



Health	2
Fire	2
Reactivity	0
PPE	G



SECTION 1: CHEMICAL PRODUCT AND COMPANY INFORMATION				
Product Name: Covaron InfernoWare™ Reflect TRC-3	Supplier Information:	1-734-315-4221		
Application: Thermosetting amorphous coramic compound	Coveren Advanced Meterials			

**Application:** Thermosetting amorphous ceramic compound

CAS#: Not available **RTECS**: Not available **Document Revision: 1.1** 

**Document Revision Date: 2024 June 19** 

Covaron Advanced Materials 4401 Varsity drive, suite A Ann Arbor, MI 48108

**CHEMTREC (24-hour):** 1-800-424-9300 Poison Control (24-hour): 1-800-222-1222 For non-emergency assistance: 1-734-315-4221

# **SECTION 2**

# GHS classification in accordance with 29 CFR 1910 (OSHA HCS)

Physical - Flammable Liquids (4) Health - Acute toxicity (4 Oral)

Skin Corrosion (2) Skin Sensitization (1) Serious Eye damage (2A)

Specific target organ toxicity- repeated exposure,

Category 2

Reproductive toxicity Category 2

Signal word

Warning

Very toxic to aquatic life with long lasting effects (GHS category 1: aquatic toxicity - acute and/or chronic).

: HAZARDS IDENTIFICATION				
GHS haza	rd statements			
H302	Harmful if swallowed			
H315	Cause skin irritation			
H317	May cause an allergic skin reaction			
H319	Cause serious eye irritation			
H334	Respiratory sensitization			
H336	May cause drowsiness or dizziness			
H361d	Suspected of damaging the unborn child.			
H373	May cause damage to central nervous system through			
	prolonged or repeated exposure.			
GHS				
precaut				
ionary				
statem				
ents				
P201	Obtain special instructions before use.			
P210	Avoid heat/sparks/open flames/hot surfaces.			
P261	Avoid breathing fumes, mist, and vapor.			
P270	Do not eat, drink or smoke when using this product.			
P271	Use only outdoors or in a well-ventilated area.			
P272	Contaminated work clothing must not be allowed out			
	of the workplace.			
P280	Wear protective gloves/protective clothing/eye			
	protection/face protection.			
P284	Wear respiratory protection.			
P301	IF SWALLOWED: Call a POISON CENTER/doctor if you			
P312	feel unwell. Rinse mouth.			

F	P330	
F	P302 P361 P352 P305	IF ON SKIN (or hair): remove immediately all contaminated clothing. Rinse skin with water or shower.  IF IN EYES: Rinse cautiously with water for several
	P338	minutes. Remove contact lenses, if present and easy to
F	P351	do. Continue rinsing. Immediately call a POISON CENTER/doctor.
<u> </u>	P314	Get medical advice/attention if you feel unwell.
F	P333	If skin irritation or rash occurs: Get medical
<u> </u>	P313	advice/attention.
F	P363	Wash contaminated clothing before use.
F	P370	In case of fire: Use sand or carbon dioxide or powder
F	P378	extinguisher for extinction.
F	P403	Store locked up in a well-ventilated place.
F	P235	Keep Cool
F	P501	Dispose of contents and containers to an approved facility in accordance with local, regional, national, and international regulations.

SECTION 3: Composition					
Name CAS# Wt%					
Proprietary resin	_	5-40			
Parachlorobenzotrifluoride	98-56-6	20-65			
Toluene	108-88-3	<0.6%			

SECTION 4: FIRST AID MEASURES					
General	ral Consult a physician. Provide this data sheet to medical personnel. Move out of dangerous area.				
If inhaled	Move person to fresh air. Seek medical attention. If not breathing or unconscious, provide artificial respiration. Exercise caution if performing mouth-to-mouth resuscitation for persons who have inhaled toxic substances.				
Skin Contact	Immediately flush skin with large amount of water while removing contaminated clothing and shoes. Wash off with soap and water for at least 15 minutes. If symptoms persist, seek medical attention. Do not peel solidified product off the skin.				
Eye Contact	Rinse thoroughly with plenty of water or saline solution for at least 15 minutes, occasionally lifting the upper and lower lid. Remove contact lenses if present and easy to do. Continue rinsing. Consult a physician.				
Ingestion	To prevent aspiration of material into the lungs, lay the victim on one side with head lower than the waist. Never give anything by mouth to an unconscious person. Rinse mouth with water, then drink a lot of water. Remove denture if present. Seek medical advice.				

