
Cerakote H Series Coatings (Part A)

1 PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: Cerakote H Series Coatings (Part A)
Common Name: Heat Curable Polymer-Ceramic Composite Coating
Revision Date: 8/16/2018
Version: 1.0

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2 HAZARDS IDENTIFICATION**Classification of the Substance or Mixture****GHS Classification in Accordance with 29 CFR 1910 (OSHA HCS):**

Health, Acute toxicity, 5 Oral
Health, Acute toxicity, 5 Inhalation
Health, Respiratory or skin sensitization, 1 Skin
Health, Skin corrosion/irritation, 3
Health, Serious Eye Damage/Eye Irritation, 2 B
Health, Specific target organ toxicity - Repeated exposure, 2

GHS Label Elements, Including Precautionary Statements

GHS Signal Word: **WARNING**

GHS Hazard Pictograms:

**GHS Hazard Statements:**

H303 - May be harmful if swallowed
H333 - May be harmful if inhaled
H317 - May cause an allergic skin reaction
H316 - Causes mild skin irritation
H320 - Causes eye irritation
H373 - May cause damage to organs through prolonged or repeated exposure

GHS Precautionary Statements:

P101 - If medical advice is needed, have product container or label at hand.
P102 - Keep out of reach of children.
P201 - Obtain special instructions before use.
P210 - Keep away from heat/sparks/open flames/hot surfaces. No smoking
P233 - Keep container tightly closed.

P242 - Use only non-sparking tools.
 P243 - Take precautionary measures against static discharge.
 P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.
 P262 - Do not get in eyes, on skin, or on clothing.
 P271 - Use only outdoors or in a well-ventilated area.
 P280 - Wear protective gloves/protective clothing/eye protection/face protection.
 P301+330+331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
 P302+350 - IF ON SKIN: Gently wash with soap and water.
 P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
 P335 - Brush off loose particles from skin.
 P360 - Rinse immediately contaminated clothing and skin with plenty of water before removing clothes.
 P402 - Store in a dry place.
 P403+233 - Store in a well ventilated place. Keep container tightly closed.
 P404 - Store in a closed container.

Hazards not Otherwise Classified (HNOC) or not Covered by GHS

Route of Entry: Eyes, Ingestion, Inhalation, Skin
Target Organs: Central Nervous System, Kidneys, Liver.
Inhalation: Not expected to be a relevant route of exposure, however under conditions where exposure to vapors or mists is possible, could cause respiratory tract infection.
Skin Contact: May be mildly irritating to the skin. May cause skin sensitization, rashes, exzema, and redness. Prolonged or repeated exposure may aggravate existing conditions.
Eye Contact: May be irritating to the eyes.
Ingestion: Not likely to be a relevant route of exposure, however, ingestion may cause damage to the lining of the gastrointestinal tract.

Store between 50F-100F

3 COMPOSITION/INFORMATION OF INGREDIENTS

Chemical Ingredients		
CAS#	%	Chemical Name
98-56-6	70-85%	p-chlorobenzotrifluoride
64741-71-5	10-40%	Polymers Viscous
66402-68-4	10-40%	Ceramic and/or metallic pigments and colorants
1333-86-4	0-2%	Carbon black
13463-67-7	0-10%	Titanium dioxide

CA Proposition 65: Contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm:

13467-67-7 Titanium Dioxide

1333-86-4 Carbon Black

There are no additional ingredients present which, within the current knowledge of the supplier, and in the concentrations applicable, are classified as significantly hazardous to health or the environment and hence require reporting in this section.

The above products are REACH compliant; Registration number(s) may not be provided because substance(s) are exempted, not yet registered under REACH or are registered under another regulatory process.

4 FIRST AID MEASURES

Inhalation: Remove to fresh air. If breathing is difficult, have trained person administer oxygen.
Skin Contact: Wash thoroughly with soap and water for at least 15 minutes while removing contaminated clothing and shoes. Wash all clothing before re-use. If irritation persists, seek medical attention.
Eye Contact: Immediately flush with water for at least 15 minutes. If irritation persists, seek medical attention.
Ingestion: Do not induce vomiting. Seek medical attention immediately.

