









Printed: 03/25/2010 Revision: 03/25/2010 Supercedes Revision: 01/11/2006 Date Created: 07/16/2003

1. Product and Company Identification

Product Code: 3023

Product Name: SIFCO Process Gold (Alkaline)

Manufacturer Information

Company Name: SIFCO Applied Surface Concepts

Division of SIFCO Industries, Inc.

5708 E. Schaaf Road

Independence, OH 44131

Phone Number: (216)524-0099 **Fax Number:** (216)524-6331

Emergency Contact: CHEMTREC (United States) (800)424-9300
Information: CHEMTREC (International-Collect) +1 (703)527-3887

Web site address: http://www.SIFCOASC.com

Email address: info@sifcoasc.com

2. Hazards Identification

Emergency Overview

Colorless to light yellow liquid with bitter almond odor.

Toxic by inhalation, in contact with skin and if swallowed. May cause sensitisation by inhalation and skin contact.

Toxic to aquatic

organisms, may cause long-term adverse effects in the aquatic environment.

Environmental hazard. Marine Pollutant Emergency Response Guidebook #151

Route(s) of Entry: Inhalation? Yes Skin? Yes Eyes? Yes Ingestion? Yes

Health Hazards (Acute and Chronic)

EYE: May cause eye irritation, burns possible.

SKIN CONTACT: Causes skin irritation, may cause burns and possible allergic reaction. May be fatal if absorbed through the skin.

SKIN ABSORPTION, INHALATION, or INGESTION: Mean Lethal Dose (MLD) is 50-60 mg cyanide.

Amounts above MLD cause immediate unconsciousness, convulsions, death within 1-15 minutes. Amounts near MLD cause dizziness, rapid respiration, vomiting, flushing, headache, drowsiness, drop in blood pressure, rapid pulse, unconsciousness, convulsions, (death within 4 hours possible).

CHRONIC EFFECTS: Prolonged or repeated exposure may cause damage to skin, eyes, respiratory system and teeth. May cause severe and delayed health effects such as inflammation of the lungs and chemical bronchitis.

Signs and Symptoms Of Exposure

Dependant on route(s) of entry. See section above for details.

Medical Conditions Generally Aggravated By Exposure

Preexisting skin and eye conditions; respiratory system disorders.

3. Composition/Information on Ingredients Hazardous Components (Chemical Name) CAS # Concentration Formula RTECS # 1. Dicyanaurate 1. Dicyanaurate



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Hazardous Components (Chemical Name) CAS# Concentration **Formula** RTECS # 3. Water 7732-18-5 90.0 -98.0 % H2O ZC0110000

4. First Aid Measures

Emergency and First Aid Procedures

First aid providers must take proper precautions for their own safety before entering contaminated areas to assist chemical accident victims and handling their contaminated clothing and equipment. Another person should immediately call the Emergency Medical Service, 911-Operator, Hospital, Physician, Ophthalmologist or Poison Control Center, as applicable. Give the following information: Location of the accident, your phone number, description of the accident, name of chemical agent and product, number and condition of casualties, what is being done for the victims. Stay on the phone until the other party hangs up! Remove victim from contaminated area to a clean, quiet, ventilated area. Calm and reassure him, keep him warm.

EYES: Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes.

SKIN: Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Thoroughly decontaminate (or discard) clothing and shoes.

INHALATION: Immediately remove to fresh air. Give amyl nitrite inhalation 1 ampule (0.2 ml) every 5 minutes. Stop if systolic blood pressure goes below 80 mm Hg. Give artificial respiration with 100% oxygen. INGESTION: Immediately induce vomiting by sticking finger down throat. Do not give emetics. Give amyl nitrite inhalation 1 ampule (0.2 ml) every 5 minutes. Stop if systolic blood pressure goes below 80 mm Hg. Give artificial respiration with 100% oxygen. Do not give mouth-to-mouth resuscitation to avoid danger of poisoning. ANTIDOTE: Always have on hand a cyanide first aid kit. Break an amyl nitrite pearl in a cloth. Hold lightly under nose for 15 seconds. Repeat inhalation 5 times at 15 second intervals.

Note to Physician

If patient has not responded to amyl nitrite, inject intravenously 10 ml of a 3% solution of sodium nitrite at a rate not greater than 2.5-5 ml per minute. Follow directly with 50 ml of a 25% solution of sodium thiosulfate at the same rate by the same route. Keep patient under observation. If signs of poisoning persist or reappear, repeat nitrite and thiosulfate injections 1 hour later in one-half the original doses.

5. Fire Fighting Measures

Material Will Not Burn Flammability Classification:

NA Flash Pt:

LEL: None UEL: None **Explosive Limits:**

NA **Autoignition Pt:**

Special Fire Fighting Procedures

Use NIOSH/MSHA approved positive-pressure self-contained breathing apparatus. Structural fire fighters' protective clothing WILL NOT provide adequate protection.

Unusual Fire and Explosion Hazards

Containers can build up pressure and burst if exposed to heat (fire). Water runoff can cause environmental damage. Dike area for later disposal.