SECTION 5: Fire Fighting Measure					
Extinguishing media					
	<b>Unsuitable methods of extinction:</b> Water jets streams may spread the fire.				
Flammable liquid and vapor! Vapors are heavier than air and can travel along to ground to a source of ignition and flash back. Vapors can spread along the ground collect in low or confined areas. Liquid will float and may reignite on the surface of water.					
Advice for firefighters	Wear self-contained breathing apparatus for firefighting if necessary.				
Further information	Use water spray to cool unopened containers.				

SECTION 6: ACCIDENTAL RELEASE MEASURES				
Personal precautions, protective equipment and emergency procedures	Avoid breathing mist or vapors. Wear respiratory protection. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapor accumulation in low-lying areas.			
Environmental precautions	Prevent further leakage or spillage, if practical and safe. Do not allow product to enter drains. Avoid discharge into the environment.			
Methods and materials for containment and remediation	Stop leak if possible and safe. Cover spill with vermiculite, perlite or ground clay.  Do not use combustible material such as saw dust. Sweep up and store in appropriate waste container for disposal via a licensed waste disposal company.			

SECTION 7: HANDLING AND STORAGE				
Precautions for safe	s for safe This material is flammable:			
handling:  Avoid vapor formations and use with adequate ventilation, avoid breath Vapors are heavier than air and will tend to collect in low areas. Avoid confined spaces. Flammable vapors may form explosive mixtures in the a coating equipment and containers at all times. Use non sparking tools. Isodrain, wash and purge systems or equipment before maintenance or rep Avoid bodily contact with material:  Wear appropriate personal protective equipment. Avoid contact with ski eyes. Wash hands thoroughly after handling and avoid contact with eyes No eating, drinking or smoking near areas where substance is handled, por stored.				
Conditions for safe	Keep container clearly labeled and tightly closed in a cool, dry, well-ventilated			
storage, including	area. Opened containers must be carefully resealed and kept upright to prevent			
incompatibilities	leakage. Keep away from heat, flames, static electricity. Containers are hazardous when empty as they contain product residues. Ventilate closed areas. Keep out of reach of children.			

## **SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Engineering Control**: Adequate room ventilation plus local exhaust at points of emission to maintain levels of airborne contaminates below exposure limits. Assure ACGIH TWA and OSHA PEL limits (varies by product) are maintained. Use of fume hoods or closed booths required when product is used in a manner that may generate mist or aerosol.

## **Personal Protective Equipment:**

**Hands**: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times. Solvent resistant (neoprene, nitrile or other nonporous) recommended.

**Eyes**: Chemical splash goggles should be worn at a minimum.

**Skin:** Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Apron and protective industrial coating recommended.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES				
Appearance:	Silver colored liquid	Evap. Rate:	0.9	
Physical state:	Liquid	Decomp Temp:	None	
Density:	0.8 - 1.4 g/cm <sup>3</sup>	Odor:	Organic solvent	
Viscosity:	50-100 Cp	Solubility in water:	negligible	
Boiling Point:	>136 °C	Freezing/Melting pt.:	Not Available	
Flammability:	Flammable	Flash Point:	43 °C, closed cup	
Partition Coefficient	Not Available	Vapor Density:	6.2	
Vapor Pressure	Not Available	VOC:	(exempt)	
pH:	N/A	Auto-ignition Temp:	>500C (932F)	
		UFL/LFL:	0.9v/v%-10.5v/v%	

SECTION 10: STABILITY AND REACTIVITY			
Hazardous polymerization	No		
Hazardous Thermal decomposition products include oxides of carbon.  Decomposition			
Materials to avoid	Strong oxidizers		
Chemical stability	Stable		

## **SECTION 11: TOXICOLOGICAL INFORMATION**

NTP Carcinogen: No IARC Monographs: No OSHA Regulated: Yes (5mg/m3, 8hTWA) *No components* are recognized as carcinogens by the National Toxicology Program (NTP), the International Agency for Cancer Research (IARC) or the Occupational Safety and Health Administration (OSHA). Reported Human Effects: No human studies have been conducted with this material. The use of recommended protective equipment should minimize any adverse effects.

Based on sums of components, following animal effects are expected:

Oral LD50, rat: 1000 mg/kg

### **SECTION 12: ECOLOGICAL INFORMATION**

Harmful to aquatic life with long lasting effects.

