



<b>HEALTH</b>	*	<b>3</b>
<b>FLAMMABILITY</b>		<b>0</b>
<b>PHYSICAL HAZ.</b>		<b>0</b>
<b>PPE</b>		<b>X</b>



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## 1. Product and Company Identification

**Product Code:** 2043  
**Product Name:** SIFCO Process Cobalt (Heavy Built)  
**Manufacturer Information**  
**Company Name:** SIFCO Applied Surface Concepts  
 Division of SIFCO Industries, Inc.  
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 Independence, OH 44131  
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**Email address:** [info@sifcoasc.com](mailto:info@sifcoasc.com)

## 2. Hazards Identification

### Emergency Overview

Red liquid. Danger! Causes burns. Corrosive to skin, eyes, and respiratory system. May cause sensitisation by inhalation and skin contact. May cause cancer by inhalation. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Emergency Response Guidebook #154

### OSHA Regulatory Status:

This material is classified as hazardous under OSHA regulations.

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

### Health Hazards (Acute and Chronic)

**INHALATION:** Vapors irritate the respiratory system, and may cause coughing and difficulties in breathing. Prolonged inhalation of high concentrations may damage respiratory system.

**INGESTION:** May cause stomach pain or vomiting. May cause chemical burns in mouth and throat.

**SKIN CONTACT:** Causes burns. Acts as a defatting agent on skin. May cause cracking of skin, and eczema. May cause sensitisation by skin contact.

**EYE CONTACT:** Causes burns.

**HEALTH WARNINGS:** Known or suspected carcinogen for humans.

**CHRONIC EFFECTS:** Prolonged or repeated exposure may cause damage to skin, eyes and respiratory system..

### Signs and Symptoms Of Exposure

### Medical Conditions Generally Aggravated By Exposure

Pre-existing skin and eye conditions; respiratory system disorders.

## 3. Composition/Information on Ingredients

Hazardous Components (Chemical Name)	CAS #	Concentration	Formula	RTECS #
1. Sulfuric acid	7664-93-9	< 1.0 %	H2O4S	WS5600000
2. Cobalt Sulphate	10124-43-3	10.0 -20.0 %	Co.H2O4S	GG3100000
3. Water	7732-18-5	80.0 -89.0 %	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:** Remove to fresh air. Lay victim down, legs raised. Loosen tight clothing, cover with a blanket. If not breathing, give artificial respiration.

**INGESTION:** DO NOT induce vomiting, unless advised by EMS. Give victim large quantities of water to drink. Never give anything by mouth to an unconscious person.

## 5. Fire Fighting Measures

**Flammability Classification:** Material will not burn.

**Flash Pt:**

**Explosive Limits:** LEL: UEL:

### Special Fire Fighting Procedures

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

### Unusual Fire and Explosion Hazards

Contact with metals may form flammable hydrogen gas. 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

All

### 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.

### Additional Accidental Spill Information

NEUTRALIZING AGENT: Sodium Bicarbonate, Soda Ash/Slaked Lime.

## 7. Handling and Storage

### 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. Thoroughly wash hands. 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 60-90°F away from incompatible materials and physical hazards. Do not remove or deface container labels.

## 8. Exposure Controls/Personal Protection

Hazardous Components (Chemical Name)	CAS #	OSHA PEL	ACGIH TLV	Other Limits
1. Sulfuric acid	7664-93-9	1 mg/m3	1 mg/m3	
2. Cobalt Sulphate	10124-43-3	0.1 mg/m3	0.02 mg/m3	
3. Water	7732-18-5			

### Protective Equipment Summary - Hazard Label Information:

Neoprene gloves Eye wash station in work area

### Respiratory Equipment (Specify Type)

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

### Eye Protection

Use chemical safety goggles and/or full face shield where dusting or splashing of solutions is possible. Maintain eye wash fountain and quick-drench facilities in work area.

### Protective Gloves

Wear protective gloves and clean body-covering clothing.

Nitrile, neoprene, vinyl, latex gloves.

### Other Protective Clothing

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

### Ventilation

A system of local and/or general exhaust ventilation is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, Industrial Ventilation, A Manual of Recommended Practices, most recent edition, for details.

