



Historic Plaster Conservation Services
Applied Science

CO F-50 Primer
Solvent-Based Plaster Consolidation Primer



TM

Section 1: Product and Company Identification

Historic Plaster Conservation Services

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Product Name: CO F-50 Primer

Product Description: Solvent-Based Plaster consolidation primer

Generic Name: Aqueous acrylic emulsion

Date of Revision: 30 November 2012

24-Hour Emergency Phone Number: (613) 996-6666 (CANUTEC)

Use only for spills and releases.

Section 2: Hazard Identification

Emergency Overview: Milky white, opaque liquid with ammonia odor. Flammable liquid and vapor. May be irritating to eyes, skin and respiratory system. Use with adequate ventilation.

HMIS HEALTH	2
HMIS FLAMMABILITY	2
HMIS REACTIVITY	0
PERSONAL PROTECTION	C

OSHA Regulatory Status: This material is considered hazardous under the OSHA standard.

WHMIS Classification: B2, D2A

Potential Health Effects:

Inhalation: Inhalation of vapors irritates the respiratory tract. Exposure to high concentrations has a narcotic effect, producing symptoms of dizziness, drowsiness, headache, staggering, unconsciousness.

Ingestion: Can cause drowsiness, unconsciousness, and death. Gastrointestinal pain, cramps, nausea, vomiting, and diarrhea may also result.

Skin Contact: May cause irritation with redness and pain. May be absorbed through the skin with possible systemic effects.

Eye Contact: Vapors cause eye irritation. Splashes cause irritation and eye damage, including chemical conjunctivitis.

Chronic Exposure: May cause reproductive and fetal effects.

Aggravation of Pre-existing Conditions: Persons with pre-existing skin disorders or eye problems or impaired liver or kidney function may be more susceptible to the effects of the substance.

Target Organs: Central nervous system, liver, kidneys, eyes

Section 3: Composition / Information On Ingredients

Component	Common Names, Synonyms	CAS #	EINECS	Weight %
Ethyl alcohol	Ethanol, grain alcohol	64-17-5	200-578-6	30 - 60
Non-hazardous acrylic polymer		Not required	Not listed	10 - 30
Aqua ammonia	Ammonium hydroxide	1336-21-6	215-647-6	< 0.2

Non-hazardous components may or may not be listed. Carcinogens are listed when present at 0.1% or more; components which are otherwise hazardous according to WHMIS and OSHA are listed when present at 1.0% or more. This is not intended to be complete compositional disclosure. See Section 15 for applicable states right to know and other regulatory information.

Section 4: First Aid Measures

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention.

Ingestion: Dilute material by giving several glasses of water or milk. Never give anything by mouth to an unconscious person. Get medical attention.

Skin: Immediately flush skin with plenty of water for at least 15 minutes. Get medical attention if irritation develops.

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

Note to Physicians: N/A

Section 5: Fire Fighting Measures

Fire: Flash point: 27-28°C (81-82°F).

Explosion: Not considered an explosion hazard.

Extinguishing Media: Water spray, dry chemical, alcohol foam or carbon dioxide. Water spray may be used to keep fire exposed containers cool.

Special Precautions: In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

NFPA Rating: Health - 2 Flammability - 2 Reactivity - 0 Other - NA

Section 6: Accidental Release Measures

Ventilate area of leak or spill. Remove all sources of ignition. Wear appropriate personal protective equipment as specified in Section 8. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Contain and recover liquid when possible. Use non-sparking tools and equipment. Collect liquid in an appropriate container or absorb with an inert material (vermiculite, dry sand, earth,) and place in a chemical waste container. Do not use combustible materials such as saw dust. If a leak or spill has not ignited, use water spray to disperse the vapors, to protect personnel attempting to stop leak and to flush spills away from exposures. Ensure that disposal is performed in compliance with federal and local laws.

Section 7: Handling and Storage

Mix before using. Keep in a tightly closed container, stored in a cool, dry, ventilated area. Keep from freezing. Protect against physical damage. Isolate from any source of heat or ignition. Separate from incompatibles, combustibles, organic or other readily oxidizable materials. Empty containers of this material may possess the same hazards as full containers since they retain product residues (liquid, vapors); observe all warnings and precautions listed for the product.

