toxicological information ... / >>

Phosphoric acid
LD50 (Oral) 2600 mg/kg Ratto
LD50 (Dermal) 2740 mg/kg Coniglio

1-chloro-2,3-epoxypropane
LD50 (Oral) > 15000 mg/kg Ratto
LD50 (Dermal) 23000 mg/kg Coniglio

C12-C14-alkyl glycidyl ethers (Oxirane, mono [(C12-14-alkyloxy) methyl] derivs)
LD50 (Oral) 26800 mg/kg Ratto

BisphenolF diglycidylether
LD50 (Oral) > 2000 mg/kg Ratto
LD50 (Dermal) > 2000 mg/kg Coniglio

Quartz
Acute oral / dermal LD50 of quartz and cristobalite greater than 2000 mg / kg

Acute toxic inhalation
Lack of dose-specific acute toxicity data allowing categorical decisions on the classification of acute inhalation toxicity of 100% crystalline silica forms. Acute inhalation toxicity not expected based on study values according to OECD requirements, with substance containing 45% cristobalite and no lethality reported. No further testing is warranted in the interest of animal welfare.

SKIN CORROSION / IRRITATION

Causes skin irritation

Phosphoric acid
Strongly corrosive on the skin and mucous membranes.

SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye irritation

Phosphoric acid
Strongly corrosive on the eyes.

RESPIRATORY OR SKIN SENSITISATION

Sensitising for the skin

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

Quartz
Quartz has genotoxic and mutagenic effects mainly due to inflammatory processes. Respirable quartz did not cause increases in HPRT mutations in epithelial cells of the lungs of rats in vitro.

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

Quartz
The risk of excess lung cancer is only proven for high occupational exposures to respirable crystalline silica. The risk of excess lung cancer is limited to patients with silicosis.

Phosphoric acid
Effetti CMR (cancerogeni, mutageni, tossici per la riproduzione)
Tossicità per la riproduzione
Tossicità dello sviluppo/teratogenicità
Saggio sulla tossicità riproduttiva a una generazione
Parametro : NOAEL(C)
Via di esposizione : Ratto
Dosi efficace : >= 500 mg/kg bw/day

REPRODUCTIVE TOXICITY

SECTION 11. Toxicological information ... / >>

Does not meet the classification criteria for this hazard class

Quartz
Silica is essential to normal body functions and is ingested orally with the consumption of foods containing silica in nature. A first mono-generational study on Wistar rats does not show the occurrence of adverse effects deriving from the long-term ingestion of silica-rich water.

STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

Quartz
Prolonged or massive exposure to dust containing respirable crystalline silica can cause silicosis, a nodular pulmonary fibrosis caused by the deposition in the lungs of respirable fine particles of crystalline silica.
There is substantial evidence to support the fact that the increased risk of cancer would be limited to patients already suffering from silicosis. The protection of workers against silicosis must be guaranteed by respecting the limits of occupational exposure in accordance with the law and possibly adopting additional risk management measures.

Phosphoric acid
Toxicity after repeated use (subacute, subchronic, chronic)
Subacute oral toxicity
Parameter: NOAEL (C)
Route of exposure: Oral route
Species: Rat
Effective dose: 250 mg / kg

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

SECTION 12. Ecological information

This product is dangerous for the environment and is toxic for aquatic organisms. In the long term, it have negative effects on acquatic environment.
Phosphoric acid
Use according to good working practices, avoiding to disperse the product in the environment.

12.1. Toxicity

Phosphoric acid

EC50 - for Crustacea	> 100 mg/l/48h Daphnia magna
EC50 - for Algae / Aquatic Plants	> 100 mg/l/72h Desmodesmus subspicatus

1-chloro-2,3-epoxypropane

LC50 - for Fish	2 mg/l/96h
EC50 - for Crustacea	1,8 mg/l/48h
EC50 - for Algae / Aquatic Plants	11 mg/l/72h

C12-C14-alkyl glycidyl ethers (Oxirane, mono [(C12-14-alkyloxy) methyl] derivs)

LC50 - for Fish	1800 mg/l/96h
EC50 - for Crustacea	6,07 mg/l/48h Daphnie
Chronic NOEC for Algae / Aquatic Plants	5 mg/l 72 h

BisphenolF diglycidylether

LC50 - for Fish	2,54 mg/l/96h
EC50 - for Crustacea	2,55 mg/l/48h Daphnie
EC50 - for Algae / Aquatic Plants	> 1 mg/l/72h

12.2. Persistence and degradability

SECTION 12. Ecological information ... / >>

C12-C14-alkyl glycidyl ethers (Oxirane, mono [(C12-14-alkyloxy) methyl] derivs)
Biodegradability: Rapidly degradable - Test: Oxygen consumption - Duration: 28d -%: 87 - Notes: OECD Guideline 301 F (Manometric Respirometry Test)

Phosphoric acid
The substance is inorganic, therefore biodegradability tests are not applicable.
The phosphoric acid dissociates in water in the H3O +, H2PO4-, HPO4-- ioins, which can be further degraded.

C12-C14-alkyl glycidyl ethers (Oxirane, mono [(C12-14-alkyloxy) methyl] derivs)
Rapidly degradable

12.3. Bioaccumulative potential

Phosphoric acid
Does not bioaccumulate
Phosphoric acid dissociates in water from the H3O +, H2PO4-, HPO4-- ioins, which are present in the environment. Phosphoric acid is absorbed in the form of phosphate anions.

