

SAFETY DATA SHEET

Item Code: N0724

Section 1. Identification of the material and the supplier

Item Code: N0724
 Product: Con-Coil
 Product Use: Condenser Coil Cleaner

New Zealand Supplier: Realcold Ltd
 Address: 9 Prescott Street
 Penrose, Auckland

Telephone: 09 526 5700
 Fax Number: 09 526 5721

Emergency Telephone: 09 526 5700
0800 766 764 (National Poison Centre)

Manufacturer: The RectorSeal Corp, 2601 Spenwick Dr, Houston, USA

Date of MSDS Preparation: 14 March 2017 – ver 2

Section 2. Hazards Identification

This substance is hazardous according to the *HSNO (Minimum Degrees of Hazard) Regulations 2001*

Pictograms



Toxic Chronic Toxic Corrosive Ecotoxic

HSNO Class.	Hazard Code	Hazard Statement	EU Risk Phrases
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6.1B (oral)	H300	Fatal if swallowed.	R28
6.1B (dermal)	H310	Fatal in contact with skin.	R27
6.1B (inhalation)	H330	Fatal if inhaled.	R23
6.9A	H372	Causes damage to cardiovascular system through prolonged or repeated exposure	R48
8.1A	H290	May be corrosive to metals.	Not listed
8.2B	H314	Causes severe skin burns and eye damage.	R34
8.3A	H318	Causes serious eye damage.	R34
9.1D	H402	Harmful to aquatic life.	R52
9.3A	H431	Very toxic to terrestrial vertebrates.	R28

Prevention Code Prevention Statement

P102	Keep out of reach of children.
P103	Read label before use.
P104	Read safety data sheet before use
P234	Keep only in original container.
P260	Do not breathe fumes or vapours.
P262	Do not get in eyes, on skin, or on clothing.
P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P280	Wear protective gloves, protective clothing, eye protection and face protection*.
P284	Wear respiratory protection.*

Response Code Response Statement

P101	If medical advice is needed, have product container or label at hand.
P310	Immediately call a POISON CENTER or doctor/physician.
P314	Get medical advice/attention if you feel unwell.
P320	If specific treatment is urgent see first aid instruction on the label.
P363	Wash contaminated clothing before reuse.
P390	Absorb spillage to prevent material damage.
P391	Collect spillage.
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P301 + P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P302 + P350	IF ON SKIN: Gently wash with plenty of soap and water.
P303 + P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Storage Code Storage Statement

P405	Store locked up.
P406	Store in corrosive resistant container with a resistant inner liner.
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.

Disposal Code Disposal Statement

P501	Dispose off according to Local Regulations
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Section 3. Composition / Information on Ingredients

Ingredients	Wt%	CAS NUMBER.
Phosphoric Acid	12.29	7664-38-2
Hydrofluoric Acid	9.69	7664-39-3
Glycol Butyl Ether	1.40	111-76-2

Section 4. First Aid Measures

Routes of Exposure:

- If in Eyes** If even minute quantities of hydrofluoric acid enter the eyes, they should be immediately irrigated with running water for 5 minutes. The eyelids should be held apart during the irrigation to insure contact of water with all accessible tissue of the eyes and lids. Immediately following irrigation with water, a 1% calcium gluconate solution should be used to wash the eyes thoroughly for 5-10 minutes, and then instilled every 2-3 hours as drops. A physician, preferably an eye specialist, should be called in at once. No oils or oily ointment should be used unless ordered by the physician.
- If on Skin** Workers who have had contact with hydrofluoric acid should be subjected immediately to a drenching shower of water. The clothing should be removed as rapidly as possible, even while the victim is in the shower, and medical assistance obtained immediately. It is essential that the exposed area be washed with copious amounts of water for a sufficient period of time to remove all hydrofluoric acid from the skin (5 Minutes). Calcium gluconate gel (2.5%) should be rubbed in continuously until pain has completely subsided. Personnel who apply the gel should be sure to wear rubber gloves to prevent skin contamination with the HF. Calcium gluconate gel is the preferred treatment but an alternative treatment is using an iced aqueous or alcoholic solution, 0.13% (1:750) of benzalkonium chloride (zephiran chloride); and iced 70% alcohol solution; or and ice-cold saturated solution of magnesium sulfate (epsom salt) should be applied for at least 30 minutes. If the burn is in such an area that it is impractical to immerse the part, then the iced solution should be applied with saturated compresses, which should be changed at least every two minutes. The physician should be available by then to administer further treatment before completion of the iced solution treatment. However, if a physician is not available by that time, the treatment with one of the iced solutions should be continued for two to four hours. In cases of overexposure due to HF, as in skin burns of greater than approximately 25 sq. inches in area, hypocalcemia may be present. Therefore, systemic administration of calcium gluconate may be necessary. Frequent monitoring of serum calcium, renal and hepatic functions are necessary.
- If Swallowed** Swallowing of hydrofluoric acid causes burns of the mucous membrane of the mouth, throat, esophagus and the stomach. The patient should be encouraged to immediately drink a large amount of water or milk with added milk of magnesia. Do not induce vomiting. Call a physician immediately.
- If Inhaled** Exposed individuals should be carried at once into an uncontaminated atmosphere. Even in the absence of symptoms, a physician should be called immediately. If breathing has stopped, begin artificial respiration. If inhalation equipment and trained attendant are available, oxygen administration should be started at once. Patient should remain quiet - preferably lying down and kept warm and comfortable. As soon as possible, patient should be given 2.5% to 3% calcium gluconate solution by inhalation, preferably by intermittent positive pressure breathing (IPPB) using a nebulizer, or by nebulizer alone. The patient should be watched carefully for edema of the upper airway with respiratory obstruction. Delayed pulmonary edema is likely in patients with burns of the skin on the face or neck. If pulmonary edema develops, the patient should be

