

Potassium dicyanoaurate (Au 68% - 68,2% -68,3%)

Rev n. VIII of 11.05.2022 Replaces rev n VII of 21.09.2021

1. IDENTIFICATION OF THE SUBSTANCE AND COMPANY

1.1 Product Identifier

Chemical denomination	Potassium dicyanoaurate
C.A.S. Registry Number	13967-50-5
EC number	237-748-4
Molecolar Weight	288,0986
Raw formula	[KAu(CN) ₂]
Trade Name	Product code
Double salt AU-K 68%	01 – 1001 (COC)
Double salt AU-K 68,2%	172
Double salt AU-K 68,3%	167 – 1167 (COC)
REACH Identification number	01-2120130777-52-XXXX

1.2 Substance or Mixture Identified pertinent uses and suggested uses:

Intended uses: Production, formulation, electroforming, electroplating and surface treatment of metals. Industrial use.

Environmental release category

ERC1	MANUFACTURE OF THE SUBSTANCE			
Process category				
PROC2	Production or refining of chemicals in a closed or continuous process, with occasional controlled			
	exposure or processes with equivalent containment conditions			
PROC3	Manufacture or formulation of chemicals in closed batch processes, with occasional controlled			
	exposure or processes with equivalent containment conditions			
PROC4	Production of chemicals with the possibility of exposure			
PROC8a	Transfer of substance or preparation (loading / unloading) to non-dedicated facilities			
PROC8b	Transfer of the substance or a preparation (loading / unloading) in dedicated facilities			
PROC9	Transfer of substance or preparation into small containers (dedicated filling line including weighing)			
PROC26	Handling of inorganic substances at room temperature			
ERC2	FORMULATION IN A MIXTURE			
PROC4	Production of chemicals with the possibility of exposure			
PROC5	Mixing or blending in batch process			
PROC8a	Transfer of substance or preparation (loading/unloading) to non-dedicated facilities			
PROC8b	Transfer of the substance or a preparation (loading/unloading) in dedicated facilities			
PROC9	Transfer of substance or preparation into small containers (dedicated filling line including weighing)			
PROC26	Handling of inorganic substances at room temperature			
Products of	categories			
PC14	Metal surface treatment products, including electroplating and electroplating products			
Environm	ental release category			
ERC5	USE IN INDUSTRIAL PROPCESSES THAT LEAD TO INCLUSION WITHIN OR ABOVE AN ARTICLE			
PROC1	Production or refining of chemicals in a closed process, without occasional controlled exposure or			
	processes with equivalent containment conditions			
PROC2	Production or refining of chemicals in a closed or continuous process, with occasional controlled			
	exposure or processes with equivalent containment conditions			
PROC3	Manufacture or formulation of chemicals in closed batch processes, with occasional controlled			
	exposure or processes with equivalent containment conditions			
PROC4	Production of chemicals with the possibility of exposure			
PROC5	Mixing in batch processes			
PROC7	Industrial spray application			
PROC8a	Transfer of substance or preparation (loading / unloading) to non-dedicated facilities			
PROC8b	Transfer of the substance or a preparation (loading / unloading) in dedicated facilities			
PROC9	Transfer of substance or preparation into small containers (dedicated filling line including weighing)			
11005	ransjer of substance of preparation into small containers (acateura jining inte including weighing)			



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1.3

1.4

2.1

2.