5 FIRE FIGHTING MEASURES

Flammability: Combustible liquid formulation. Will burn under fire conditions but will not sustain combustion.
Flash Point: 43-degrees C
Autoignition Temp: >500-degrees C

Extinguishing Media:

Carbon dioxide, dry chemical powder, or appropriate foam.

Fire Fighting Procedures:

Evacuate all unnecessary personnel. Shut down motors, pumps, electrical service, and eliminate sources of ignition. Use water spray to cool containers and avoid pressure build-up. Wear self-contained breathing apparatus and full protective clothing.

Fire and Explosion Hazard:

Combustible Liquid. Over-heated containers may rupture.

Sensitivity of Static Charge:

Electrostatic charge may build up during handling. Grounding of equipment is recommended.

6 ACCIDENTAL RELEASE MEASURES

Personal Precautions:

Evacuate all unnecessary personnel and eliminate all sources of ignition.

Environmental Precautions:

Contain liquids and prevent discharge into streams and sewers, control or stop the loss of volatile material to the atmosphere. Do not apply water to the spill. Spills should be reported, if required, to the appropriate local, state, or federal agencies.

Small Spills:

Cover with an inorganic absorbent, such as vermiculite, perlite, ground clay, or sand; sweep up, and dispose of appropriately. Clean contaminated area with soap and water.

Large Spills:

Dike to contain and pump into drums for disposal. Add vermiculite absorbent to remaining material (as above).

7 HANDLING AND STORAGE

Handling Precautions:

Avoid breathing fumes.
Avoid bodily contact with material.
Wear appropriate personal protective equipment (PPE).
Wash thoroughly after handling.
Keep away from heat, sparks, pilot lights, welding operations, and open flames.
Flammable vapors may form explosive mixtures in air.
Do not eat, drink, or smoke in areas where this material is used.
Do not get in eyes, clothing, or on skin.
Do not eat, drink, or smoke in areas where this material is used.
This material is not rated as flammable.
Ground all equipment and use non-sparking tools.

Isolate, vent, drain, wash and purge systems or equipment before maintenance or repair.
Clean spills immediately.

Storage Requirements:

Avoid vapor formations and use with adequate ventilation. Vapors are heavier than air and will tend to collect in low areas. Avoid use in confined spaces. Areas of poor ventilation could contain concentrations high enough to cause unconsciousness and death. Use approved air respirator following manufacturer's recommendations where vapors may be generated.
Keep container properly closed and properly labeled.
Store in a cool dry place away from direct sunlight, designated for combustible liquid storage (Do not store in temperatures below 50F or above 77F.). Avoid freezing.
Keep away from heat, sparks, and open flame.
Vent periodically, if needed, to release head pressure.
Avoid shock and friction.
Do not allow cross-contamination, and keep away from incompatible materials.
Do not store near food or drinks.
Avoid excessive aging.
Store in accordance with local regulations.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls:

General room ventilation plus local exhaust at points of emission to maintain levels of airborne contaminants below exposure limits.

Personal Protective Equipment:

HMIS PP, H | Splash Goggles, Gloves, Long Sleeves & Pants.

Appropriate Hygienic Practices:

Avoid contact with eyes, skin, and clothing. Avoid breathing vapors, fumes, and mists. Avoid prolonged or repeated exposure. Wash thoroughly after handling, and before eating, drinking or smoking.

If mists or aerosols are generated during handling wear a respirator equipped with an organic vapor cartridge.

Other:

Emergency shower and eyewash facility should be in close proximity.