placed in IPPB with positive end - expiratory pressure (PEEP). The administration of respiratory care should be closely supervised and performed by qualified personnel. Stimulants should not be given unless ordered by a physician. Under no circumstances should a patient be permitted

Section 5. Fire Fighting Measures

Hazard Type	Acutely Toxic
Hazards from decomposition products	Material can generate explosive hydrogen gas on contact with certain metals and reacts violently with water. Runoff from fire control may cause pollution. Neutralize runoff with sodium bicarbonate.
Suitable Extinguishing media	Use agents appropriate for surrounding fires.
Precautions for firefighters and special protective clothing	Wear self-contained breathing apparatus (SCBA) and other protective clothing. Hazardous decomposition products possible (see Section 10). Evacuate immediate area.
HAZCHEM CODE	2X

Section 6. Accidental Release Measures

Evacuate area and keep upwind until gas has dispersed. Dike spill. Dilute with water fog (direct application of alkali may cause violent splattering). Neutralize with sodium bicarbonate. Persons not wearing protective equipment and clothing should be restricted from areas of spills or leaks until clean up has been completed.

Section 7. Handling and Storage

Handling Refrain from splashing product when pouring. Avoid all contact with skin or clothing. Empty containers may contain residues and vapors. KEEP OUT OF REACH OF CHILDREN.

Storage Keep container closed and upright when not in use. Do not store near heat, sparks, or open flames. This product will attack glass, concrete and certain metals. Store only in plastic containers. DO NOT USE METAL CANS

Section 8 Exposure Controls / Personal Protection

WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

Substance	CAS #	TWA		STEL	
		ppm	mg/m3	ppm	mg/m3
Phosphoric acid	[7664-38-2]	-	1	-	-
Hydrogen fluoride, as F	[7664-39-3]	Ceiling 3 ppm (2.6 mg/m3)			

Workplace Exposure Standard – Time Weighted Average (WES-TWA). *The time-weighted average exposure standard designed to protect the worker from the effects of long-term exposure.* Workplace Exposure Standard – Short-Term Exposure Limit (WESSTEL). *The 15-minute average exposure standard.* Applies to any 15- Minute period in the working day and is designed to protect the worker against adverse effects of irritation, chronic or irreversible tissue change, or narcosis that may increase the likelihood of accidents. The WES-STEL is not an alternative to the WES-TWA; both the short-term and time-weighted average exposures apply.

Engineering

Product Name: Con-Coil Item No: N0724 Issued by: Realcold Ltd
 Date of MSDS: 12 January 2012 Tel: 64 9 526 5700

Controls Local exhaust acceptable

Personal Protection

Respiratory: In confined poorly ventilated areas, use NIOSH/MSHA approved air purifying or supplied air purifying or supplied air respirators.

Hands: Wear acid resistant gloves (neoprene, PVC, butyl rubber).

Eyes: Full-face shield and chemical splash goggles (ANSI Z-87.1 or equivalent).

Other: Acid resistant vinyl or polyethylene coated coveralls. Where use can result in skin contact, wash exposed areas thoroughly before eating, drinking, smoking, or leaving work area.
Launder contaminated clothing before reuse.

Section 9 Physical and Chemical Properties

Appearance	Clear Pink Liquid
Odour	Irritating Odour
Flash Point	N/A
Boiling Point	100°C @ 760 mm Hg
Vapour Pressure	17 @ 20° C
Specific Gravity	1.09
Solubility in Water	Soluble

Section 10. Stability and Reactivity

Stability of Substance	Stable. Does not polymerise.
Conditions to Avoid	Uncontrolled contact with water and active metals. Excessive heat will cause pressure build-up in container.
Incompatible Materials	Alkalies, most metals, cyanides, sulfides, glass and ceramics.
Hazardous Decomposition Products	Fluorides and hydrogen gas on contact with certain metals; these fumes can be highly corrosive.