PROC13	Treatment of articles by dipping				
PROC15	Use as a laboratory reagent				
PROC26	Handling of inorganic substances at room temperature				
Product					
PC14	-	reatment products	s, including electroplating and electroplating products		
Use indu	•				
SU16			and optical products, electrical equipment production		
	nental release				
ERC8c	USE DISPERSED	O IN CLOSED ENVIE	RONMENTS THAT LEADS TO INCLUSION ON OR INTO AN ITEM		
PROC4	Production of c	hemicals with the	possibility of exposure		
PROC8b			eparation (loading / unloading) in dedicated facilities		
PROC9			tion into small containers (dedicated filling line including weighing)		
PROC13	•	rticles by immersic			
PROC26 Product		i gunic substances	at room temperature		
PC14		reatment product	s, including electroplating and electroplating products		
1014	wietar surjuce t	reatment product.	s, mendaring electroplating and electroplating products		
Use sect	or:				
SU16	Production of c	omputers, electroi	nic and optical products, electrical equipment		
Advised a	gainst uses: No	on in particular			
Safety dat	ta sheet suppli	er information			
Name			FAGGI ENRICO S.P.A.		
Address			Via Majorana, 101/103 50019 Sesto		
			Fiorentino FI		
Telephone	e number		055311861		
Fax numb			055311791		
	ompente respo	nsabile della	lorenzo.magaldi@faggi.it		
	ti di sicurezza		lorenze.magarare raggine		
	y Telephone N	umber	111 - Medical helpline operating in		
Lineigene		umber.			
			England, in Scotland (NHS 24) and in Wales		
			(NHS Direct Wales)		
	IDENTIFICATIO	JN			
	lassification				
	on according to F				
Hazard Cl	asses	Categories Codes	Hazard codes		
Met. Corr		1	H290 May be corrosive to metals.		
Acute toxi	city -Oral	2	H300 Fatal if swallowed.		
	•	_			

2 H315 Causes skin irritation.

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- 1 H317 May cause an allergic skin reaction.
 - 1 H318 Causes serious eye damage
 - 2 H330 Fatal if inhaled
 - 1 H400 Very toxic to aquatic life.
 - H410 Very toxic to aquatic life with long lasting effects

2.2 Label elements Pictograms:

Skin irrit.

Skin sens.

Eye damage

Acute toxicity

Aquatic acute

Aquatic chronic





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Signal word	DANGER		
Hazard statements	H290	May be corrosive to metals	
	H300	Fatal if swallowed.	
	H315	Causes skin irritation	
	H317	May cause an allergic skin reaction	
	H318	Cause serious eye damage	
	H330	Fatal if inhaled	
	H410	Very toxic to aquatic life with long lasting effects	
Additional hazard	EUH032	Contact with acids liberates very toxic gas.	
statements / identification			
elements (EU)			
Safety advices	P234	Keep only in original packaging.	
	P273	Avoid release to the environment.	
	P280	Wear protective gloves/protective	
		clothing/eye protection/face protection.	
		IF ON SKIN: Wash with plenty of water	
	P302+P352		
		IF SWALLOWED: Immediately call a POISON	
	P301+P310	CENTER or doctor	
		IF INHALED: transport the injured person to	
	P304+P340	fresh air and keep him at rest in a position	
		that favors breathing	
Other hazards	Hydrogen cyanide can cause all levels of poisoning. Under the action of acids (including carbon dioxide) hydrogen cyanide is released, which is flammable and together with the		
	air can form explosive gas mixtures.		
	Avoid contact v	with acids, air humidity, water.	

Avoid contact with acids, air humidity, water.

3. COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substance

2.3

Potassium dicyanoaurate	2
CAS Number	13967-50-5
CE Number	237-748-4
INDEX Number	Not available
ATE	LD50 (oral): 24.4 - 36.1 mg/kg bw (rat)
M factor (acute)	1
M factor (chronic)	1
First aid massures	

First aid measures

4.1 First aid measures description

General advices

Take yourself out of the dangerous air. Immediate medical attention is required. Show the safety data sheet to healthcare personnel. Bring the injured person to fresh air and keep him at rest in a position that allows easy breathing. Undo tight clothing such as

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	collars, ties, belts. In case of difficulty in breathing or respiratory arrest, give artificial respiration or supply oxygen by trained personnel. Don't leave the victim unsupervised. The following recommendations on first aid and the necessary therapies should be made available to all first aid workers and doctors who may be called to provide help before the work with cyanide or hydrocyanic acid begins. Adverse effects may also include the following: headache, dizziness, lightheadedness, nausea, vomiting, fits, fainting, shortness of breath or difficulty in breathing, cardiac arrest or heart attack. Remove all contaminated clothing immediately. If breathing is difficult, serve oxygen. If victim is not breathing, provide artificial respiration. Do not practice mouth-to-mouth or mouth-to-nose resuscitation. Use the AMBU bag or respirator. Keep the victim warm and at rest. If unconscious place him in the safety position and immediately provide medical attention.
Protection of first aid personnel	No action should be taken involving personal risk or without suitable training. If toxic fumes are suspected to still be present, rescuers should wear an appropriate mask or isolated breathing apparatus. It may be dangerous for rescuers to practice mouth-to- mouth resuscitation. Wash contaminated clothes with plenty of water before removing them or putting on gloves.
Inhalation	Call a physician immediately. (KEY WORD. CYANIDE / HYDRAULIC ACID POISONING). If the victim is unconscious, place him in the safety position and call a doctor immediately. If the decomposition products caused by a fire are inhaled, symptoms may be delayed.
Ingestion	Clean mouth with water and drink plenty of water. Call a physician immediately. (KEY WORD. CYANIDE / HYDRAULIC ACID POISONING). Keep the respiratory tract clear. DO NOT INDUCE VOMITING. Rinse your mouth with water. Do not give anything by mouth to an unconscious person. Immediately take the injured person to the hospital.
Skin contact	Immediately take the injured person to the hospital. Wash contaminated clothing before re-use. Immediately remove the substance from the skin. If the substance is on the skin, wash it repeatedly with water. Flush contaminated skin with large amounts of water.