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PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Colored or clear liquid paint/coating	Odor:	Solvent-like
Physical State:	Viscous Liquid	Molecular Formula:	Not determined
Odor Threshold:	Not determined	Solubility:	Not determined
Particle Size:	Not determined	Softening Point:	Not determined
Spec Grav./Density:	Varies with color: ~1.4	Percent Volatile:	Not determined
Viscosity:	5-500 Cp	Heat Value:	Not determined
Saturated Vapor Concentration:	Not determined	Freezing/Melting Pt.:	Not determined
Boiling Point:	138.6-degrees C	Flash Point:	43-degrees C
Flammability:	Will burn under fire conditions but will not sustain combustion.	Octanol:	Not determined
Partition Coefficient:	Not determined	Vapor Density:	4.6 - 6.2 (Air=1)
Vapor Pressure:	Not determined	VOC:	Exempt
pH:	NA, Non-aqueous	Bulk Density:	Not determined
Evap. Rate:	Not determined	Auto-Ignition Temp:	>500-degrees C
Molecular weight:	Not determined	UFL/LFL:	0.9v/v% - 10.5v/v%
Decomp Temp:	~124-degrees C		

Parachlorobenzotrifluoride does not sustain combustion as determined by ASTM D4206. It is therefore exempted from classification as a "Flammable Liquid." (See 49 CFR 173.20(a)(3)).

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STABILITY AND REACTIVITY

Chemical Stability:	Stable
Conditions to Avoid:	Extreme temperatures, moisture, vapor formation and sources of ignition.
Materials to Avoid:	Strong oxidizing agents, strong acids, water and alkalines.
Hazardous Decomposition:	Chlorine-containing gases, fluorine-containing gases may be preserved in products containing parachlorobenzotrifluoride, Carbon dioxide and silicon oxides may be produced from all coating formulations.
Hazardous Polymerization:	Will not occur.

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TOXICOLOGICAL INFORMATION

GENERAL INFORMATION:

Acute oral toxicity: Low toxicity, LD50 > 2000 mg/kg

Acute dermal toxicity: Low toxicity, LD50 > 2000 mg/kg

COMPONENTS:

H-Series (Part A) Heat-Curable, High-Temperature resin(s)

H-SERIES SUPPLEMENTAL INFORMATION:

Contains < 11 wt% Cr(III) oxide-based pigments.

Acute toxicity (Oral LD50) >/- 5.41 mg/l (dust/mist).

Carcinogenic Effects:

NTP: Not Listed

ACGIH: A4 - Not classifiable for human or animal.

IARC: 3 - Not classifiable for human.

OSHA: Not Listed.

Mutagenic Effects:

Mutagenic for mammalian somatic cells. Mutagenic for bacteria and/or yeast. May cause damage to the following organs: upper-respiratory tract, skin.

REGULATION: US, IARC Monographs on Occupational Exposures to Chemical Agents.

REMARKS:

U.S. IARC Monographs on Occupational Exposures to Chemical Agents: Not classified by the International Agency for Research on Cancer (IARC).

SENSITIZATION: May cause skin sensitization.

CARCINOGENICITY: Recent 2-year bioassays in rats and mice exposed by the dermal route to H-Series (Part A) Resin type compositions yielded NO EVIDENCE of carcinogenicity to the skin or any other organs.

MUTAGENICITY: Inactive when tested by vivo mutagenicity assays.

POTENTIAL HEALTH EFFECTS:

Inhalation: Not expected to be a relevant route of exposure; however, under conditions where exposure to vapors or mists is possible, could cause respiratory tract irritation.

Skin: May be mildly irritating to the skin.
May cause skin sensitization.

Eyes: May be mildly irritating to the eyes.

Ingestion: Not likely to be a relevant route of exposure.

COMPONENTS:

TRADE SECRET: Ceramic and/or metallic pigments and colorants.

REGULATIONS:

NTP Carcinogen: No

IARC Monographs: No

OSHA Regulated: No

Not known to contain any ingredients recognized as carcinogens by the National Toxicology Program (NTP), the International Agency for Cancer Research or the Occupational Safety and Health Administration (OSHA).

SENSITIZATION: May cause an allergic skin reaction.