Acute and prolonged toxicity to fish: LC50 Lepomis macrochirus(Bluegill) 9h 5.6mg/l Toxicity to aquatic invertebrates EC50 Daphnia magna (water fleas) 48h 3.7-5.6mg/L

Avoid disposal in Landfills and sewage systems. Avoid releases into water sources

## **SECTION 13: DISPOSAL CONSIDERATIONS**

This product, as well as any materials impregnated or infused with it during its use, must be disposed of in accordance with all applicable local, state and federal regulations. Contact a licensed professional waste disposal service to dispose of this material

## **SECTION 14: TRANSPORT INFORMATION**

UN number: not subject to transport regulations

US DOT and IATA
Proper Shipping n/a
Hazard Class: none
UN Number n/a
Packing Group: n/a

Environmentally hazardous substance (aquatic environment) p-chlorobenzotrifluoride

## **Remarks**

Covaron TRC-3 is not subject to transportation regulations as the mixture does not sustain combustion. Per 49 CFR § 173.120(a)(3) of the hazardous materials regulations, liquids with a flash point greater than 35°C that do not sustain combustion according to ASTM D 4206 do not meet the definition of a Class 3 Flammable Liquid.

International Air Transport Association (IATA) Dangerous Goods Regulations section 3.3.1.3(a) states that liquids which do not sustain combustion "need not be considered as flammable" if the liquid has "passed a suitable test for combustibility" as prescribed by the UN Manual of Tests and Criteria, Part III, subsection 32.5.2. ASTM D 4206 standards are identical to the UN Manual standards; it is thus considered to be a suitable test for combustibility. Since TRC-3 does not sustain combustion when testing with ASTM D 4206, Covaron TRC-3 is not considered regulated for purposes of transportation.

#### **Remarks**

p-Chlorobenzotrifluoride (PCBTF) will preferentially partition to the atmosphere, due to its high volatility. It has been estimated that 99.93% of a 100 Kg spill would end up in the atmosphere, while only 0.06% would partition to water (M. Garlanda, 1990). The aqueous solubility of PCBTF (29.1 mg/L) would also tend to limit its potential impact to exposed aquatic systems. PCBTF has exhibited significant toxicity to aquatic species under laboratory conditions but is unlikely to exhibit a similar degree of acute toxicity under environmental conditions due to the aforementioned solubility and volatility issues. The moderate level of bioaccumulation measured in laboratory tests will also be subject to environmental mitigation due to PCBTF's physical/chemical properties. PCBTF should rapidly volatilize from dry and moist soils. Volatility, and relative environmental partitioning characteristics, make it unlikely that PCBTF represents a significant threat to aquatic or terrestrial environments.

SECTION 15: REGULATORY INFORMATION				
Component	CAS#	Wt%	Regulations	
Proprietary resin	_	5-40	TSCA, PA, M, NJ	
Parachlorobenzotrifluoride	98-56-6	20-65	TSCA(export notification), NJ, PA,	
			CA prop. 65	
Toluene	108-88-3	<0.6	NJ, PA, CA prop. 65, Ma	

PA = PA Right-To-Know List of Hazardous Substances

M=Massachusetts Right-To-Know List of Hazardous Substances

NJ= New Jersey Right-To-Know List of Hazardous Substances

DE= Delaware Right-To-Know List of Hazardous Substances

NY= New York Right-To-Know List of Hazardous Substances

PA= Pennsylvania Right-To-Know List of Hazardous Substances

RI= Rhode Island Right-To-Know List of Hazardous Substances

WI= Wisconsin Right-To-Know List of Hazardous Substances

CA Prop. 65 = Safe Drinking Water and Toxic Enforcement Act

TSCA = Toxic Substances Control Act

The following are on California Prop65 list:

Para chlorobenzotrifluoride

Toluene

Covaron coatings meet all air quality and regulatory requirements with respect to manufacturing and application. Specifically, the hardened finished product does not release any "volatile organic compounds" (VOC) under any ambient conditions.

U.S. TOXIC SUBSTANCES CONTROL ACT: All components of this product are on the TSCA Inventory or are exempt from the TSCA Inventory requirements under 40 CFR 720.30.

#### **SECTION 16: OTHER INFORMATION**

#### **NFPA**

Health=2

Fire=2

Reactivity=0

Specific Hazard=No

#### **HMIS**

Health=2

Fire=2

Physical Hazard=0

PPE: G- Safety Glasses, Gloves, Vapor respirators

OSHA Standard 29 CFR 1910.1200 requires that information be provided to employees regarding the hazards of chemicals by means of hazard communication program including labeling, material safety data sheets, training and access to written records. We request that you (as it is your legal duty to) make all information in this Safety Data Sheet available to all your employees.

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