



GE Betz

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Material Safety Data Sheet

Issue Date: 31-MAY-2002

EMERGENCY TELEPHONE (Health/Accident): (800) 877-1940

1 PRODUCT IDENTIFICATION

PRODUCT NAME:

PROCOAT 9858

PRODUCT APPLICATION AREA:

PASSIVATION TREATMENT

2 COMPOSITION / INFORMATION ON INGREDIENTS

Information for specific product ingredients as required by the U.S. OSHA HAZARD COMMUNICATION STANDARD is listed. Refer to additional sections of this MSDS for our assessment of the potential hazards of this formulation.

HAZARDOUS INGREDIENTS:

CAS#	CHEMICAL NAME
13530-65-9	CHROMIC ACID (H ₂ CrO ₄), ZINC SALT (1:1) Corrosive; potential sensitizer (skin); human carcinogen (IARC=1; NTP=known); potential liver and kidney toxin
1333-82-0	CHROMIC (VI) ACID (CrO ₃); CHROMIUM OXIDE Oxidizer; corrosive; highly toxic (by ingestion and skin absorption); potential sensitizer (skin); human carcinogen (IARC=1; NTP=known); potential liver and kidney toxin
7779-90-0	PHOSPHORIC ACID, ZINC SALT (2:3) Irritant

Although evidence is inconclusive, EPA and OSHA consider all CrVI compounds potential human carcinogens. Increased risk of lung cancer has been observed in chrome producing, plating, alloy and pigment industries.

Results of animal tests indicate some CrVI compounds may be carcinogenic to man by inhalation. It is therefore prudent to treat all CrVI compounds as suspect carcinogens and to minimize worker exposure to dusts/mists.

3 HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

DANGER

Corrosive to skin. Skin sensitizer. Corrosive to the eyes. Dusts or mists can cause ulceration and perforation of the nasal septum, as well as irritation and damage to the respiratory tract. Symptoms may resemble asthma.

DOT hazard: Corrosive to skin
Emergency Response Guide #154
Odor: Slight Acid; Appearance: Yellow-Orange, Liquid

Fire fighters should wear positive pressure self-contained breathing apparatus(full face-piece type). Proper fire-extinguishing media: Flood with water. Use of CO2 or foam may not be effective.

POTENTIAL HEALTH EFFECTS

ACUTE SKIN EFFECTS:

Primary route of exposure; Toxic; Corrosive to skin. Skin sensitizer.

ACUTE EYE EFFECTS:

Corrosive to the eyes.

ACUTE RESPIRATORY EFFECTS:

Toxic;Dusts or mists can cause ulceration and perforation of the nasal septum, as well as irritation and damage to the respiratory tract. Symptoms may resemble asthma.

INGESTION EFFECTS:

Toxic;
May cause severe irritation or burning of mouth, throat, and gastrointestinal tract with severe chest and abdominal pain, nausea, vomiting, diarrhea, lethargy and collapse. Possible death when ingested in very large doses.

TARGET ORGANS:

Prolonged or repeated exposures may cause skin sensitization, tissue necrosis, and/or toxicity to the liver and kidney. May increase risk of cancer.

MEDICAL CONDITIONS AGGRAVATED:

Not known.

SYMPTOMS OF EXPOSURE:

May cause nasal, respiratory, and mucous membrane irritation, possibly leading to abdominal cramps, nausea, and vomiting.

4 FIRST AID MEASURES

SKIN CONTACT:

URGENT! Wash thoroughly with soap and water. Remove contaminated clothing. Get immediate medical attention. Thoroughly wash clothing before reuse.

EYE CONTACT:

URGENT! Immediately flush eyes with plenty of low-pressure water

for at least 20 minutes while removing contact lenses. Hold eyelids apart. Get immediate medical attention.

INHALATION:

Remove to fresh air. If breathing is difficult, give oxygen. If breathing has stopped, give artificial respiration. Get immediate medical attention.

INGESTION:

Do not feed anything by mouth to an unconscious or convulsive victim. Do not induce vomiting. Immediately contact physician. Dilute contents of stomach using 3-4 glasses milk or water.