Section 8: Exposure Control / Personal Protection

Exposure Guidelines:

Component	CAS #	OSHA PEL	ACGIH TLV	NIOSH TLV
Ethyl alcohol	64-17-5	1000 ppm TWA	1000 ppm TWA	1000 ppm TWA 3300 IDLH
Acrylic polymer		None established	None established	None established
Aqua ammonia	1336-21-5	50 ppm (35 mg/m ³)	25 ppm TWA 35 ppm STEL	18 mg/m ³ REL 27 mg/m ³ STEL 300 ppm IDLH

Personal Protective Equipment:

Skin Contact: Wear protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact. Nitrile and NBR gloves are recommended.

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

Inhalation: General ventilation is recommended to keep exposures below the Airborne Exposure Limits. Use NIOSH-approved vapor respirator if exposure is unknown or exceeds permissible limits. A respiratory protection program that meets OSHA's 29 CFR 1910.134 or ANSI Z88.2 requirements must be followed whenever workplace conditions warrant respirator use. **WARNING:** Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

Engineering Controls: A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it 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.

Section 9: Physical and Chemical Properties

Appearance	Milky white, opaque liquid	Specific Gravity (g/mL)	0.88 – 0.95
Odor	Weak ammonia	pH	Not determined
Odor Threshold	Not determined	Solubility in water	Approx 75-85%
Freezing Point	About 0°C (32°F)	% Volatiles	11-23%
Boiling Point	Not determined	Evaporation Rate	Not determined
Flash Point	27-28°C (81-82°F)	Vapor Pressure	Not determined
VOC as component	0 g/L	VOC as applied	0 g/L

Section 10: Stability and Reactivity

Chemical Stability: This product is stable in closed containers at room temperature.

Hazardous Decomposition Products: Carbon oxides (CO, CO₂), nitrogen oxides (NO, NO₂, N₂O), hydrogen cyanide, isocyanates, acrylic monomers, organic acids and aldehydes.

Hazardous Polymerization: Will not occur.

Incompatibilities: Strong acids, oxidizers, heat

Conditions to Avoid: Incompatible materials, combustible materials.

Section 11: Toxicological Information

Acute Dose Effects: Eyes: Ethyl alcohol: Rabbit: Draize: 500 mg/24H, Mild

Skin: Ethyl alcohol: Draize test, Rabbit: 20 mg/24H, Moderate

Oral: Ethyl alcohol: Rat: LD₅₀: 7060 mg/kg; Mouse: LD₅₀: 3450 mg/kg; Rabbit LD₅₀: 6300 mg/kg

Inhalation: Ethyl alcohol: Mouse: LC₅₀: 39 g/m³/4H; Rat: LC₅₀: 20000 ppm/10H

Section 12: Ecological Information

Environmental Fate: This product is not expected to bioaccumulate. This product is not readily biodegradable.

Ecotoxicity: This material is expected to have a low environmental toxicity.

Ethyl alcohol: Fish: Rainbow trout (*Oncorhynchus mykiss*): LC₅₀ = 12900-15300 mg/L; 96 Hr; Flow-through @ 24-24.3°C; Fish: Rainbow trout (*Oncorhynchus mykiss*): LC₅₀ = 11200 mg/L; 24 Hr; Bacteria (*Phytobacterium phosphoreum*): EC₅₀ = 34900 mg/L; 5-30 min; Microtox test

Section 13: Disposal Considerations

As a waste, this material IS NOT considered a HAZARDOUS WASTE.

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

Section 14: Transport Information

Canadian TDG **Proper Shipping Name:** Flammable liquid, n.o.s. (Contains Ethanol)
DOT Hazard Class: 3
UN Number: UN 1993
Packing Group: III

International Air **Proper Shipping Name:** Flammable liquid, n.o.s. (Contains Ethanol)
DOT Hazard Class: 3
UN Number: UN 1993
Packing Group: III

U.S. Domestic Ground **Proper Shipping Name:** Flammable liquid, n.o.s. (Contains Ethanol)
DOT Hazard Class: 3
UN Number: UN 1993
Packing Group: III

U.S. Domestic Air **Proper Shipping Name:** Flammable liquid, n.o.s. (Contains Ethanol)
DOT Hazard Class: 3
UN Number: UN 1993
Packing Group: III

Emergency Response Guide: 127

This data provided for information only. The description shown may not apply to all shipping situations. Consult TDG or 49 CFR, or appropriate regulations to properly classify your shipment for transportation.

