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	1.1	Product Identifier			
		Denomination	GOLD	POTASSIUM CYANIDE (I)	
		C.A.S. Registry Number	13967	-50-5	
		EINECS Number	200-82	21-6	
		Molecolar Weight	288,1		
		Formula Bruta	[KAu(C	CN)2]	
		Trade Name	Sale de	орріо АU-К	
	1.2	Substance or Mixture Ide	Substance or Mixture Identified pertinent uses and suggested uses		
		Galvanic uses			
	1.3	.3 Safety Data Sheet supplier information			
		EU market introducing re	sponsible		
		Name		FAGGI ENRICO S.P.A.	
		Address		Via Majorana, 101/103 50019 Sesto Fiorentino F	
		Telephone number Fax number		055311861 055311791	
		Qualified person responsi	ble for SDS		
	1.4	Emergency Telephone Number:		lorenzo.magaldi@faggi.it Tel. 0557947819 Centro Antiveleni di Firenze	
•	1.5	Registry number		01-2120130777-52	
Ζ.	2.1	2. HAZARDS IDENTIFICA	IIUN ardinata Baa		
	2.1	. Mixture classification according to Re			
		Hazaru Classes	Categories	nazaru coues	
		Met Corr	1	H200	
			2	H300	
		Skin Irrit	2	H315	
		Skin Sens	1	H317	
		Eve Dam.	1	H318	
		Acute Tox	2	H330	
		Hazardous for Aquatic	-	H400	
		Environmental Acute	_		
		Hazardous for Aquatic	1	H410	
		Environmental Cronic			
	2.2	Label elements :			



Advices

DANGER



SAFETY DATA SHEET According to Regulation n. 1907/2006 and Regulation 830/2015

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	GIUM CYANIDE				
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ision n V dd 06.29	9.2017				
Hazard advices	H290	May be corrosive to metals			
	H300	Fatal if swallowed			
	H315	Causes skin irritation			
	H317	May cause an allergic skin reaction			
	H318	Causes serious eye damage			
	H330	Fatal if inhaled			
	H410	Highly toxic for aquatic organisms with long terms effects			
	EUH032	By contact with acids releases high toxic gas			
Safety advices	P234	Keep only in original container			
	P273	Avoid breathing dust / fume / gas and / mist / vapors / spray			
	P280	Wear protective gloves / protective clothing. Protect eyes / face.			
	P301+P310	IF SWALLOWED: Immediately call a poison control center or doctor			
	P302+P3352	IF ON SKIN: Wash with plenty of water and soap			
	P304+P340	IF Inhaled: Set the injured at fresh air and keep in position favourable for breathing			
More The hydrocyanic acid can lead to a		acid can lead to all levels of poisoning.			
information	Under the action of acids (including carbon dioxide) is released hydrocyanic				
Results of	acid, which is fla	mmable and together with the air can form explosive gas			
PBT and	mixtures.				

Avoid contact with acids, air humidity, water. vPvB ev. PBT : not applicable vPvB : not applicable

3. 3. COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substance Esachloroplatinic Acid, Solid Salt 40%

CAS No: 13967-50-5 EINECS No. 200-821-6 CE No. : IUPAC No.

4. **MISURE DI PRIMO SOCCORSO**

4.1 First aid measures

Inhalation In case of formation of aerosols, mists, dusts or fumes can inhalation. No mouth-to-mouth or mouth-nose. Use artificial respiration bag or respirator. Risk of poisoning. Keep respiratory tract. In case of shortness of breath, give oxygen. Call a physician immediately for emergency room (keyword: poisoning with cyanide / prussic acid). Ingestion Rinse mouth. Is immediately drink plenty of water. Induce vomiting. Call a physician immediately for emergency room (Keyword: poisoning with cyanide / hydrocyanic acid) Skin contact If the skin dry and without injury is in contact with dry sodium cyanide or potassium, you have not so far observed cyanide poisoning. After contact with skin, wash with soap and water. With symptoms of intoxication alarm the emergency doctor immediately (keyword:



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Therapy: severe intoxication.



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> Artificial respiration with oxygen. immediate administration of antidote. The medicines listed below may be used for the therapy with antidote:

Overall trainer

1. Administer hydroxocobalamin (Cyanokit®) 5g intravenous (70 mg / kg for adults) infusion for a period of 20-30 minutes. This dosage may be repeated, according to the severity of intoxication. The infusion period, for the repeated administration is 30 minutes up to 2 hours. The hydroxocobalamin can be administered only intravenously.

2. edetate dicobalt (Kelocyanor®) 300 mg (1 ampoule) for adults in 1-3 minutes, by intravenous route.

