

KIT - SAFETY DATA SHEET

Product identifier used on the

label:

Kit Name DEVCON® Brushable Ceramic white

Stock No.: 11770

Other means of identification:

 $\underline{\textbf{Recommended use of the chemical and restrictions on use:}}$

 $\underline{\textbf{Chemical manufacturer address and telephone number:}}$

Manufacturer Name: ITW Performance Polymers
Address: 30 Endicott Street
Danvers, MA 01923

Component list			
Component A	BRUSHABLE CERAMIC WHITE RESIN		
Component B	CC4500 BRUSHABLE CERAMIC WHITE HARDENER		
Kit SDS Revision Date	9/10/2015		

Component A - SDS

SECTION 1: IDENTIFICATION

 $\underline{\text{Product identifier used on the label:}}$

Product Name: BRUSHABLE CERAMIC WHITE RESIN

Other means of identification:

Synonyms: None.

Recommended use of the chemical and restrictions on use:

Product Use/Restriction:

Not applicable.

 $\underline{\hbox{Chemical manufacturer address and telephone number:}}\\$

Manufacturer Name: ITW

Address: 30 Endicott Street
Danvers, MA 01923
General Phone Number: (978) 777-1100

Emergency phone number:

Emergency Phone Number: (800) 424-9300

CHEMTREC: For emergencies in the US, call CHEMTREC: 800-424-9300

SECTION 2 : HAZARD(S) IDENTIFICATION

Classification of the chemical in accordance with CFR 1910.1200(d)(f):

GHS Pictograms:

 \Diamond

Signal Word: WARNING.

GHS Class: Eye Irritation. Category 2.
Skin Irritation. Category 2.
Skin Sensitization. category 1.

Specific Target Organ Toxicity - STOT, Single Exposure SE. Category 3.

Stock No. 11770

Hazard Statements: H319 - Causes serious eye irritation. H315 - Causes skin irritation.

H317 - May cause an allergic skin reaction. H335 - May cause respiratory irritation.

P261 - Avoid breathing dust/fume/gas/mist/vapours/spray. Precautionary Statements:

P272 - Contaminated work clothing should not be allowed out of the workplace. P280 - Wear protective gloves/protective clothing/eye protection/face protection. P302+P352 - IF ON SKIN: Wash with plenty of water.

P304+P340 - IF INHALED: Remove victim 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.
P312 - Call a POISON CENTER or doctor/physician if you feel unwell.

P321 - Specific treatment (see ... on this label).
P332+P313 - If skin irritation occurs: Get medical advice/attention. P333+P313 - If skin irritation or rash occurs: Get medical advice/attention. P337+P313 - If eye irritation persists: Get medical advice/attention. P362+P364 - Take off contaminated clothing and wash it before reuse

P403+P233 - Store in a well-ventilated place. Keep container tightly closed. P405 - Store locked up

P501 - Dispose of contents/container in accordance with Local, State, Federal and Provincial regulations.

Hazards not otherwise classified that have been identified during the classification process:

Route of Exposure: Eyes. Skin. Inhalation. Ingestion.

Potential Health Effects:

Can cause moderate irritation, burning sensation, tearing, redness, and swelling. Overexposure may Eve:

cause lacrimation, conjunctivitis, corneal damage and permanent injury.

Can cause skin irritation; itching, redness, rashes, hives, burning, and swelling. Allergic reactions are

possible. May cause skin sensitization, an allergic reaction, which becomes evident on reexposure to this

Inhalation: Respiratory tract irritant. High concentration may cause dizziness, headache, and anesthetic effects.

Ingestion: Causes irritation, a burning sensation of the mouth, throat and gastrointestinal tract and abdominal pain.

Chronic Health Effects: Prolonged skin contact may lead to burning associated with severe reddening, swelling, and possible tissue destruction.

Signs/Symptoms: Overexposure can cause headaches, dizziness, nausea, and vomiting.

Target Organs: Eyes. Skin. Respiratory system. Digestive system.

Aggravation of Pre-Existing Conditions:

Individuals with pre-existing skin disorders, asthma, allergies or known sensitization may be more susceptible to the effects of this product.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures:

Inhalation:

Chemical Name	CAS#	Ingredient Percent	EC Num.
Bisphenol A diglycidyl ether resin	25068-38-6	50 - 60 by weight	
Aluminum oxide	1344-28-1	30 - 40 by weight	
Titanium dioxide	13463-67-7	1 - 10 by weight	

SECTION 4: FIRST AID MEASURES

Description of necessary measures:

Eye Contact: Immediately flush eyes with plenty of water for at least 15 to 20 minutes. Ensure adequate flushing of

the eyes by separating the eyelids with fingers. Get immediate medical attention

Immediately wash skin with plenty of soap and water for 15 to 20 minutes, while removing contaminated clothing and shoes. Get medical attention if irritation develops or persists. Skin Contact:

If inhaled, remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained

personnel. Seek immediate medical attention

Ingestion: If swallowed, do NOT induce vomiting. Call a physician or poison control center immediately. Never give

anything by mouth to an unconscious person.