Recommendations:

• Need to see a doctor immediately



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	Possibility of delayed effects following exposure	YES
	 Move the exposed individual from the place of exposure to the open air 	YES
	 Remove clothing and shoes of the exposed individual 	YES
	How to handle contaminated clothing	With gloves
	• For those providing first aid, wear PPE	YES
4.2	Most important symptoms and effects, both acute and delayed	
	Possible signs of poisoning: It seems appropriate to differentiate between 1. Slight poisoning 2. Severe poisoning	two stages:
	The following symptoms do not provide reliable information about progno Symptoms of central nervous system	osis.
	Early stage: headache, dizziness, drowsiness, nausea.	
	advanced stage: convulsions, coma.	
	pulmonary symptoms	
	Early stage: dyspnea, tachypnea.	
	advanced stage: hypoventilation, Cheyne-Stokes respiration, apnea cardiovascular symptoms	
	Early stage: Hypertonia, arrhythmia sinus node, AV nodal arrhythmia, brac advanced stage: tachycardia, complex arrhythmias, cardiac arrest. skin symptoms	lycardia.
	Early stage: Colorful red.	
	Advanced stage: cyanosis.	
	Effect on the metabolism: to pH 7.1 by lactate acidosis and lactate levels u have been described.	p to 17 mm / liter
4.3	Indication of any need to immediately consult a doctor and special treat	ments

Therapy: Prevent reabsorption and ensure vital functions, strictly adhering to self-protection measures. Rapid antidote therapy can be life-saving and takes precedence over elimination of poison.

Therapy: Slight intoxication. 100% artificial respiration with oxygen. Based on the symptoms and clinical picture, detailed examinations of the reports, symptomatic treatment for pulmonary edema prophylaxis and diagnostics (lung radiography) are required.

Antidote therapy: for example, administration of sodium thiosulfate 12.5 g - 100-500 mg / kg intravenously, according to the clinical findings and symptoms. Attention! The dosage applies to an adult of 70 kg. Any person poisoned by cyanide must be monitored continuously for many hours even if the patient feels well. This is to ensure that no new symptoms or previous ones remain.

Therapy: severe intoxication.

Artificial respiration with oxygen. Immediate administration of antidote.

The medicines listed below can be used for antidote therapy:

Complex trainer

1. Administer intravenous hydroxocobalamin (Cyanokit[®]) 5g (70 mg / kg for adults) over an infusion period of 20-30 minutes. This dosage can be repeated, according to the severity of the



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intoxication. The infusion period for repeated administration is 30 minutes up to 2 hours. Hydroxocobalamin can only be administered intravenously.

2. Dicobalt edetate (Kelocyanor[®]) 300 mg (1 vial) for adults in 1-3 minutes, intravenously. Methemoglobin trainer:

1. 4-dimethylaminophenol, (4-Dmap) sodium thiosulfate: the antidote is administered in the following sequence:

to. 4-DMAP, 250 mg (3-4 mg for each kg of body weight) in 5 ml IV (vial) followed by b. sodium thiosulfate 12.5 g in 50 ml IV- infusion.

If the antidote has been administered and the diagnosis is not that of cyanide intoxication and you have methemoglobin> 30%, you can administer toluidine blue or methylene blue, to suspend the effect of the cyanide antidote. WARNING: this should be done with the utmost caution and only in the hospital, due to the renewed emission of cyanide in the blood.