Trainer methemoglobin:

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

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

If the antidote was administered and the diagnosis is not that of cyanide intoxication and you have methemoglobin> 30%, you can be administered toluidine blue or methylene blue, to suspend the effect of cyanide antidote. CAUTION: what should be done with extreme caution and only in the hospital, because of the renewed cyanide emissions in the blood.

5. **FIRE PREVENTION**

5.1 **Extinguishing means**

Suitable extinguishing means: Non suitable extinguishing means

alkaline extinguishing powder

water, carbon dioxide (CO2), foam, extinguishing agent acid, acidic fire dust.

5.2 Special hazards arising from the mixture

In case of fire can be released hydrogen cyanide

5.3 Advice for firefighters

General information Do not allow water used to extinguish the fire flows into drain, in groundwater or surface water. Cool containers at risk with water. If feasible in terms of safety, to move from immediate hazard undamaged containers.

Devices Normal clothing to fight the fire, such as a compressed air breathing apparatus open circuit (EN137), full flame retardant (EN469), fire resistant gloves (EN659) and boots for firefighters (HOA29 or A30)

6. ACCIDENTAL RELEASE MEASURES

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

For non-emergency personnel 6.1.1.

Move away from the contaminated area and keep upwind.

6.1.2. For emergency responders

Wear:

Gloves for chemical risks comply with the standards EN420 EN374

Splash goggles in compliance with the Directive 89/686 / EEC and the standard EN166: 2001

Clothing complete conformity with the UNI EN 13034: 2006

Half-facial masks with filters ABEK2P3 R complies with EN14387: 2004 + A1: 2008

6.2 **Environmental precautions:**

Do not discharge product into the following compartments:

- ground
- ground water

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sewer

In case of pollution of rivers, lakes or drains, inform appropriate authorities in accordance with local laws.

In case of fire, the Shutdowns water should not enter drainage systems, soil, or surface water. In case of fire, remove the endangered containers and bring them to a safe place, if you can do so safely.

6.3 Methods and materials for containment and cleaning up

6.3.1. Recommendations on how to contain a spill Ask (if possible) or cover discharges

6.3.2. Recommendations on how to clean up a spill

1. solid substance:

Collect mechanically. Collect in suitable containers. The collected material should be reused or disposed of according to regulations. To absorb spilled substance, it is recommended to use an 'approved industrial vacuum cleaner. 2. solution:

Absorb with material that holds liquids, for example: inert absorbent, diatomaceous earth or absorbent for acid. Collect mechanically. Collect in suitable containers. The collected material should be reused or disposed of according to regulations.

6.3.3. **Other informations:**

The essence, packaging, fire-fighting water and the remains of any fire should be taken to an appropriate disposal facility, respecting the rules on waste.

6.4 **Reference to other sections:**

HANDLING AND STORAGE 7.

7.1. Precautions for safe handling:

7.1.1. General recommendations

Avoid dust formation and keep away from incompatible materials (acids, acid salts, aluminum). Use only under intake hood. Keep fire extinguisher nearby and containment means such as inert absorbent materials, diatomaceous earth or absorbent for acid.

7.1.2. General recommendations on personal hygiene

do not eat, drink or smoke in work areas; Wash hands thoroughly after use and remove contaminated clothing and protective equipment before entering areas where you eat.

7.2. Conditions for safe storage, including any incompatibilities

Keep away from food, drink and feed. Keep away from bases, strong oxidation agents and metals.

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

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

In case of hydrogen cyanide liberation: E 'possible the formation of dust / air mixtures flammable or explosive.

Hold around extinguishers suitable substance and plenty of water.

Open containers under suction and close them immediately after 'use.

7.2.2. Containment of the effects of weather conditions, pressure, temperature, sunlight,

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		humidity and vibrations Keep in a locked room and breez	y. Protect against solar radiation and the action of			
	7.2.4.	Precautions for maintaining inte Store in original container. Keep	grity of the substances containers tightly closed and store in a dry and well			
		ventilated, clean, dry, lockable.				
	7.2.5.	Provisions on ventilation, specific limits under storage conditions,	ic design for storage rooms or vessels, quantity packaging compatibilities			
		Keep the deposited substances lo Use approved packaging ADR	ocked up and forced ventilation.			
7.3.		Specific end use				
		Professional use				
		EXPOSURE CONTROLS / PERSON	AL PROTECTION			
8.1.		Control parameters				
0.2.		(As Potassium cvanide CAS 151-50-8 FC 205-792-3)				
		Control parameters: 5 mg / m3 p	ermissible limit value (OEL (EU))			
		Remarks: Source for the limit value	alues: ACGIH			
		Control parameters: Skin designa	tion: (OEL (EU))			
		It can be absorbed through the sl	kin.			
		The proceedings of suitable meas	surements are:			
		Potassium cyanide: OSHA method ID120				
		NIOSH 7904 method				
0.0		hydrocyanic acid: USHA method ID120				
8.2.		Exposure controls:	ation at the work place and with energianal			
		machinery.	ation at the work place and with operational			
		To install an emergency shower a	and an eye shower.			
	8.2.1.	Appropriate engineering controls				
		It is possible to evaluate the insta	allation of a detector of fugitive emissions is			
		hydrocyanic acid in the working area.				
	8.2.2. Individual protection measures, su		such as personal protective equipment			
		Protection Eye / lace	standard FN166: 2001			
		Skin protection (Hands)	Material of gloves:			
			Natural rubber latex (NR) Material thickness 0.5			
			mm Break through time \geq 480 min Method DIN EN			
			574			
			 Nitrile Material thickness 0.11 mm 			
			• penetration time \geq 480 min Method DIN EN 374			
			 Nitrile thickness of 0.33 mm material penetration time ≥ 480 min MetodoDIN EN374 			
			Polychloroprene with natural-latex liner material			