SECTION 5: FIRE FIGHTING MEASURES

Suitable and unsuitable extinguishing media:

Suitable Extinguishing Media: Use carbon dioxide (CO2) or dry chemical when fighting fires involving this material.

Unsuitable extinguishing media: Water or foam may cause frothing.

Sealed containers at elevated temperatures may rupture explosively and spread fire due to Unusual Fire Hazards: polymerization. Heating above 300 deg F in the presence of air may cause slow oxidative

decomposition and above 500 deg F may cause polymerization.

Special protective equipment and precautions for fire-fighters:

Protective Equipment: As in any fire, wear Self-Contained Breathing Apparatus (SCBA), MSHA/NIOSH (approved or equivalent)

and full protective gear.

Evacuate area of unprotected personnel. Use cold water spray to cool fire exposed containers to Fire Fighting Instructions:

minimize risk of rupture. Do not enter confined fire space without full protective gear. If possible,

contain fire run-off water.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Personal Precautions: Evacuate area and keep unnecessary and unprotected personnel from entering the spill area.

Environmental precautions:

Environmental Precautions: Avoid runoff into storm sewers, ditches, and waterways.

Methods and materials for containment and cleaning up:

Spill Cleanup Measures:

Absorb spill with inert material (e,g., dry sand or earth), then place in a chemical waste container. Provide ventilation. Clean up spills immediately observing precautions in the protective equipment section. After removal, flush spill area with soap and water to remove trace residue. Avoid personal contact and breathing vapors or mists. Ventilate area. Use proper personal protective

equipment as listed in Section 8.

Reference to other sections:

Other Precautions: Pump or shovel to storage/salvage vessels.

SECTION 7: HANDLING and STORAGE

Precautions for safe handling:

Handling: Use with adequate ventilation. Avoid breathing vapor, aerosol or mist.

Hygiene Practices: Wash thoroughly after handling

Special Handling Procedures: Provide appropriate ventilation/respiratory protection against decomposition products (see Section 10)

during welding/flame cutting operations and to protect against dust during sanding/grinding of cured

Conditions for safe storage, including any incompatibilities:

Storage: Store in a cool, dry, well ventilated area away from sources of heat and incompatible materials. Keep

container tightly closed when not in use.

SECTION 8: EXPOSURE CONTROLS, PERSONAL PROTECTION

EXPOSURE GUIDELINES:

Aluminum oxide:

Guideline OSHA: PEL-TWA: 5 mg/m3 Respirable fraction (R) PEL-TWA: 15 mg/m3 Total particulate/dust (T)

<u>Titanium dioxide</u>:

Guideline ACGIH: TLV-TWA: 10 ma/m3

Appropriate engineering controls:

Use appropriate engineering control such as process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Good general **Engineering Controls:**

ventilation should be sufficient to control airborne levels. Where such systems are not effective wear suitable personal protective equipment, which performs satisfactorily and meets OSHA or other recognized standards. Consult with local procedures for selection, training, inspection and maintenance

of the personal protective equipment.

Individual protection measures:

Eye/Face Protection: Wear appropriate protective glasses or splash goggles as described by 29 CFR 1910.133, OSHA eye

and face protection regulation, or the European standard EN 166.

Wear appropriate protective gloves and other protective apparel to prevent skin contact. Consult manufacturer's data for permeability data. Skin Protection Description:

Respiratory Protection: A NIOSH approved air-purifying respirator with an organic vapor cartridge or canister may be

permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.

Other Protective: Facilities storing or utilizing this material should be equipped with an eyewash and a deluge shower

safety station.

Only established PEL and TLV values for the ingredients are listed. Notes:

SECTION 9: PHYSICAL and CHEMICAL PROPERTIES

PHYSICAL AND CHEMICAL PROPERTIES:

Physical State Appearance: Viscous, Liquid. Odor: Slight. odor. **Boiling Point:** >500°F (260°C) Melting Point: Not determined.

Specific Gravity: 1.1-1.3 Solubility: negligible. Vapor Density: >1 (air = 1)

Vapor Pressure: 0.03 mmHg @171°F

Percent Volatile: 0

Evaporation Rate: <<1 (butyl acetate = 1)

pH: Neutral. Molecular Formula: Mixture Molecular Weight: Mixture

Flash Point: >400°F (204.4°C)

Flash Point Method: Pensky-Martens Closed Cup

Lower Flammable/Explosive Limit: Not determined. Upper Flammable/Explosive Limit: Not determined. Auto Ignition Temperature: Not determined.

VOC Content: 0 g/L

9.2. Other information:

Percent Solids by Weight 100

SECTION 10: STABILITY and REACTIVITY

Chemical Stability:

Chemical Stability: Stable under normal temperatures and pressures.