5. FIRE FIGHTING MEASURES

5.1 Fire fighting media

Suitable extinguishing media Unsuitable extinguishing media alkaline fire fighting powder.

water, carbon dioxide (CO2), foam, acid fire fighting material, acid fire fighting powders.

5.2 Special hazards arising from the substance or mixture

Do not allow run-off from fire fighting to enter drains or water courses. Hazardous combustion products: metal oxides, nitrogen oxides, hydrogen cyanide

Special recommendations for firefighters

5.3 General information Prevent the water used to extinguish the fire from flowing into the sewer, groundwater or surface water. Collect the water used during the extinguishing of the fire separately. This must not be discharged into the sewers. Fire residues and contaminated water must be disposed of in accordance with applicable laws.
 Equipment If necessary, wear isolated breathing apparatus for firefighting.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and procedures in case of emergency

6.1.1. For non-emergency personnel

Move away from the contaminated area and keep upwind.

6.1.2. For emergency responders

Wear protective equipment. avoid the formation of dust. avoid breathing dust. Semi-face masks with ABEK2P3 filters compliant with the EN14387: 2004 standard Chemical risk gloves compliant with all EN420 and EN374 standards Splash goggles compliant with Directive 89/686 / EEC and standard EN166: 2001 Complete clothing compliant with the UNI EN 13034: 2006 type 6 standard

6.2 Environmental precautions:

Do not send the product to the following compartments:

- ground
- •ground water
- sewer



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In case of pollution of rivers, lakes or sewers, inform the competent authorities in accordance with local laws.

6.3 Methods and materials for containment and cleaning up

6.3.1. Recommendations on how to contain a spill Close (if possible) or cover the drains

6.3.2. Recommendations on how to clean up a spill

1. <u>Solid substance:</u>

Collect mechanically. Collect in suitable containers. The collected material must be reused or disposed of according to regulations. To absorb the spilled substance, it is recommended to use an approved industrial vacuum cleaner.

2. Solution:

Absorb with liquid-retaining material, for example: inert absorbent medium, diatomaceous earth or acid absorbent. Collect mechanically. Collect in suitable containers. The collected material must be reused or disposed of according to regulations.

6.3.3. Other informations:

The substance, the packaging, the fire extinguishing water and the remains of any fire must be sent to an appropriate disposal facility, in compliance with waste regulations.

6.4 Reference to other sections:

None

HANDLING AND STORAGE

7.1. Precautions for Safe Handling

7.1.1. Recommendations that allow the substance or mixture to be handled safely, such as containment and prevention measures for fires and for the formation of aerosols and dusts

Avoid the formation of dust and keep away from incompatible materials (acids, acid salts, aluminum). Do not breathe dust and vapors. Avoid contact with eyes and skin. Use only under a suction hood. Keep fire extinguishers and containment means such as inert absorbent media, diatomaceous earth or absorbent for acids nearby. Provide for the disposal of waste water in accordance with local and national laws. Post appropriate signs against the risk of fire and / or explosion.

7.1.2. Generic recommendations on occupational hygiene

Do not eat, drink and smoke in work areas. Wash your hands after use. Remove contaminated clothing and protective equipment before entering eating areas **Conditions for safe storage, including any incompatibilities**

7.2.1. Management of risks associated with explosive atmospheres, corrosive conditions, flammability hazards, incompatible substances and mixtures, evaporation conditions, potential sources of ignition

The product itself does not burn but if involved in a fire it can release toxic gases. Suitable containers: plastic.

7.

7.2.



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7.3.

8.1.

8.