CARCINOGENICITY: Not listed as a carcinogen by NTP.

POTENTIAL HEALTH EFFECTS: No human studies have been conducted with this material. The use of recommended protective equipment should prevent any adverse effects.

Inhalation: May cause irritation of the respiratory tract. Prolonged or repeated exposure may cause lung damage.

Skin: May be mildly irritating to the skin.

Eyes: Dust may cause irritation and inflammation.

Ingestion: Not likely to be a relevant form of exposure.

Ecotoxicity Effects:

Toxicity to fish: Acute LC 50 1.3 mg/l Fish 96h
203 Fish, Acute Toxicity Test.

Acute LC 50 > 11 mg/l Aquatic plants/Algae 72h

Ceramic and/or metallic pigments and colorants:

Oral LD50, rat: 200-2000 mg/kg

Skin irritation, rabbit; severe erythema with signs of necrosis after 1-hour exposure.

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DISPOSAL CONSIDERATIONS

Do not mix this product with aqueous or other protic waste streams. Incineration of combustible waste material in a permitted facility in accordance with the local, state and federal regulations is the recommended disposal method.

This product is not regulated by the EPA. It is the waste generator's responsibility to determine how disposal must occur. Disposal should be made in accordance with federal, state and local regulations. Minimize or avoid the generation of waste whenever possible. Dispose of waste, unused material and empty containers in a licensed facility.

DO NOT DISCHARGE INTO DRAINS, SURFACE WATERS OR GROUNDWATER.

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TRANSPORT INFORMATION

US DOT: Not Regulated for Transport

IATA: Not Regulated for Transport

ICAO: Not Regulated for Transport

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REGULATORY INFORMATION

Component (CAS#) [%] - CODES

p-chlorobenzotrifluoride (98-56-6) [70-85%] TSCA

Polymers Viscous (64741-71-5) [10-40%] TSCA

Ceramic and/or metallic pigments and colorants (66402-68-4) [10-40%] TSCA

Carbon black (1333-86-4) [0-2%] MASS, OSHAWAC, PA, TSCA, TXAIR, CA Prop. 65

Titanium dioxide (13463-67-7) [0-10%] MASS, OSHAWAC, PA, TSCA, TXAIR, CA Prop. 65

Regulatory CODE Descriptions

TSCA = Toxic Substances Control Act

MASS = MA Massachusetts Hazardous Substances List

OSHAWAC = OSHA Workplace Air Contaminants

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

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

TXAIR = TX Air Contaminants with Health Effects Screening Level

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.

RoHS-2: NIC Industries, Inc. products comply with the EU RoHS-2 Directive and Amendments, including 2006/122/EC.

REACH: NIC Industries, Inc. products comply with EU REACH Regulation EC No. 1907/2006.

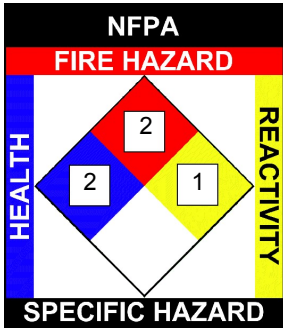
TSE/BSE: NIC Industries, Inc. products comply with European Parliament and Council Regulation (EC) No. 999/2001.

Conflict Minerals: No NIC Industries, Inc. products contain any "conflict materials" as defined in Section 1502 of the Dodd-Frank Act.

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OTHER INFORMATION

NFPA: Health = 2, Fire = 2, Reactivity = 1, Specific Hazard = n/a
HMIS III: Health = 2(Chronic), Fire = 2, Physical Hazard = 0
HMIS PPE: H - Splash Goggles, Gloves, Apron, Vapor Respirator



HMIS	
HEALTH	<input checked="" type="checkbox"/> 2
FLAMMABILITY	2
PHYSICAL HAZARD	0
PERSONAL PROTECTION	H

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.,

U.S. Federal Regulations:

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, and it is your legal duty to, make all information in this Safety Data Sheet available to all your employees.

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