Section 11 Toxicological Information

Phosphoric Acid	Oral-Rat LD50:1530 mg/kg
Hydrofluoric Acid	Oral-Rat LD50:5045 mg/kg Rat LC50:966 PPM/1H
Glycol Butyl Ether	Oral-Rat LD50:470 mg/kg Inhalation-Rat LC50:2900 mg/m3

Acute hazards

Hydrofluoric acid is extremely irritating and corrosive to skin and mucous membranes. Speed in moving exposed personnel from contaminated area and in removing HF from skin or eyes is of primary importance. First aid must be started immediately, within seconds, in all cases of contact with hydrofluoric acid in any form. Inhalation of the vapor may cause ulcers of the upper respiratory tract. Concentrations at 50 to 200 ppm are dangerous. Hydrofluoric acid produces burns, which are slow in healing. The subcutaneous tissue may be affected, becoming blanched and bloodless. Gangrene of the affected areas may follow.

Symptoms of overexposure by eye or skin contact, inhalation, or ingestion:

Conjunctivitis, corneal burns; severe skin burns with ulceration; pain behind the breastbone, cough, spitting blood, dyspnea, difficult breathing, bronchopneumonia, cyanosis, shock, muscle spasms, convulsions, jaundice, oliguria, alburninuria, hematuria, nausea, vomiting, abdominal pain, diarrhea; burns and corrosion of mouth, esophagus, stomach and small bowel. Inhalation over exposure may cause lung damage and pulmonary edema. Toxicity from pulmonary absorption of fluoride ion may develop in the liver and kidneys.

Chronic hazards

Possible mutagen. Respiratory ulcers may occur. Skin injuries may result in gangrene.

Medical conditions aggravated by exposure

Individuals with pre-existing or chronic diseases of the eyes, skin, respiratory system, cardiovascular system, gastrointestinal system, liver, or kidneys may have increased susceptibility to excessive exposure.

Section 12. Ecotoxicological Information

Phosphoric Acid

Food Chain Concentration Potential	None
WATERFOWL TOXICITY	N/A
BOD	None
AQUATIC TOXICITY	138 ppm/24 hr/mosquito fish/TLm

Hydrofluoric Acid

Food Chain Concentration Potential	None
WATERFOWL TOXICITY	N/A
BOD	None
AQUATIC TOXICITY	60 ppm/fish/lethal

Glycol Butyl Ether

Food Chain Concentration Potential	N/A
WATERFOWL TOXICITY	N/A
BOD	26%
AQUATIC TOXICITY	1000 ppm/24 hr/brine shrimp/TLm

Section 13. Disposal Considerations

Dispose of absorbed materials and liquid waste in accordance with all local regulations.

Section 14 Transport Information

Classified as a Dangerous Good for transport

Road and Rail Transport (in NZ ; NZS 5433:2007)

UN No:	3264
Class-primary	8
Packing Group	II
Proper Shipping Name:	Corrosive Liquid, Acidic, Inorganic, N.O.S. (Hydrofluoric And Phosphoric Acid)

Air Transport

UN No:	3264
Class-primary	8
Packing Group	II
Proper Shipping Name:	Corrosive Liquid, Acidic, Inorganic, N.O.S. (Hydrofluoric And Phosphoric Acid)

Marine Transport

UN No: 3264
Class-primary 8
Packing Group II
Proper Shipping Name: Corrosive Liquid, Acidic, Inorganic, N.O.S. (Hydrofluoric And Phosphoric Acid)

Section 15 Regulatory Information

EPA Approval Code: Cleaning Products (Toxic [6.1]) Group Standard – HSR002593

HSNO Classification: 6.1B, 6.9A, 8.1A, 8.2B, 8.3A, 9.1D, 9.3A

HSNO Controls:

Trigger quantities for this substance:

	Trigger Quantity
Approved Handler	Any Quantity (acutely toxic 6.1B)
Location Certificate	Not applicable
Tracking	Any Quantity (acutely toxic 6.1B)
Signage	250L
Emergency Response Plan	100L

Section 16 Other Information

1. HSNO Approved Code of Practice: Preparation of Safety Data Sheets, September 2006.

Disclaimer

This document has been issued by Realcold Limited and serves as their Safety Data Sheet ('SDS'). It is based on information concerning the product which has been provided to Realcold Limited or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer. While Realcold Limited have taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, Realcold Limited accept no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS

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Please contact the New Zealand distributor, Realcold Ltd, if further information is required.

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