



| | |
|------------|---|
| Health | 3 |
| Fire | 3 |
| Reactivity | 1 |
| PPE | G |



SECTION 1: CHEMICAL PRODUCT AND COMPANY INFORMATION

| | |
|--|---|
| Product Name: Covaron InfernoWare™ Shield SN03 | Supplier Information: 1-734-315-4221 |
| Application: Thermosetting amorphous ceramic compound | Covaron Advanced Materials |
| CAS#: <i>Not available</i> | 4401 Varsity drive, suite A |
| RTECS: <i>Not available</i> | Ann Arbor, MI 48108 |
| Document Revision: 1.3 | CHEMTREC (24-hour): 1-800-424-9300 |
| Document Revision Date: 2024 Feb 23 | Poison Control (24-hour): 1-800-222-1222 |
| | For non-emergency assistance: 1-734-315-4221 |

SECTION 2: HAZARDS IDENTIFICATION

| | | |
|---|---|--|
| <p>GHS classification in accordance with 29 CFR 1910 (OSHA HCS)</p> <p>.Physical, Flammable Liquids, 3 In contact with water release flammable gas .Health, Acute toxicity, 5 Oral .Health, Specific target organ toxicity-Single Exposure, 3 Skin Corrosion 1A Respiratory sensitization 1 Serious Eye damage 1 May cause cancer</p> <p>Signal word Danger</p> | GHS hazard statements | |
| | H225 | Highly flammable liquid and vapor |
| | H261 | In contact with water release flammable gas |
| | H302 | Harmful if swallowed |
| | H312 | Harmful in contact with skin |
| | H315 | Cause skin irritation May cause an allergic skin reaction |
| | H317 | May cause an allergic skin reaction |
| | H334 | Respiratory sensitization |
| | H336 | May cause drowsiness or dizziness |
| | H351 | May cause cancer |
| | H411 | Toxic to aquatic life with long lasting effects |
| | GHS precautionary statements | |
| | P201 | Obtain special instructions before use. |
| | P202 | Do not handle before reading and understanding safety precautions. |
| | P210 | Keep away from heat, sparks, open flames and hot surfaces. No smoking. |
| | P232 | Protect from Moisture. |
| P233 P235 | Keep container tightly closed. Keep cool. | |
| P240 | Ground and bond container and receiving equipment. | |
| P241 | Use explosion-proof electrical, ventilating, lighting and mixing equipment. | |
| P242 | Use only non-sparking tool. | |
| P243 | Take precautionary measures against static discharge. | |

| | |
|--|---|
| P261 | Avoid breathing fumes, mist, and vapor. |
| P264 | Wash skin thoroughly after handling. |
| 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 P312 P330 P331 | IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth. Do NOT induce vomiting. |
| P303 P361 P353 | IF ON SKIN (or hair): remove immediately all contaminated clothing. Rinse skin with water or shower. |
| P304 P340 P312 | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell. |
| P305 P338 P351 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor. |
| P314 | Get medical advice/attention if you feel unwell. |
| P332 P313 | If skin irritation or rash occurs: Get medical advice/attention. |
| P363 | Wash contaminated clothing before use. |
| P370 P378 | In case of fire: Use only dry chemical or carbon dioxide for extinction. |
| P403 P405 | Store locked up in a well-ventilated place. |
| 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% |
| Aluminum oxide | 1344-28-1 | 0-10 |
| Charcoal | 16291-96-6 | 0-5 |
| Titanium dioxide | 1317-80-2 | 0-7 |
| Iron oxide | 1309-37-1 | 0-8 |
| Proprietary ceramic and/or metallic pigment | — | 5-45 |
| Proprietary resin | — | 5-40 |
| Para chlorobenzotrifluoride | 98-56-6 | 20-65 |
| Ethanol | 75-21-8 | 0-30 |