NOTES TO PHYSICIANS:

Material is corrosive. It may not be advisable to induce vomiting. Possible mucosal damage may contraindicate the use of gastric lavage.

5 FIRE FIGHTING MEASURES

FIRE FIGHTING INSTRUCTIONS:

Fire fighters should wear positive pressure self-contained breathing apparatus (full face-piece type).

EXTINGUISHING MEDIA:

Flood with water. Use of CO2 or foam may not be effective.

HAZARDOUS DECOMPOSITION PRODUCTS:

Thermal decomposition (destructive fires) yields elemental oxides.

FLASH POINT:

> 200F > 93C P-M(CC)

MISCELLANEOUS:

Corrosive to skin
UN3264;Emergency Response Guide #154

6 ACCIDENTAL RELEASE MEASURES

PROTECTION AND SPILL CONTAINMENT:

Ventilate area. Use specified protective equipment. Contain and absorb on absorbent material. Place in waste disposal container. Flush area with water. Wet area may be slippery. Spread sand/grit.

DISPOSAL INSTRUCTIONS:

For disposal use a commercial disposal company or in-house use a chromate removal system in accordance with RCRA regulations. Incineration of chromates with chlorides or chlorine bearing organics may be hazardous. URGENT!
Water contaminated with this product may be sent to a sanitary sewer treatment facility, in accordance with any local agreement, a permitted waste treatment facility or discharged under a permit.

7 HANDLING & STORAGE

HANDLING:

Contains an oxidizer. Avoid all contact with reducing agents, oils, greases, organics and acids. Do not allow to dry. Corrosive to skin and/or eyes. Do not breathe mist or vapor.

STORAGE:

Keep containers closed when not in use. Store away from oxidizable and combustible materials.

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE LIMITS

CHEMICAL NAME

CHROMIC ACID (H₂CrO₄), ZINC SALT (1:1)
PEL (OSHA): 0.1 MG/M³-CEILING (AS Cr)
TLV (ACGIH): 0.05 MG/M³ (AS Cr)

CHROMIC (VI) ACID (CrO₃); CHROMIUM OXIDE
PEL (OSHA): 0.1 MG/M³-CEILING(AS Cr)
TLV (ACGIH): 0.05 MG/M³(AS Cr)

PHOSPHORIC ACID, ZINC SALT (2:3)
PEL (OSHA): NOT DETERMINED
TLV (ACGIH): NOT DETERMINED

ENGINEERING CONTROLS:

Adequate ventilation to maintain air contaminants below exposure limits.

PERSONAL PROTECTIVE EQUIPMENT:

Use protective equipment in accordance with 29CFR 1910 Subpart I

RESPIRATORY PROTECTION:

A RESPIRATORY PROTECTION PROGRAM THAT MEETS OSHA'S 29 CFR 1910.134 AND ANSI Z88.2 REQUIREMENTS MUST BE FOLLOWED WHENEVER WORKPLACE CONDITIONS WARRANT A RESPIRATOR'S USE. USE AIR PURIFYING RESPIRATORS WITHIN USE LIMITATIONS ASSOCIATED WITH THE EQUIPMENT OR ELSE USE SUPPLIED AIR-RESPIRATORS. If air-purifying respirator use is appropriate, use a respirator with HEPA cartridges.

SKIN PROTECTION:

gauntlet-type neoprene gloves, chemical resistant apron-- Wash off after each use. Replace as necessary.

EYE PROTECTION:

splash proof chemical goggles, face shield

9 PHYSICAL & CHEMICAL PROPERTIES

Specific Grav.(70F,21C)	1.235	Vapor Pressure (mmHG)	~ 18.0
Freeze Point (F)	10	Vapor Density (air=1)	< 1.00
Freeze Point (C)	-12		
Viscosity(cps 70F,21C)	9	% Solubility (water)	100.0

Odor	Slight Acid
Appearance	Yellow-Orange
Physical State	Liquid
Flash Point	P-M(CC) > 200F > 93C
pH As Is (approx.)	1.0
Evaporation Rate (Ether=1)	< 1.00

NA = not applicable ND = not determined

10 STABILITY & REACTIVITY

STABILITY:

Stable under normal storage conditions.