	In case of release of hydrogen cyanide: The formation of flammable or explosive dust / air mixtures is possible.
	Keep suitable fire extinguishers and plenty of water near the substance.
	Open the containers under suction and close them immediately after use.
	open the containers under suction and close them initialities after use.
7.2.2.	Containment of the effects of weather conditions, pressure, temperature, sunlight, humidity and vibrations
	Keep in a locked and ventilated room. Protect against solar radiation and the action of heat.
7.2.3.	Conditions for keeping substances / mixtures intact
	Store in original containers. Keep the containers tightly closed and store them in a
	dry and well ventilated, clean, dry, closable place.
7.2.4.	Provisions relating to ventilation, specific design of storage rooms or containers, quantitative limits in storage conditions, compatibility of packaging
	Do not store near: acids and acid salts.
	Keep the substances in a locked deposit with forced ventilation.
	Use ADR approved packaging
	Specific end uses
	Industrial use.
	EXPOSURE CONTROL / PERSONAL PROTECTION
	Control parameters
	(as Potassium Cyanide CAS 151-50-8 EC 205-792-3)
	Control parameters:
	TLV (ceiling value): 5 mg/m ³ as STEL (skin)
	EU-OEL: 1 mg/m ³ as TWA
	Control parameters: Skin designation: (OEL (IT))
	It can be absorbed through the epidermis.
	Suitable measurement procedures are:
	Potassium cyanide: OSHA method ID120
	NIOSH method 7904
	Hydrogen cyanide: OSHA method ID120
	DNEL: Sustamic effects for long term expective inhelation: $0.071 \text{ mg}/\text{m}^3$
	Systemic effects for long term exposure - inhalation: 0.071 mg / m ³ Systemic effects for acute long-term exposure - dermal: 0.1 mg / kg bw / day
	PNEC:
	Fresh water: 0.2 μg / L
	Fresh water (intermittent release): 2 µg / L
	Sea water: 0.02 μ g / L
	STP: 6 mg / L
	Sediment (fresh water): 0.33 mg / kg dry weight
	Sediment (sea water): 0.033 mg / kg dry weight
	Soil: 0.067 mg / kg dry weight
	Exposure controls
	Provide for appropriate air extraction / evacuation in the workplace and on the

8.2.



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Provide for the installation of an emergency shower and an eye shower.

- **8.2.1.** Appropriate technical controls Use only in aspirated rooms.
- 8.2.2. Individual protection measures, such as personal protective equipment

Eye / face protection	Goggles with side shields compliant with
	Directive 89/686 / EEC and EN166: 2001
	standard
Skin protection (hands)	Glove material:
	Glove material:
	 Nitrile rubber thickness 0.38 mm
	Breakthrough time> 240 minutes
Skin (body) protection	Complete clothing compliant with the UNI
	EN 13034: 2006 type 6 standard
	When cleaning: rubber or plastic boots
Respiratory protection	When hydrogen cyanide occurs:
	Wear self-contained breathing apparatus.
	Observe the maximum times of use of
	respiratory protection.
	In case of dust / aerosol:
	Respirator with combined filter B-P3
	Respirator with combined filter ABEK-P3
Thermal hazards	The substance does not present a thermal

8.2.3. Environmental exposure controls

Prevent the spillage of solutions containing cyanide in groundwater, soil, sewers. Provide for closing the manholes while moving the solutions. Do not store in areas with sewage drains.

hazard

9.

9.1

PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chem	ical properties
Physical state	Crystalline solid
Color	White
Odour	None when dry.
	Almond if moist
Melting point / freezing point	It decomposes at 383 ° C and 101.3 kPa
Boiling point or initial boiling point and boiling range	Non applicable
Flammability	Not flammable
Lower and upper explosive limits	Not explosive
Flash point	Not applicable
Self-ignition temperature	Not flammable
Decomposition temperature	383 °C
рН	11 (100 g/l in water)