Section 15: Regulatory Information

TSCA Chemical Inventory: All of the chemicals in this product are listed on the TSCA Inventory.

TSCA Sec 4 Chemical Test Rule: None of the chemicals in this product are under a Chemical Test Rule.

TSCA Sec 8(d): None of the chemicals in this product are on the Health and Safety Reporting List.

TSCA Sec 12(b) Notices of Export: None of the chemicals in this product are on this list.

TSCA Significant New Use Rule (SNUR): None of the chemicals in this product are on this list.

SARA Sec 302 (EHS) TPQ: None of the chemicals in this product have a TPQ.

SARA Sec 302 (EHS) RQ: None of the chemicals in this product have a RQ.

SARA Sec 311/312: Acute – YES; Chronic – YES; Fire – YES; Release of Pressure – NO; Reactivity – NO

SARA 313 List: None of the chemicals in this product are on this list.

CERCLA Hazardous Substances and corresponding RQs: Not applicable.

RCRA: None of the chemicals in this product are on this list.

Clean Air Act: Hazardous Air Pollutants? NO **Class 1 Ozone Depletors?** NO **Class 2 Ozone Depletors?** NO

Clean Water Act: Hazardous Substance? NO **Priority Pollutant?** NO **Toxic Pollutant?** NO

Chemical Weapons Convention: None of the chemicals in this product are on this list.

Drug Enforcement Agency (DEA) CDTA: None of the chemicals in this product are on this list.

OSHA: None of the chemicals in this product are considered Highly Hazardous by OSHA.

State Right-to-Know Lists: Ethyl alcohol can be found on the state Right-to-Know lists of California, Massachusetts, Minnesota, New Jersey and Pennsylvania. Ammonium hydroxide can be found on the state Right-to-Know lists of California, Massachusetts, New Jersey and Pennsylvania.

California Proposition 65: WARNING: This product contains Ethyl alcohol, a chemical known to the state of California to cause developmental reproductive toxicity.

Canadian: This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by the Controlled Products Regulations. The components in this product are listed, or exempt from listing, on the Canadian Domestic Substances List.

WHMIS Classification: B2, D2A

Canada Ingredient Disclosure List: Ethyl alcohol and ammonia are listed on the Ingredient Disclosure List.

Section 16: Other Information

Abbreviations and acronyms used:

ACGIH	American Conference of Governmental Industrial Hygienists	ND	not determined
ANSI	American National Standards Institute	NFPA	National Fire Prevention Association
atm	atmosphere (pressure unit)	NTP	National Toxicology Program
BOD	biological oxygen demand	OC	open cup
CAS	Chemical Abstracts Service	OSHA	Occupational Safety and Health Administration
CC	closed cup	Part	partition
CDTA	Chemical Drug and Trafficking Act	PEL	permissible exposure limits
COC	Cleveland Open Cup	ppb	parts per billion
COD	chemical oxygen demand	PPE	personal protective equipment
CFR	Code of Federal Regulations	ppm	parts per million
CPR	cardio-pulmonary resuscitation	psi	pounds per square inch
DEA	Drug Enforcement Agency	RCRA	Resource Conservation and Recovery Act
DOT	Department of Transportation	RQ	Reportable quantity
EINECS	European Inventory of Existing Commercial Chemical Substances	RTK	Right to Know
FDA	Food and Drug Administration	SARA	Superfund Amendments and Reauthorization Act
IARC	International Agency for Research on Cancer	STEL	short-term exposure limit
IDLH	immediate danger to life and health	TCC	Tagliabue Closed Cup
kg	kilogram	TDG	Transportation of Dangerous Goods
L	liter	TPQ	threshold planning quantity
LC50	median lethal concentration	TQ	threshold quantity
LD50	median lethal dose	TSCA	Toxic Substances Control Act
LEL	lower explosive limit	TWA	time-weighted average
mg	milligram	UEL	upper explosive limit
mL	milliliter	WHMIS	Workplace Hazardous Information System
NIOSH	National Institute for Occupational Safety and Health		

This document was prepared in accordance with WHMIS, 29 CFR 1910.1200 and ANSI Z400.1-2004.

Prepared by Douglas R. Chrisope on 30 November 2012.

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