

TechShield High-Temp Paint

Overview

Read this document before use.

This is designed for Professional use only.

Only certified applicators of ROKOAT products should attempt to use this product.

All personnel should read this document before use.

Composition / Information on Ingredients

CAS No.	Chemical Name	Approx. %
Trade Secret	Ambient temperature-curable refractory resin(s)	20-50%
Trade Secret	Ceramic and/or metallic pigments and colorants	15-30%
31900-57-9	Silicone-based rheology modifiers	0-1%
98-56-6	p-chlorobenzotrifluoride	20-65%

There are no additional ingredients present which, that 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.

*In accordance with OSHA Hazard Communication Standard 29 CFR 1910.1200(i) and in conformance with the United Nations' Globally Harmonized System of Classification and Labeling of Chemicals (GHS), the specific identity and/or exact percentage (concentration) of composition has been withheld as a "Trade Secret."

Hazards Identification

Route of Entry: Inhalation, Ingestion, Skin Absorption, Eye Contact

Target Organs: Respiratory System, Integumentary System, Digestive System and Nervous System.

Inhalation: May cause moderate irritation of the upper respiratory tract. May produce symptoms of CNS depression (headaches, dizziness, nausea, loss of balance, drowsiness) and CNS stimulation (shaking, tremors). Severe overexposure may cause severe CNS depression symptoms such as fatigue or loss of concentration.

Skin Contact: May cause moderate skin irritation.

Eye Contact: May cause irritation and pain.

Ingestion: Harmful by ingestion. May be irritating to the gastrointestinal tract, cause gastric distress and stomach pains.

NFPA: Health = 2, Fire = 3, Reactivity = 1

HMIS III: H*2/F3/PH1

NFPA	
FIRE HAZARD	
HEALTH	REACTIVITY
2	3
1	
SPECIFIC HAZARD	

HMIS III	
HEALTH	2
FLAMMABILITY	3
PHYSICAL HAZARDS	1
PERSONAL PROTECTION G Safety Glasses, Gloves, Vapor Respirator	

GHS Signal Word: WARNING

GHS Hazard Pictograms:



GHS Classifications:

Physical, Flammable Liquids - 3

Health, Acute toxicity - 4 Oral

Health, Specific target organ toxicity - Single exposure - 3

Environmental, Hazards to the aquatic environment - Acute -3

Health, Acute toxicity - 4 Dermal

GHS Phrases:

H226 - Flammable liquid and vapour

H302 - Harmful if swallowed

H335 - May cause respiratory irritation

H402 - Harmful to aquatic life

H312 - Harmful in contact with skin

GHS Precautionary Statements:

P102 - Keep out of reach of children.

P210 - Keep away from heat/sparks/open flames/hot surfaces. No smoking

P211 - Do not spray on an open flame or other ignition source.

P232 - Protect from moisture.

P240 - Ground/bond container and receiving equipment.

P242 - Use only non-sparking tools.

P243 - Take precautionary measures against static discharge.

P260 - Do not breathe dust/fume/gas/mist/vapours/spray.

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.

P273 - Avoid release to the environment.

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

P284 - Wear respiratory protection.

P301+330+331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P302+352 - IF ON SKIN: Wash with soap and water.

P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305+351+338 - IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

P314 - Get Medical advice/attention if you feel unwell.

P332+313 - If skin irritation occurs: Get medical advice/attention.

P337 - If eye irritation persists: Seek medical attention.

P342 - If experiencing respiratory symptoms: Seek medical attention.

P370+378 - In case of fire: Use dry chemical powder, foam, for extinction.

P374 - Fight fire with normal precautions from a reasonable distance.

P402+404 - Store in a dry place. Store in a closed container.

P403+233 - Store in a well ventilated place. Keep container tightly closed.

P403+235 - Keep cool.

P410+403 - Protect from sunlight.

P501 - Dispose of contents/container to licensed waste facility.

First Aid

Inhalation: Remove to fresh air. If breathing is difficult, have trained person administer oxygen. Maintain an open airway. Loosen tight clothing. If symptoms develop, seek medical attention.

Skin Contact: Remove all contaminated clothing and shoes. Wash thoroughly with soap and water for at least 15 minutes. Wash all clothing before re-use. If symptoms develop, seek medical attention.

Eye Contact: Remove contact lenses. Immediately flush with water for at least 15 minutes, gently holding eyelids apart. If symptoms develop, seek medical attention.

Ingestion: Rinse mouth out and then drink plenty of water. Only induce vomiting at the instruction of medical personnel. Vomiting may be dangerous. Keep head low so vomit does not enter the lungs. Never induce vomiting or give anything by mouth to an unconscious or convulsing person. Keep patient at rest. Seek immediate medical attention.

Fire Fighting Measures

Flammability: Class B Flammable Liquid

Extinguishing Media: Carbon dioxide, dry chemical powder, foam or alcohol foam.

Fire Fighting Procedures: Evacuate all unnecessary personnel. Shut down motors, pumps, electrical service, and eliminate sources of ignition if safe to do so. Use water spray to cool containers and avoid pressure build-up (do not allow water to mix with product). If fire occurs, isolate area, contain and eliminate fire, then dispose of debris in accordance with official regulations. Stay upwind of material at all times. Wear self-contained breathing apparatus and full protective clothing. May release dense black smoke containing hazardous products of combustion.

Fire and Explosion Hazard:

Contains possibly combustible materials. Over-heated containers may rupture. Fumes may be flammable/explosive in air when in the presence of an ignition source. Vapors may travel a significant distance to a source of ignition and flash back.