Suitable Extinguishing Media

Dry chemical, or regular foam.

Unsuitable Extinguishing Media

6. Accidental Release Measures

Steps To Be Taken In Case Material Is Released Or Spilled

Do not touch or walk through spilled material. Isolate hazard area and keep people away. Notify your facility emergency coordinator. Eliminate all sources of ignition. Provide maximum ventilation. Do not release into soil, sewers, or natural bodies of water. Wear proper personal protective equipment (PPE). Carefully mop up or vacuum spill and triple rinse with water into suitable plastic container. Release of a reportable quantity (RQ) requires notification of proper authorities. Dispose of according to local, state, and federal regulations.



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Additional Accidental Spill Information

NEUTRALIZING AGENT: Bleach. Sodium or calcium hypochlorite at pH 8.5-10.

7. Handling and Storage

Hazard Label Information:

Avoid breathing harmful vapors Avoid misting

Precautions To Be Taken in Handling

Use "buddy system" when working with chemicals. Do not get in eyes, on skin, on clothing. Do not breathe vapor, mist or gas. Use with adequate ventilation. Wash thoroughly after handling. Triple rinse container clean before discarding. Put nothing else in this container.

Precautions To Be Taken in Storing

Keep container tightly closed in upright position. Store at 60-90F away from incompatible materials and physical hazards. Do not remove or deface container labels.

8. Exposure Controls/Personal Protection					
Н	azardous Components (Chemical Name)	CAS#	OSHA PEL	ACGIH TLV	Other Limits
1.	Dicyanaurate	14950-87-9	5 mg/m3		
2.	Ethylenediamine	107-15-3	10 PPM	10 ppm	25 mg/m3
3.	Water	7732-18-5			

Protective Equipment Summary - Hazard Label Information:

Safety shower in work area Neoprene gloves Safety glasses

Respiratory Equipment (Specify Type)

If engineering controls are not feasible, the respiratory protection program must comply with OSHA 29 CFR 1910.134

Eye Protection

Face shield and safety glasses w/side shields or splash-proof chemical goggles. Do not wear contact lenses. Eye wash station, safety shower, washing facilities near work area.

Protective Gloves

Nitrile, neoprene, vinyl, latex gloves.

Other Protective Clothing

Impervious boots, apron, protective clothing as required by job conditions.

Ventilation

Local exhaust ventilation is required to meet the permissible exposure limits (PEL) during the use of this product.

Work/Hygienic/Maintenance Practices

DO NOT SMOKE IN WORK AREA! Wash at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. Wash promptly with soap & water if skin becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke.

9. Physical and Chemical Properties

Physical States: [] Gas [X] Liquid [] Solid

Melting Point: <= 32.00 F (0.0 C) **Boiling Point:** >= 212.00 F (100.0 C)

Autoignition Pt: NA Flash Pt: NA

Explosive Limits: LEL: None UEL: None

Specific Gravity (Water = 1): 1.017 - 1.027

Evaporation Rate (vs Butyl < 1

Acetate=1):



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Solubility in Water: complete N.A. **Percent Volatile:** 9.5 - 10.5pH:

Appearance and Odor

Colorless to light yellow liquid with an odor of bitter almonds.

10. Stability and Reactivity

Stable [X] Stability: Unstable []

Conditions To Avoid - Instability

Stable under normal ambient conditions in tightly closed containers. Avoid overheating.

Incompatibility - Materials To Avoid

Acids, chlorates, nitrites, oxidizers, and magnesium

Hazardous Decomposition Or Byproducts

Hydrogen Cyanide, Carbon Oxides

Possibility of Hazardous Reactions: Will occur [] Will not occur [X]

Conditions To Avoid - Hazardous Reactions

11. Toxicological Information

Not Available

Carcinogenicity/Other Information

NTP **Hazardous Components (Chemical Name)** CAS# **IARC ACGIH OSHA**

Dicyanaurate 14950-87-9

Ethylenediamine 107-15-3 A4

Water 7732-18-5

Carcinogenicity: NTP? No IARC Monographs? No OSHA Regulated? No

12. Ecological Information

Dangerous for the environment: May cause long-term adverse effects in the aquatic environment.

13. Disposal Considerations

Waste Disposal Method

Ship to approved treatment/disposal facility, or precious metal reclaimer. Dispose of according to local, state, and federal regulations. Follow the applicable regulations for disposal of empty containers and rinse water. The disposal information applies to the material as manufactured. Contamination may affect the disposal requirements. The responsibility for proper waste disposal is with the generator of the waste.

F007 **RCRA Waste ID Code:**

Additional Disposal Information

D003

14. Transport Information

LAND TRANSPORT (US DOT)

DOT Proper Shipping Name UN3287, TOXIC LIQUID, INORGANIC, N.O.S.