HAZARDOUS POLYMERIZATION:

Will not occur.

INCOMPATIBILITIES:

May react with bases or strong oxidizers.

DECOMPOSITION PRODUCTS:

Thermal decomposition (destructive fires) yields elemental oxides.

INTERNAL PUMPOUT/CLEANOUT CATEGORIES:

"C"

11 TOXICOLOGICAL INFORMATION

Oral LD50 RAT: ~300 mg/kg
NOTE - Estimated value
Dermal LD50 RABBIT: ~325 mg/kg
NOTE - Estimated value
Inhalation LC50 RAT: ~4.9 mg/L/hr
NOTE - Estimated value

12 ECOLOGICAL INFORMATION

AQUATIC TOXICOLOGY

No Data Available.

BIODEGRADATION

No Data Available.

13 DISPOSAL CONSIDERATIONS

If this undiluted product is discarded as a waste, the US RCRA hazardous waste identification number is :
D002=Corrosive(pH);D007=Chromium.

Please be advised; however, that state and local requirements for waste disposal may be more restrictive or otherwise different from federal regulations. Consult state and local regulations regarding the proper disposal of this material.

14 TRANSPORT INFORMATION

DOT HAZARD: Corrosive to skin
UN / NA NUMBER: UN3264
DOT EMERGENCY RESPONSE GUIDE #: 154

15 REGULATORY INFORMATION

TSCA:

All components of this product are listed in the TSCA inventory.

CERCLA AND/OR SARA REPORTABLE QUANTITY (RQ):

33 gallons due to CHROMIC (VI) ACID (CRO3); CHROMIUM OXIDE;

SARA SECTION 312 HAZARD CLASS:

Immediate(acute);Delayed(Chronic)

SARA SECTION 302 CHEMICALS:

No regulated constituent present at OSHA thresholds

SARA SECTION 313 CHEMICALS:

CAS#	CHEMICAL NAME	RANGE
13530-65-9	CHROMIC ACID (H2CRO4), ZINC SALT (1:1)	11.0-15.0%

1333-82-0	CHROMIC (VI) ACID (CRO3); CHROMIUM OXIDE	2.0-5.0%
7779-90-0	PHOSPHORIC ACID, ZINC SALT (2:3)	6.0-10.0%

CALIFORNIA REGULATORY INFORMATION

CALIFORNIA SAFE DRINKING WATER AND TOXIC

ENFORCEMENT ACT (PROPOSITION 65) CHEMICALS PRESENT:

This product contains these chemicals known to the state of California to cause cancer or reproductive toxicity:

CAS#	CHEMICAL NAME
13530-65-9	CHROMIC ACID (H2CRO4), ZINC SALT (1:1)
1333-82-0	CHROMIC (VI) ACID (CRO3); CHROMIUM OXIDE

MICHIGAN REGULATORY INFORMATION

CAS#	CHEMICAL NAME
1333-82-0	CHROMIC (VI) ACID (CRO3); CHROMIUM OXIDE

16 OTHER INFORMATION

NFPA/HMIS		CODE TRANSLATION
Health	3	Serious Hazard
Fire	0	Minimal Hazard
Reactivity	0	Minimal Hazard
Special	CORR	DOT corrosive
(1) Protective Equipment	D	Goggles,Face Shield,Gloves,Apron

(1) refer to section 8 of MSDS for additional protective equipment recommendations.

CHANGE LOG

	EFFECTIVE DATE	REVISIONS TO SECTION:	SUPERCEDES
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MSDS status:	08-OCT-1998		** NEW **
	11-JAN-1999	10	08-OCT-1998
	03-JUN-1999	3	11-JAN-1999
	15-DEC-1999	2	03-JUN-1999
	31-MAY-2002	4	15-DEC-1999