Sensitivity of Static Charge: Electrostatic charge may build up during handling. Grounding of equipment is required.

Accidental Release Measures

Personal Precautions: Evacuate all unnecessary personnel and surrounding areas, and eliminate all sources of ignition if safe to do so. Wear proper personal protective equipment, especially a self-contained breathing apparatus. Do not touch or walk through spilled material. Provide adequate ventilation and avoid breathing vapors. Ground all equipment used.

Environmental Precautions: Contain liquids and prevent discharge into streams, soil, waterways, drains 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, especially if environmental pollution has occurred. In case of major release or road spill notify local authorities.

Remove all sparking devices or ignition sources. Product is flammable. Stop leak if without risk. Move containers from spill area. Approach spill from upwind. Cover with an inorganic absorbent, such as vermiculite, perlite, ground clay, or sand; sweep up, and dispose according to local, state and federal regulations. Contaminated absorbent may pose the same hazard as spilled material does. Use spark proof tools and explosion proof equipment. Dispose of via a licensed waste disposal contractor.

Handling & Storage

Handling Precautions: This material is rated as 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. Avoid bodily contact with material. Wear appropriate personal protective equipment. Wash thoroughly after handling, avoid contact with eyes. No eating, drinking or smoking near areas where substance is handled, processed or stored. Flammable vapours 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. Clean spills immediately.

Storage Requirements: Keep away from heat, static electricity discharges and all sources of ignition. Avoid moisture and extreme temperatures. Avoid shock and friction. Store in a cool, dry area away from direct sunlight (do not store in temperatures below 50 oF or above 77 oF). Avoid Freezing. Do not allow cross-contamination, and keep away from incompatible materials. Keep tightly closed when not being used, but vent carefully before using. Label all containers appropriately. Do not reuse containers. Do not store near food or drinks. Avoid excessive aging. Store in accordance with local regulations.

Exposure Control / Personal Protection

Engineering Controls: 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: HMIS PP, F | Goggles, Chemical Resistant Gloves, Apron (protective industrial clothing recommended along with apron).

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: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts. 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.

Emergency shower and eyewash facility should be in close proximity. Employ proper hygienic measures after working with material and before eating, smoking or using the lavatory. Fully wash any contaminated clothing. Emissions from ventilation or work process equipment should be checked to ensure they comply with the regulations of environmental protection legislation. Completely isolate and thoroughly clean all equipment, piping or vessels with a solvent before beginning maintenance or repairs.

Physical & Chemical Properties

Appearance: Color varies by product

Physical State: Liquid

Spec Grav./Density: 1.0 - 1.5

Viscosity: Varies by product number

Odor: Ammoniacal

Solubility: Reacts with water

VOC: Exempt

Stability & Reactivity

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 p-chlorobenzotrifluoride. Carbon dioxide and silicon oxides may be produced from all coating formulations.

Hazardous Polymerisation: Will not occur.

Toxicology Information

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 (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.

Reported Animal Effects from various individual chemical components:

Oral LD50, rat: >300-2000 mg/kg

Vapor LC50, rat 20 g/m³

Skin irritation, rabbit; corrosive.

Vapor LC50, rat 4211 ppm

Toxicological information may change depending on individual product.

Contains < 16 wt% Cr(III) oxide-based pigments.

Toxicity information for chromium (III) oxide-based pigments:

Acute Toxicity (Oral LD50) > 5,000 mg/kg.

Acute Toxicity (Inhalation LC50) >/- 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.

NOTE: NTP, IARC and ACGIH found that "there is sufficient evidence for the carcinogenicity of chromium and certain chromium compounds both in humans and experimental animals." The chromium compounds that are considered carcinogenic are hexavalent chromium compounds [Cr(VI)]. The chromium oxide based pigments present in the NIC products listed above are all trivalent, refractory chromium compounds [Cr(III)], each containing 1ppm or less of leachable hexavalent chromium (</-0.0001%). The toxicity information stated above are for Cr(III) oxide-based C.I. Pigments as stated in SDS's provided by the pigment suppliers.

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

Ecological Information

Water hazard Category 2: Contains materials toxic to fish. Avoid disposal in landfills and sewage systems. Avoid release into water sources.

Disposal Considerations

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 to 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. 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.

Transport Information

DOT Class: Flammable Liquid (3) #3

UN #: UN 1263, Class: 3, Proper Shipping Name: Paint or Paint Related Materials.

US DOT:

Proper Shipping Name: Paint or Paint Related Materials

Hazard Class: 3

UN Number: 1263

Packing Group: III

IATA:

Proper Shipping Name: Paint or Paint Related Materials

Hazard Class: 3

UN Number: 1263

Packing Group: III



Regulatory Information

U.S. Federal Regulations: TSCA All components are listed or exempted.

SARA 302/304/311/312: Depends on individual product. Individual products may or may not contain chemicals subject to the reporting requirements of SARA 313.

California Proposition 65: Individual products may or may not contain chemicals known to the state of California to cause cancer and birth defects, or other reproductive harm.

Canadian DSL Inventory Status: This product contains materials not listed on the Canadian DSL but listed on the NDSL.

*Chromium (III) oxide (1308389 n/a/%) MASS, TSCA.

*tert-Butyl acetate (540885 40.0-60.0%) CERCLA, CSWHS, MASS, OSHAWAC, PA, TSCA, TXAIR

Other Information

This data offered in good faith as typical values and as product specifications.

DISCLAIMER: No warranty, either expressed or implied is hereby made. The recommended industrial safety and care practices for safe handling are believed to be generally applicable. Each user should review these recommendations in the specific context of the intended use and determine the suitability of this product for their application.