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		Auto-ignition Temperature	Not applicable
		Decomposition Temperature	Not applicable
		Viscosity	Not defined
		Explosive Properties	Not classified as explosive
		Oxidazing Properties	Not Oxidazing
	9.2.	Other informations	
10		None STABILITY AND REACTIVITY	
10.	10.1	Chemical Reactivity	
	-	Risk of hydrocyanic acid formation in conta	act with acids, carbon dioxide, air humidity.
	10.2	Chemical stability	
		The product is stable under normal conditi	ons of storage and use.
	10.3	Possibility of hazardous reactions	hydrocycanic acid formation
	10.4	Conditions to avoid	ryurocyanic actu formation.
	10.4	Under the action of acids (including carbon	n dioxide) is released hydrocyanic acid,
		which is flammable and together with the	air can form explosive gas mixtures. Keep
		away from acidic salts.	
	10.5	Incompatible materials	
		Acids, acid salts. With time, even the air ca	n lead to the formation of hydrogen
	10.6	Hazardous decomposition products	
		HCN hydrogen cyanide (hydrocyanic acid)	
11.		TOXICOLOGICAL INFORMATION	
	11.1	Information on toxicological effects of ac	tivated carbon
		Acute toxicity oral way:	DL50 rat: 29.2 mg / kg Method: literature
		Acute toxicity Inhalation way	Data not available
		Corrosion / irritation	Irritant
		Eye irritations/damages	Causes serious eye damage
		Sensitization	Sensitizing
		Repeated dose toxicity	Oral Rat: 75 ppm
			Testing period: 11.5 months
			Organ recipient / effect: no artifact due to
			tumors brain thyroid gland
			Method: Literature national studies
			oral rat
			Testing period: 90 days
			NUALL: ca. 0.3 mg / kg
			organs
			organs

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		Substance to be tested: sodium cyanide drinking water study sub-chronic toxicity	
		oral mouse NOAEL: ca. 16.2 mg / kg Organ recipient / effect: reproductive organs Substance to be tested: sodium cyanide drinking water study	
		sub-chronic toxicity	
	Cutenous Corrosion/Irritation	Irritant	
	Eyes injuries/Heavy Eyes irritation	Causes serious eye damages	
	respiratory or skin sensitization:	Sensitizing	
	Germ cen mutagementy	Negative	
	Carcinogenicity	No data available	
	Reproduction toxicity	Negative	
	Specific target organ toxicity (STOT) -	no data available	
	single exposure		
	Specific target organ toxicity (STOT) –	no data available	
	repeated exposure	Incrimition (on curch on 200 norm LICN)	
	Innalation nazaros	atmospheric air) or ingestion (ca 200-300 mg KCN) can result in the immediate loss of consciousness and death.	
11.2	Information about exposure routes		
	It can be absorbed by the skin, especia	lly if sweated of injured	
11.3	3 Symptoms related to the physical, chemical and toxicological		
	Shortness of breath, unconsciousness		
11.4	Immediate, delayed and chronic effects from exposure to short and long term The inhalation and ingestion may result in death. In case of long-term exposure limit (15 ppm) have been described individual cases of disorders of thyroid function		
11.5	Interactive effects Unknown interactive effects		
11.6	Absence of specific data -		
11.7	Other Information None		
	Ecological informations	LCEO On an alternative reactions 0.042 and / L/OCh	
	Fisnes loxicity	LC50 Oncornynchus mykiss: 0.042 mg / 1 / 96n Method: Literature	
		Salvelinus fontinalis: 0.011 mg / 1.144 days	
		Method: Literature	
		Reproduction	
		Salvelinus fontinalis NOEC: 0.006 mg / I /	
		144giorni	
		Method: Literature	

12.