## 9. Physical and Chemical Properties

<b>Physical States:</b>	[ ] Gas [ X ] Liquid [ ] Solid
<b>Melting Point:</b>	<= 32.00 F (0.0 C)
<b>Boiling Point:</b>	>= 212.00 F (100.0 C)
<b>Explosive Limits:</b>	LEL: UEL:
<b>Specific Gravity (Water = 1):</b>	1.190 - 1.210 at 20.0 C (68.0 F)
<b>Evaporation Rate (vs Butyl Acetate=1):</b>	< 1
<b>Solubility in Water:</b>	complete
<b>Percent Volatile:</b>	N.A.
<b>pH:</b>	1 - 2
<b>Appearance and Odor</b>	
	Red liquid

## 10. Stability and Reactivity

**Stability:** Unstable [ ] Stable [ X ]

### Conditions To Avoid - Instability

Stable under normal ambient conditions. Avoid: Mixing with any other material.

**Incompatibility - Materials To Avoid**

Avoid excessive heat for prolonged periods of time.

**Hazardous Decomposition Or Byproducts**

Fire creates: Toxic/vapours/fumes of: Carbon monoxide (CO) Carbon dioxide (CO<sub>2</sub>).

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

**Conditions To Avoid - Hazardous Reactions**

**11. Toxicological Information**

Not Available

**Carcinogenicity/Other Information**

Carcinogen to humans

Hazardous Components (Chemical Name)	CAS #	NTP	IARC	ACGIH	OSHA
1. Sulfuric acid	7664-93-9	Known	1	A2	Unknown
2. Cobalt Sulphate	10124-43-3	Unknown	2B	A3	
3. Water	7732-18-5				

**Carcinogenicity:** NTP? Yes IARC Monographs? Yes OSHA Regulated? Yes

**12. Ecological Information**

Not Available

**13. Disposal Considerations**

**Waste Disposal Method**

Ship to approved treatment/disposal facility. Dispose of according to local, state, and federal regulations. Follow the applicable regulations for disposal of empty containers and rinsate. 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.

**RCRA Waste ID Code:** D002

**14. Transport Information**

**LAND TRANSPORT (US DOT)**

**DOT Proper Shipping Name** UN3264, Corrosive liquid, Acidic, Inorganic, n.o.s.  
(Sulfuric Acid ...%), 8, PG III - ERG 154

**DOT Hazard Class:** 8

**DOT Hazard Label:** CORROSIVE

**UN/NA Number:** UN3264

**Packing Group:** III

**LAND TRANSPORT (Canadian TDG)**

**UN Number:** 3264

**Packing Group:** III

**LAND TRANSPORT (European ADR/RID)**

**UN Number:** 3264

**Packing Group:** III

**ADR Classification:** 8

**Danger Code (Kemler):** 80

**MARINE TRANSPORT (IMDG/IMO)**

**UN Number:** 3264

**Packing Group:** III

**IMDG Classification:** 8

**IMDG EMS Number:** FA

**Marine Pollutant:** No

## 15. Regulatory Information

### US EPA SARA Title III

Hazardous Components (Chemical Name)	CAS #	Sec.302 (EHS)	Sec.304 RQ	Sec.313 (TRI)	Sec.110
1. Sulfuric acid	7664-93-9	Yes 1000 LB	Yes 1000 LB	Yes	No
2. Cobalt Sulphate	10124-43-3	No	No	Yes-Cat. N096	Yes
3. Water	7732-18-5	No	No	No	

### US EPA CAA, CWA, TSCA

Hazardous Components (Chemical Name)	CAS #	EPA CAA	EPA CWA NPDES	EPA TSCA	CA PROP 65
1. Sulfuric acid	7664-93-9	No		Inventory	
2. Cobalt Sulphate	10124-43-3	No		Inventory	Yes
3. Water	7732-18-5	No		Inventory	

### 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
- 8A:** 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:

- Yes  No Acute (immediate) Health Hazard
- Yes  No Chronic (delayed) Health Hazard
- Yes  No Fire Hazard
- Yes  No Sudden Release of Pressure Hazard
- 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)
Cobalt Sulfate	- 10124-43-3	- (20%)
Sulfuric Acid	- 7664-93-9	- (< 1%)

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: >1000 Pounds

(Release) Reportable Quantity: >1876 liters

Extremely Hazardous Substance Sulfuric Acid

3. EPCRA Hazard Categories:

Immediate (Acute) Health: Yes

Delayed (Chronic) Health: Yes

Fire: No

Sudden release of Pressure: No

Reactivity: No

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 Proposition 65:

WARNING! This product contains detectable amounts of chemicals known to the State of California to cause cancer, birth defects, or reproductive harm.

INTERNATIONAL REGULATIONS:

WHMIS Classification.

Class E, D-2B

## 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 warranty 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.