C12-C14-alkyl glycidyl ethers (Oxirane, mono [(C12-14-alkyloxy) methyl] derivs)

Partition coefficient: n-octanol/water	3,77 Kow
BCF	160

BisphenolF diglycidylether

Partition coefficient: n-octanol/water	3 Kow
BCF	150

12.4. Mobility in soil

C12-C14-alkyl glycidyl ethers (Oxirane, mono [(C12-14-alkyloxy) methyl] derivs)
Non-mobile - Test: Koc - Partition coefficient 426850

Phosphoric acid
This substance is highly soluble and dissociates in water.

12.5. Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT or vPvB in percentage ≥ than 0,1%.

12.6. Other adverse effects

Information not available

SECTION 13. Disposal considerations

13.1. Waste treatment methods

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.
Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.
Waste transportation may be subject to ADR restrictions.
CONTAMINATED PACKAGING
Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

SECTION 14. Transport information

14.1. UN number

ADR / RID, IMDG, IATA: 3082

ADR / RID: In accordance with Special Provision 375, this product, when is packed in receptacles of a capacity ≤ 5Kg or 5L, is not submitted to ADR provisions.

IMDG: In accordance with Section 2.10.2.7 of IMDG Code, this product, when is packed in receptacles of a capacity ≤ 5Kg or 5L, is not submitted to IMDG Code provisions.

SECTION 14. Transport information ... / >>

IATA: In accordance with SP A197, this product, when is packed in receptacles of a capacity ≤ 5Kg or 5L, is not submitted to IATA dangerous goods regulations.

14.2. UN proper shipping name

ADR / RID: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (1-chloro-2,3-epoxypropane; BisphenolF diglycidylether)
IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (1-chloro-2,3-epoxypropane; BisphenolF diglycidylether)
IATA: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (1-chloro-2,3-epoxypropane; BisphenolF diglycidylether)

14.3. Transport hazard class(es)

ADR / RID: Class: 9 Label: 9

IMDG: Class: 9 Label: 9

IATA: Class: 9 Label: 9

14.4. Packing group

ADR / RID, IMDG, IATA: III

14.5. Environmental hazards

ADR / RID: Environmentally Hazardous

IMDG: Marine Pollutant

IATA: Environmentally Hazardous

14.6. Special precautions for user

ADR / RID:	HIN - Kemler: 90 Special provision: -	Limited Quantities: 5 L	Tunnel restriction code: (-)
IMDG:	EMS: F-A, S-F	Limited Quantities: 5 L	
IATA:	Cargo:	Maximum quantity: 450 L	Packaging instructions: 964
	Pass.:	Maximum quantity: 450 L	Packaging instructions: 964
	Special provision:	A97, A158, A197, A215	

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Information not relevant

SECTION 15. Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Seveso Category - Directive 2012/18/EC: E2

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006
Product
Point 3

SECTION 15. Regulatory information ... / >>

Contained substance

Point	75	Titanium dioxide Reg. no.: 01-2119489379-17
Point	75	Phosphoric acid Reg. no.: 01-2119485924-24-XXXX

Regulation (EC) No. 2019/1148 - on the marketing and use of explosives precursors
Not applicable

Substances in Candidate List (Art. 59 REACH)
On the basis of available data, the product does not contain any SVHC in percentage ≥ than 0,1%.

Substances subject to authorisation (Annex XIV REACH)
None

Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012:
None

Substances subject to the Rotterdam Convention:
None

Substances subject to the Stockholm Convention:
None

Healthcare controls
Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

15.2. Chemical safety assessment

A chemical safety assessment has been performed for the following contained substances
Phosphoric acid

SECTION 16. Other information

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

Skin Corr. 1B	Skin corrosion, category 1B
Eye Irrit. 2	Eye irritation, category 2
Skin Irrit. 2	Skin irritation, category 2
Skin Sens. 1	Skin sensitization, category 1
Aquatic Chronic 2	Hazardous to the aquatic environment, chronic toxicity, category 2
H314	Causes severe skin burns and eye damage.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H411	Toxic to aquatic life with long lasting effects.
EUH205	Contains epoxy constituents. May produce an allergic reaction.

LEGEND:
- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX NUMBER: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration

SECTION 16. Other information ... / >>

- PEL: Predicted exposure level- PNEC: Predicted no effect concentration
- REACH: EC Regulation 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA STEL: Short-term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

GENERAL BIBLIOGRAPHY

1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
3. Regulation (EU) 790/2009 (I Atp. CLP) of the European Parliament
4. Regulation (EU) 2015/830 of the European Parliament
5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
12. Regulation (EU) 2016/1179 (IX Atp. CLP)
13. Regulation (EU) 2017/776 (X Atp. CLP)
14. Regulation (EU) 2018/669 (XI Atp. CLP)
15. Regulation (EU) 2018/1480 (XIII Atp. CLP)
16. Regulation (EU) 2019/521 (XII Atp. CLP)
17. Regulation (EU) 2019/1148
18. Regulation (EU) 2020/217 (XIV Atp. CLP)

- The Merck Index. - 10th Edition
- Handling Chemical Safety
- INRS - Fiche Toxicologique (toxicological sheet)
- Patty - Industrial Hygiene and Toxicology
- N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
- IFA GESTIS website
- ECHA website
- Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

Note for users:
The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.
This document must not be regarded as a guarantee on any specific product property.
The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.
Provide appointed staff with adequate training on how to use chemical products.

CALCULATION METHODS FOR CLASSIFICATION
Chemical and physical hazards: Product classification derives from criteria established by the CLP Regulation, Annex I, Part 2. The data for evaluation of chemical-physical properties are reported in section 9.
Health hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 3, unless determined otherwise in Section 11.
Environmental hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 4, unless determined otherwise in Section 12.

Changes to previous review:
The following sections were modified:
03 / 09 / 14.