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	Daphnia Toxicity	EC50 Daphnia magna: 0,041 mg / l / 48h Substance to be tested: 2-hydroxy-2- metilpropionitrile Method: US-EPA
	Seeweed Toxicity	EC 10 Moinodaphnia spec .: 0.022 mg / l / 5 days Method: literature IC 10 Scenedesmus acuminatus: 0.03 mg / l / 8 days Method: Chronic literature
	Living organism toxicity	Lumbriculus variegatus EC50: 11 mg / I / 96 h
	Terrestrial plants toxicity	Terrestrial plants EC50: 22.4 mg / l Testing period: 32 days Method: Literature
	Toxicity other non-mammals	Birds: moderate Substance to be tested: sodium cyanide
	Toxicity for bacterias	Lymnaea luteola EC50: 2.5 mg / 1/ 96 days Method: Literature Plecoptera EC50: 0.43 mg / 1/ 96giorni Method: Literature EC 10 Pseudomonas putida: 0.001 mg / 1 / 16h Method: literature Activated sludge EC50: 0.6 mg / 1 / h 0.5 Method: 87/302 / EEC EC 10 Uronema parduczi: 0.27 mg / 1 / 20h Method: Literature
	Persistence and degradability	Abiotic degradation: Hydrolysis Result: Potentially biodegradable
	Bioaccumulative potential Mobility in soil	Bio-concentration factor (BFC) 0,30 Log KOC: (Air) : High Referred to substance: hydrogen cyanide LogKOC (ground): possible absorbing
	Results of PBT and vPvB evaluation Other adverse effects DISPOSAL CONSIDERATIONS	Not applicable None
13.1.	13. Methods of Waste Treatment: This product and its packaging must be disposed of in licensed facilities. It must be attributed an EWC code of hazardous waste based on the provisions of the Directive 2008/98 / EC and subsequent amendments and additions.The packaging and labeling of waste 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.The cyanide waste can only be treated and decontaminated by licensed companies with: Hydrogen peroxide and pH 11).TRANSPORT INFORMATION UN NUMBERUN NUMBER1588NameInorganic cyanides, solid, n.o.s.Hazard class referred to transport6.1Packaging groupIIHazardous for EnvironmentalDangerous for enviroinmental	

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		Special precautions for user	Use approved packaging			
15.		REGULATORY INFORMATION				
	15.1	Legislazion	e	Applicabilità		
		Reg. (CE) 1907/2006/CE Reach		YES		
		Reg. (EC) 1272/2008 and subsequent	CLP. amendments and	YES		
		additions				
		Reg. (EC) 2037/2000 "substances that	deplete the ozone layer"	NO		
		Reg. (EC) 850/2004 "Persistent organi	c pollutants"	NO		
		Reg. (EC) 689/2008 "export and impo	rt hazardous chemicals"	NO		
		Substance listed in Annex I of Dir. 96/	82 / EC - "Seveso II"	NO		
		Directive, which was transposed into	national legislation by the			
		Legislative Decree 334/99				
		Italian Legislative Decree 81/2008 (Co	nsolidated Act on	YES		
		protection of health and safety in the	workplace), as amended			
		Directive 2014/103/UE "Adr"		NO		
	15.2	Chemical Safety Assessment				
		A chemical safety assessment has not	been carried out.			
16.	OTHER INFORMATION					
	16.1	16.1 Data compared to the previous version:				
		Modified section 1				
	16.2	Abbreviations and acronyms				
		ADR: European Agreement on the transport of dangerous goods by road				
		RID: International Regulations on the Transport of Dangerous Goods by Rail.				
		IMDG: International Marine Code for Dangerous Goods				
		IATA: the international air transport association				
		IATA-DGR: Dangerous Goods Regulations' Association aviation				
		ICAO: International Civil Aviation.				
		ICAO-TI: Technical Instructions by the international Civil Aviation Organization				
		GHS: Globally Harmonized System of Classification and Labelling of Chemicals.				
		CAS: Chemical Abstracts Service				
		LC50: Lethal concentration, 50 percent	t			
		LD50: Lethal dose, 50 percent				
	16.3	Key literature references and sources	of the data on this MSDS:			
		http://echa.europa.eu/web/guest/information-on-chemicals/registered-substances				
		platform ESIS http://esis.jrc.ec.europa.eu				
		Safety data sheets of the suppliers of substances used in the formulation				
	16.4	Classification and procedure used to derive it in accordance with Reg. (EC)				
		1272/2008 in relation to the mixtures	•			
		Classification according to Regulation	Classification Procedu	ure		
		(CE) 1272/2008				
	16.5.	Formazioni adeguate per i lavoratori a	al fine di garantire la protezione	e della salute		
		umana e dell'ambiente				
	 Training in accordance with the provisions of the Legislative Dependence 					
		(Consolidated Act on protection of	of health and safety in the work	olace), as		
		amended.				
		PPE use				
	16.6.	Other informations				

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None