(Dicyanoaurate), 6.1, PG III - ERG 151

6.1 **DOT Hazard Class: POISON DOT Hazard Label: UN/NA Number:** UN3287 **Packing Group:** Ш

LAND TRANSPORT (Canadian TDG)

UN Number: 3287



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Packing Group: Ш LAND TRANSPORT (European ADR/RID) 3287 **UN Number:** Ш **Packing Group:** MARINE TRANSPORT (IMDG/IMO)

3287 **UN Number: Packing Group:** Ш **Marine Pollutant:** Yes

15. Regulatory Information

US EPA SARA Title III

Hazardous Components (Chemical Name)		zardous Components (Chemical Name)	CAS#	Sec.302 (EHS)	Sec.304 RQ	Sec.313 (TRI)	Sec.110
	1.	Dicyanaurate	14950-87-9	No	No	No	No
	2.	Ethylenediamine	107-15-3	Yes 10000 LB	Yes 5000 LB	No	No
	3.	Water	7732-18-5	No	No	No	No

US EPA CAA, CWA, TSCA

Hazardous Components (Chemical Name) CAS		CAS#	EPA CAA	EPA CWA NPDES	EPA TSCA	CA PROP 6	
1.	Dicyanaurate	14950-87-9	HAP, ODC ()	No	No	No	
2.	Ethylenediamine	107-15-3	HAP, ODC ()	Yes	Inventory	No	
3.	Water	7732-18-5	HAP. ODC ()	No	Inventory	No	

SARA (Superfund Amendments and Reauthorization Act of 1986) Lists:

Sec.302: EPA SARA Title III Section 302 Extremely Hazardous Chemical with TPQ. * indicates 10000

LB TPQ if not volatile.

Sec.304: EPA SARA Title III Section 304: CERCLA Reportable + Sec.302 with Reportable Quantity. **

indicates statutory RQ.

Sec.313: EPA SARA Title III Section 313 Toxic Release Inventory. Note: -Cat indicates a member of a

chemical category.

Sec.110: EPA SARA 110 Superfund Site Priority Contaminant List

TSCA (Toxic Substances Control

Act) Lists:

Inventory: Chemical Listed in the TSCA Inventory.

5A(2): Chemical Subject to Significant New Rules (SNURS)

6A: Commercial Chemical Control Rules

84. Toxic Substances Subject To Information Rules on Production 8A CAIR: Comprehensive Assessment Information Rules - (CAIR) **8A PAIR:** Preliminary Assessment Information Rules - (PAIR) 8C: Records of Allegations of Significant Adverse Reactions

8D: Health and Safety Data Reporting Rules

8D TERM: Health and Safety Data Reporting Rule Terminations

12(b): Notice of Export

Other Important Lists:

CWA NPDES: EPA Clean Water Act NPDES Permit Chemical CAA HAP: EPA Clean Air Act Hazardous Air Pollutant

CAA ODC: EPA Clean Air Act Ozone Depleting Chemical (1=CFC, 2=HCFC)

CA PROP 65: California Proposition 65

International Regulatory Lists:

EPA Hazard Categories:

This material meets the EPA 'Hazard Categories' defined for SARA Title III Sections 311/312 as indicated:

[X] Yes [] No Acute (immediate) Health Hazard



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[X] Yes [] No	Chronic (delayed) Health Hazard
[] Yes [X] No	Fire Hazard
[] Yes [X] No	Sudden Release of Pressure Hazard
[X] Yes [] No	Reactive Hazard

Regulatory Information

U.S. FEDERAL REGULATIONS:

1. Supplier Notification about toxic Chemicals.

SIFCO Applied Surface Concepts is required to inform you, that this product contains a toxic chemical or chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372, if specified annual thresholds are met or exceeded.

Toxic Chemical CAS # Wt.% (Maximum)

Dicyanoaurate - 14950-87-9 - (5%) Edthylenediamine - 107--15-3 - (5%)

Your other suppliers of trade name products or mixtures containing section 313 chemicals must also notify you. If you repackage or otherwise redistribute this product to industrial customers you are required to furnish similar notification to them.

2. CERCLA and EPCRA:

Threshold Planning Quantity: NA (Release) Reportable Quantity: > 88 liters

Extremely Hazardous Substances: Ethylenediamine

3. EPCRA Hazard Categories:

Immediate (Acute) Health: Yes Delayed (Chronic) Health: Yes

Fire: No

Sudden release of Pressure: No

Reactivity: Yes

4. TSCA Statement.

All ingredients of this product are listed under the Toxic Substances Control Act (TSCA).

5. ODS Certification.

This product does not contain and is not manufactured with Ozone Depleting Substances (ODS).

6. VOC Certification.

This product does not contain any Volatile Organic Compounds (VOC).

7. PCB Certification.

This product does not contain any polychlorinated biphenyls (PCB).

STATE REGULATIONS:

California Prop. 65:

Not applicable

INTERNATIONAL REGULATIONS

WHMIS Classifications: D1-B, F



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16. Other Information

Company Policy or Disclaimer

DISCLAIMER:

This information is believed to be accurate and represents the best information currently available to us. However, we make no warrenty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes.