

Revision Date 19-Apr-2012

Revision Number 4

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product Identifier

Product Description: Gold(I) cyanide
Cat No. 390130000; 390130010; 390130050

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

Recommended Use Laboratory chemicals
Uses advised against No Information available

Details of the supplier of the safety data sheet

Company

Acros Organics BVBA
 Janssen Pharmaceuticaaan 3a
 2440 Geel, Belgium

E-mail address begel.sdsdesk@thermofisher.com

Emergency Telephone Number

For information in the US, call: 001-800-ACROS-01
 For information in Europe, call: +32 14 57 52 11

Emergency Number, Europe: +32 14 57 52 99
 Emergency Number, US: 001-201-796-7100

CHEMTREC Phone Number, US: 001-800-424-9300
 CHEMTREC Phone Number, Europe: 001-703-527-3887

SECTION 2. HAZARDS IDENTIFICATION

Classification of the substance or mixture
REGULATION (EC) No 1272/2008

Acute oral toxicity	Category 2
Acute dermal toxicity	Category 1
Acute Inhalation Toxicity - Dusts and Mists	Category 2
Acute aquatic toxicity	Category 1
Chronic aquatic toxicity	Category 1

Classification according to EU Directives 67/548/EEC or 1999/45/EC

For the full text of the R-phrases and H-Statements mentioned in this Section, see Section 16

Symbol(s) T+ - Very toxic
 N - Dangerous for the environment

R-phrases R32 - Contact with acids liberates very toxic gas

Risk Combination Phrases R26/27/28 - Very toxic by inhalation, in contact with skin and if swallowed
 R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

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SECTION 2. HAZARDS IDENTIFICATION

Label Elements



Signal Word

Danger

Hazard Statements

H300 - Fatal if swallowed
 H310 - Fatal in contact with skin
 H330 - Fatal if inhaled
 H410 - Very toxic to aquatic life with long lasting effects
 EUH032 - Contact with acids liberates very toxic gas

Precautionary Statements - EU (§28, 1272/2008)

P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician
 P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection
 P361 - Remove/ Take off immediately all contaminated clothing
 P302 + P350 - IF ON SKIN: Gently wash with plenty of soap and water
 P304 + P340 - IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing
 P273 - Avoid release to the environment

Other Hazards

No information available.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	EC-No.	Weight %	CAS-No	67/548/EEC Classification	CLP Classification - Regulation (EC) No 1272/2008	REACH No.
Gold cyanide (Au(CN)) 506-65-0	EEC No. 208-049-1	100	506-65-0	T+; R26/27/28 R32 N; R50-53	Acute Tox. 2 (H300) Acute Tox. 1 (H310) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	-

For the full text of the R-phrases and H-Statements mentioned in this Section, see Section 16



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SECTION 4. FIRST AID MEASURES

Description of first aid measures

Eye Contact	Immediate medical attention is required. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Skin Contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Immediate medical attention is required.
Ingestion	Call a physician immediately. Clean mouth with water.
Inhalation	Remove from exposure, lie down. Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Immediate medical attention is required.
Notes to Physician	Treat symptomatically

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable Extinguishing Media

Substance is nonflammable; use agent most appropriate to extinguish surrounding fire..

Extinguishing media which must not be used for safety reasons

No information available.

Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapors

Advice for fire-fighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

Environmental precautions

Prevent further leakage or spillage if safe to do so

Methods and material for containment and cleaning up

Avoid dust formation. Wear self-contained breathing apparatus and protective suit. Sweep up or vacuum up spillage and collect in suitable container for disposal. Do not let this chemical enter the environment.

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SECTION 7. HANDLING AND STORAGE
Precautions for Safe Handling

Do not breathe dust. Do not breathe vapors or spray mist. Do not get in eyes, on skin, or on clothing. Do not ingest. Use only in area provided with appropriate exhaust ventilation.

Conditions for safe storage, including any incompatibilities

Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Keep under nitrogen.

Specific End Uses
SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
Control parameters
Exposure limits
Component

Gold cyanide (Au(CN))

European Union	The United Kingdom	France	Belgium	Spain
	STEL: 15 mg/m ³ 15 min TWA: 5 mg/m ³ 8 hr Skin	VME: 5 mg/m ³ 8 heures. CN Skin		

Component

Gold cyanide (Au(CN))

Italy	Germany	Portugal	The Netherlands	Finland
	MAK: 2 mg/m ³ 8 Stunden. inhalable fraction Skin Peak: 2 mg/m ³			

Component

Gold cyanide (Au(CN))

Austria	Denmark	Switzerland	Poland	Norway
				TWA: 5 mg/m ³ 8 timer Skin

Component

Gold cyanide (Au(CN))

Bulgaria	Croatia	Ireland	Cyprus	Czech Republic
		Skin		

Biological limit values

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

Derived No Effect Level (DNEL)

No information available.