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		Kinematic viscosity		Not applicable
		Solubility		143 g/l in water at 20°C
		Partition coefficient n-octa	nol / water	Not applicabile
		(logarithmic value)		
		Vapor pressure		Not applicable
		Density and / or relative de	nsity	3,6 g/cm ³ (20° +/-0.5 °C)
		Relative vapor density		Not applicable
		Characteristics of the partic	cles	Fraction < 100 μm: 17.6 %
	9.2.	Other information: none		
10.		STABILITY AND REACTIVITY	1	
	10.1	Reactivity		
		It can be corrosive to metal	S	
			formation in	contact with acids, carbon dioxide, air
		humidity.		
	10.2	Chemical stability		
		The product is stable under		itions of storage and use.
	10.3	Possibility of hazardous rea		
		Contact with acids liberates	, ,	
		-	ere is the pos	sibility of hydrocyanic acid formation.
	10.4	Conditions to avoid		
			-	on dioxide) hydrogen cyanide is released,
		which is flammable and together with the air can form explosive gas mixtures. Keep away from acid salts.		
	10.5	-		
	10.5	Incompatible materials	oven the air	can load to the formation of hydrogen
		Acids, acid salts. Over time, even the air can lead to the formation of hydrogen cyanide in a confined environment or in containers that are not hermetically closed.		
	10.6	Hazardous decomposition products		
	10.0	HCN hydrogen cyanide (hydrogen cyanide)		
11		TOXICOLOGICAL INFORMATION		
	11.1	Information on the hazard classes defined in Regulation (EC) No. 1272/2008		
		Acute toxicity		29.2 mg/kg bw (rat)
		•		al): >2000 mg/kg bw (rat)
		Skin corrosion/irritation		to contact with the skin, the product causes
			significant ir	nflammation with erythema, scabs or
			edema. (OE	CD Guideline 439)
		Serious eye	If brought ir	ito contact with the eyes, the product
		damage/irritation	causes serio	us eye damage, such as opacification of the
			cornea or in	jury to the iris. (In Vitro Irritancy Score
			171.5)	
		Respiratory or skin	•	nto contact with the skin, the product may
		sensitization	cause skin s	ensitization. (OECD Guideline 429)
		Germ cell mutagenicity		ailable data, the classification criteria are
			not met	ng/kg bw/ day (rat)
			NUALL . 5 II	is/ ng uw/ uay (ial)



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		Carcinogenicity	Based on av not met	ailable data, the classification criteria are
		Reproductive toxicity	Based on av not met	ailable data, the classification criteria are
			NOAEL : 10	mg/kg bw/ day (rat)
		STOT – single exposure		ailable data, the classification criteria are
		STOT – repeated	Based on av	ailable data, the classification criteria are
		exposure	not met	
	11.2	Information on other hazar		
	11.2			phoric air is analigh) or ingostion (about
				spheric air is enough) or ingestion (about
				loss of consciousness and death.
			re (15 ppm) s	single cases of thyroid function disorders
		have been reported.		
		It can be absorbed into the	skin, particul	arly if the skin is sweaty or injured.
		Symptoms related to the ph	nysical, chemi	cal, and toxicological characteristics:
		Respiratory fatigue, loss of	consciousnes	S
		Relating to substance: hydro	ogen cyanide	Epidemiological studies with exposed
		workers (1-3 ppm) did not s		
		ECOLOGICAL INFORMATIO	•	
				ment as it is very toxic to aquatic organisms
		The product is dangerous for the environment as it is very toxic to aquatic organisms The product is dangerous for the environment as it is very toxic to aquatic life with		
		long lasting effects.		intent as it is very toxic to aquatic ine with
12.1				
12.1		Toxicity:		
		Toxicity to fish - Short term	effects	
		Method		Results
		Oncorhynchus mykiss - acco	-	LC50 (24h): 12 mg/l
		EOCD guideline 203 (test for	r short-term	LC50 (48h): 5.7 mg/l
		toxicity in fish)		LC50 (72h): 5.7 mg/l
				LC50 (96h): 5.7 mg/l
				NOEC (96h): 3.2 mg/l
				LOEC (96h): 10 mg/l
		Toxicity to invertebrates - Short term effects		
		Method		Results
		Daphnia Magna		EC50 (24h): 0.76 mg/l
		In accordance with OECD 20)2 auideline	EC50 (48h): 0.20 mg/l
		(Daphnia sp. Acute immobil		NOEC (48h): 0.094 mg/
		Test)	isiation	LOEC(48H): 0.21 mg/l
		1630		
		Toxicity to algae and plants	s - Short term	effects
		Method		Results
		Pseudokirchneriella subcapi	itata	EC50 (72h) :14 mg/l (biomass)
		-		
		In accordance with OECD 20	si gulueline	EC50 (72h): 30 mg/l (growth)
				NOEC (72h): 6.4 mg/l (biomass)
				NOEC (72h): 6.4 mg/l (growth)
				LOEC (72h): 16 mg/l (biomass)

12.



LOEC (72h): 16 mg/l (growth)

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			EC10 (72h): 4.4 mg/l (biomass)			
			EC10 (72h): 11 mg/l (growth)			
			EC20 (72h): 8 mg/l (biomass)			
			EC20 (72h): 17 mg/l (growth)			
	12.2	Persistence and degradability				
		Not applicable				
	12.3	Bioaccumulation potential				
		No data available				
	12.4	Mobility in soil				
		Koc at 20 °C: 16648.7				
	12.5	Results of PBT and vPvB assessment				
		Not applicable				
	12.6	6 Properties of interference with the endocrine system No known effect				
	12.7	Other adverse effects				
		No known effect				
13.		DISPOSAL CONSIDERATIONS				
	13.1.	Waste treatment methods				
		This product and its packaging must be disposed of in authorized facilities. An CER code of hazardous waste must be assigned on the basis of the provisions of Directive				
		2008/98 / EC and subsequent amend	ments and additions.			
		The packaging and labeling of waste r	must be identical to that of the pure product. Do			
not remove the labels from the packaging until their final destination.						
		Do not reuse empty containers.				
		Cyanide waste can only be treated and decontaminated by authorized companies				
		with: Hydrogen peroxide and pH value 11).				
14.		TRANSPORT INFORMATION				
	14.1	UN number or ID number	1588			
	14.2	UN proper shipping name	Inorganic cyanides, solid, n.o.s.			
	14.3	Transport hazard classes				
		ADR / RID / IMDG / ICAO-IATA: Class: 6.1				
		ADR / RID / IMDG / ICAO-IATA: Label: 6.1 + Environment				
		ADR: Tunnel restriction code: C / E				
		IMDG - EmS: FA, S-A				
	14.4	Packing group	II			
	14.5	Environmental hazards				
		ADR / RID / ICAO-IATA: Product dang	erous for the environment			
		IMDG: Marine contaminant: Yes				
	14.6	Special precautions for users				
		•	by vehicles authorized to transport dangerous			
			ns of the current edition of the A.D.R. and			
			port must be carried out in the original packaging			
			made up of materials that cannot be attacked by			
		the content and are not likely to gene	erate dangerous reactions with this. The persons			
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			in charge of loading and unloading dangerous goods must have received appropriate		
			training on the risks presented by the preparation and on any procedures to be		
			adopted in case of emergency situations		
	14.7		Bulk sea transport in accordance with IMO acts		
			Transport in bulk is not foreseen		
15.	6. REGULATORY INFORMATION				
	15.1 Health, safety and environmental legislation and regulations			Applicability	
	specific to the substance or mixture		•		
			Reg. (CE) 1907/2006/CE Reach	YES	
			Reg. (EC) 1272/2008 CLP and following changes and additions	YES	
			Reg. (CE) 2037/2000 "Substances that deplete the ozone layer"	NO	
	Reg. (EC) 850/2004 "Persistent organic pollutants"		NO		
			Reg. (EC) 689/2008 "export and import of dangerous chemicals"	NO	
			Substance listed in Annex I of Dir. 2012/18 / EU so-called	YES	
			Seveso		
			Legislative Decree 81/2008 Consolidated Law on health and	YES	
			safety at work		
			Directive 2014/103 / EU "Adr"	YES	
			R.D. 09/01/1927 "Gas tossici" R.D. 09/01/1927 "Toxic gases"	NO	
	Reg. (CE) 1907/2006/CE Reach art. 59 – Candidate List of Substances of Very High Concern (SVHC)		NO		
			Substances of Very High Concern (SVHC)		
			Reg. (CE) 1907/2006/CE Reach - Annex XIV – Authorisation List	NO	
			Reg. (CE) 1907/2006/CE Reach - Annex XVII – Restriction List	Restricted use.	
	https://echa.europa.eu/it/substances-restricted-under-reach		Item 75 (see link)		
15.2 Chemical safety assessment		Chemical safety assessment			
			Chemical safety assessment has been carried out		
16.	OTHER INFORMATION				
		Changes compared to the previous edition			
			Regulatory adaptation.		
	Key to abbreviations and acronyms			C 1	
ADR: European agreement concerning the international transport of goods by road			-		
	GHS: Globally Harmonized System of Classification and Labeling of Substance				
	EINECS: European Inventory of Chemical Substances CAS: Chemical Abstract Service Main bibliographic references and data sources				
ECHA database on registered substances and those under re					
	http://echa.europa.eu/web/guest/information-on-chemicals/registe				
	Adequate training for workers to ensure the protection of human health and t				
	environment				
		 Training on Chemical Risk pursuant to Legislative Decree 81/08 Title IX 			
		dangerous substances			
			PPE training		
			 Training for obtaining a license for handling toxic gases 		



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