SECTION 4: FIRST AID MEASURES

| | |
|-----------------------|--|
| General advice | 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 or caustic 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 | Do not induce vomiting. Vomiting may occur spontaneously. 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 | Suitable methods of extinction: Use only dry chemical or carbon dioxide. Unsuitable methods of extinction: Water jets streams may spread the fire. |
| Special hazards | Flammable liquid and vapor! Vapors are heavier than air and can travel along the ground to a source of ignition and flash back. Vapors can spread along the ground and 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 apply water to the spill. 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

| | |
|--|--|
| <p>Precautions for safe handling:</p> | <p>This material is flammable: Avoid vapor formations and use with adequate ventilation, avoid breathing fumes. Vapors are heavier than air and will tend to collect in low areas. Avoid use in confined spaces. Flammable vapors may form explosive mixtures in the air. Ground coating equipment and containers at all times. Use non sparking tools. Isolate, vent, drain, wash and purge systems or equipment before maintenance or repair.</p> <p>Avoid bodily contact with material: Wear appropriate personal protective equipment. Avoid contact with skin and eyes. Wash hands thoroughly after handling and avoid contact with eyes. No eating, drinking or smoking near areas where substance is handled, processed or stored.</p> |
| <p>Conditions for safe storage, including incompatibilities</p> | <p>Keep container clearly labeled and tightly closed in a cool, dry, well-ventilated area. Opened containers must be carefully resealed and kept upright to prevent 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.</p> |

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Control: Adequate room ventilation plus local exhaust at points of emission to maintain levels of airborne contaminants 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: | Colored liquid | Evap. Rate: | Not Available |
| Physical state: | Liquid | Decomp Temp: | Not Available |
| Spec Grav./Density: | 1.0-1.4 g/cm ³ | Odor: | Organic solvent |
| Viscosity: | 50-100 Cp | Solubility: | Not Available |
| Boiling Point: | 124-126C | Freezing/Melting pt.: | Not Available |
| Flammability: | Flammable | Flash Point: | >23C (>73F), closed cup |
| Partition Coefficient | Not Available | Vapor Density: | Not Available |
| Vapor Pressure | Not Available | VOC: | Yes |
| 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 Decomposition | Thermal decomposition products include oxides of carbon. Contact with acids and alkalis may release hydrogen. |
| Materials to avoid | Strong oxidizers, acids, water and alkalis |
| Chemical stability | Stable |

SECTION 11: TOXICOLOGICAL INFORMATION

NTP Carcinogen: yes IARC Monographs: No OSHA Regulated: Yes (5 mg/m³ TWA, 8h)
Titanium dioxide is recognized as suspected 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: >2000 mg/kg
 Vapor LC50, rat 200 g/m³
 Skin irritation, rabbit; corrosive.

SECTION 12: ECOLOGICAL INFORMATION

Toxic to aquatic life with long lasting effects.
 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 3469 (Paint, flammable, corrosive)
US DOT and IATA
 Proper Shipping Paint, flammable, corrosive
 Hazard Class: 3[8]
 UN Number 3469
 Packing Group: III

SECTION 15: REGULATORY INFORMATION

| Component | CAS# | Wt% | Regulations |
|--------------------|------|-------|-----------------|
| Proprietary | — | 20-50 | TSCA, PA, M, NJ |
| Inorganic pigments | — | 15-30 | TSCA |

| | | | |
|-----------------------------|-----------|-------|---|
| Para chlorobenzotrifluoride | 98-56-6 | 20-65 | TSCA(export notification), NJ, PA, CA prop 65 |
| Titanium dioxide | 1317-80-2 | 0-7 | TSCA, PA, M, NJ, CAprop65 |

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 the CA Prop. 65 list:

-Titanium dioxide

- Para chlorobenzotrifluoride

PetraShield 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.

This compound is subject to TSCA 12b export notification requirement 475645-84-2

SECTION 16: OTHER INFORMATION

NFPA

Health=3

Fire=3

Reactivity=1

Specific Hazard=Yes

HMIS

Health=3

Fire=3

Physical Hazard=1

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.

This document and its contents are copyright 2024 Covaron Advanced Materials. License granted to make unlimited copies for internal use, subject to the terms of all applicable confidentiality and non-disclosure agreements. Information contained in this literature is offered for use by technically qualified personnel at their own discretion and risk. All statements and information contained herein are provided in good faith. While based on analytic procedures believed to be reliable, Covaron makes no express or implicit guarantee regarding their accuracy or completeness. As Covaron exercises no control over the end use of the product described herein, it assumes no liability for loss or damage incurred therefrom.