Predicted No Effect Concentration (PNEC)

No information available.

Exposure controls
Engineering Measures

Ensure adequate ventilation, especially in confined areas

Personal protective equipment
Eye Protection

Goggles

Hand Protection

Protective gloves

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**Skin and body protection
Respiratory Protection**

Wear appropriate protective gloves and clothing to prevent skin exposure
Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced

**Hygiene Measures
Environmental exposure controls**

Handle in accordance with good industrial hygiene and safety practice
No information available.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Powder, Solid
Appearance	Yellow
odor	odorless
pH	No information available.
Boiling Point/Range	No information available.
Melting Point/Range	No information available.
Flash Point	No information available.
Autoignition Temperature	No information available.
Water Solubility	negligible
Molecular Formula	Au C N
Molecular Weight	222.98

SECTION 10. STABILITY AND REACTIVITY
Reactivity
Chemical Stability

Moisture sensitive.

Possibility of Hazardous Reactions

Hazardous Polymerization Hazardous polymerization does not occur.
Hazardous Reactions . No information available.

Conditions to Avoid

Incompatible products, Exposure to moist air or water.

Incompatible Materials

Acids, Strong oxidizing agents.

Hazardous Decomposition Products

Nitrogen oxides (NO_x). Carbon monoxide (CO). Carbon dioxide (CO₂). Hydrogen cyanide (hydrocyanic acid).

SECTION 11. TOXICOLOGICAL INFORMATION



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SECTION 11. TOXICOLOGICAL INFORMATION

Information on Toxicological Effects

Acute Toxicity

Product Information No acute toxicity information is available for this product

Component Information

Chronic Toxicity

Carcinogenicity There are no known carcinogenic chemicals in this product

Sensitization	No information available.
Mutagenic Effects	No information available
Reproductive Effects	No information available.
Developmental Effects	No information available.
Target Organs	No information available.
Other Adverse Effects	The toxicological properties have not been fully investigated.
Endocrine Disruptor Information	None known

SECTION 12. ECOLOGICAL INFORMATION

Toxicity

Ecotoxicity effects Do not empty into drains

Persistence and degradability

No information available

Bioaccumulative potential

No information available.

Mobility in soil

No information available.

Results of PBT and vPvB assessment

Other adverse effects

No information available



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SECTION 13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from Residues / Unused Products Dispose of in accordance with local regulations

Contaminated Packaging Empty containers should be taken to local recyclers for disposal

SECTION 14. TRANSPORT INFORMATION

IMDG/IMO

UN-No 1588
Hazard Class 6.1
Packing Group II
Proper Shipping Name CYANIDES, INORGANIC, SOLID, N.O.S.

ADR

UN-No 1588
Hazard Class 6.1
Packing Group II
Proper Shipping Name CYANIDES, INORGANIC, SOLID, N.O.S.

IATA

UN-No 1588
Hazard Class 6.1
Packing Group II
Proper Shipping Name CYANIDES, INORGANIC, SOLID, N.O.S.*

SECTION 15. REGULATORY INFORMATION

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

International Inventories

Component	EINECS	ELINCS	NLP	TSCA	DSL	NDSL	PICCS	ENCS	CHINA	AICS	KECL
Gold cyanide (Au(CN))	208-049-1	-		X	X	-	X	X	-	-	X

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory



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EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

PICCS - Philippines Inventory of Chemicals and Chemical Substances

ENCS - Japan Existing and New Chemical Substances

CHINA - China Inventory of Existing Chemical Substances

AICS - Inventory of Chemical Substances

KECL - Existing and Evaluated Chemical Substances

Chemical Safety Assessment

SECTION 16. OTHER INFORMATION

Full text of R-phrases referred to under sections 2 and 3

R32 - Contact with acids liberates very toxic gas

R26/27/28 - Very toxic by inhalation, in contact with skin and if swallowed

R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

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Revision Summary

Reason for revision Not applicable

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Disclaimer

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Safety Data Sheet