Possibility of hazardous reactions:

Hazardous Polymerization: Not reported.

Conditions To Avoid:

Extreme heat, sparks, and open flame. Incompatible materials, oxidizers and oxidizing conditions. Heating resin above 300 F in the presence of air may cause slow oxidative decomposition. Conditions to Avoid:

Incompatible Materials:

Strong Lewis or mineral acids, strong oxidizing agents, strong mineral and organic bases (especially primary and secondary aliphatic amines). Incompatible Materials:

SECTION 11: TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION:

Bisphenol A diglycidyl ether resin:

Eve:

Administration into the eye - Rabbit Standard Draize test: 100 mg [Mild]
Administration into the eye - Rabbit Standard Draize test: 20 mg/24H [Moderate]
Administration into the eye - Rabbit Standard Draize test: 5 mg/24H [Severe] (RTECS)

Administration onto the skin - Rabbit LD50 - Lethal dose, 50 percent kill: >20 mL/kg [Details of toxic effects not reported other than lethal dose value] Administration onto the skin - Rat LD50 - Lethal dose, 50 percent kill: >1200 mg/kg [Details of toxic effects not reported other than lethal dose value] (RTECS) Skin:

Oral - Rat LD50 - Lethal dose, 50 percent kill: 10700 uL/kg [Details of toxic effects not reported other Ingestion:

than lethal dose value]
Oral - Rat LD50 - Lethal dose, 50 percent kill: 13600 mg/kg [Behavioral - Somnolence (general depressed activity) Lungs, Thorax, or Respiration - Dyspnea Nutritional and Gross Metabolic - Weight

loss or decreased weight gain]
Oral - Rat LD50 - Lethal dose, 50 percent kill: 13.6 gm/kg [Details of toxic effects not reported other

than lethal dose value]
Oral - Rat LD50 - Lethal dose, 50 percent kill: 11.4 gm/kg [Details of toxic effects not reported other

Oral - Rat LD50 - Lethal dose, 50 percent kill: 30 gm/kg [Behavioral - Somnolence (general depressed activity) Lungs, Thorax, or Respiration - Dyspnea Nutritional and Gross Metabolic - Weight loss or

decreased weight gain]
Oral - Rat LD50 - Lethal dose, 50 percent kill: 30 gm/kg [Details of toxic effects not reported other

Oral - Rat LD50 - Lethal dose, 50 percent kill: >1 gm/kg [Details of toxic effects not reported other

Oral - Rat LD50 - Lethal dose, 50 percent kill: 21 gill/kg [Behavioral - Somnolence (general depressed activity) Lungs, Thorax, or Respiration - Dyspnea Nutritional and Gross Metabolic (RTECS)

Titanium dioxide:

Chronic Effects:

Normal application procedures for this product pose minimal hazard as to the release of respirable titanium dioxide dust, but grinding or sanding dried films of this product may yield some respirable titanium dioxide. Although IARC has classified titanium dioxide as possible carcinogenic to human (2B), their summary concludes: "No significant exposure to titanium dioxide is thought to occur during the use of products which titanium dioxide is bound to other materials". OSHA does not regulate titanium dioxide as a carcinogen. However, under 29CFR 1910.1200 the SDS must convey the fact that titanium dioxide is a potential carcinogen to rats.

Animal evidence shows that high concentrations of pigment-grade (powdered) and ultrafine titanium dioxide dust caused respiratory tract cancer in rats exposed by inhalation. Carcinogenicity:

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity: No ecotoxicity data was found for the product.

Environmental Fate: No environmental information found for this product.

SECTION 13: DISPOSAL CONSIDERATIONS

Description of waste:

Waste Disposal: Consult with the US EPA Guidelines listed in 40 CFR Part 261.3 for the classifications of hazardous

waste prior to disposal. Furthermore, consult with your state and local waste requirements or guidelines, if applicable, to ensure compliance. Arrange disposal in accordance to the EPA and/or state and local

guidelines.

RCRA Number: Not determined

SECTION 14: TRANSPORT INFORMATION

DOT Shipping Name: Refer to Bill of Lading DOT UN Number: Refer to Bill of Lading

IATA Shipping Name: Refer to Bill of Lading

IATA UN Number: Refer to Bill of Lading

IMDG UN Number: Refer to Bill of Lading IMDG Shipping Name: Refer to Bill of Lading

SECTION 15: REGULATORY INFORMATION

Safety, health and environmental regulations specific for the product:

Bisphenol A diglycidyl ether resin:

TSCA Inventory Status: Listed Canada DSL: Listed

Aluminum oxide:

TSCA Inventory Status: Listed

Section 313: EPCRA - 40 CFR Part 372 - (SARA Title III) Section 313 Listed Chemical.

Canada DSL: Listed

Titanium dioxide:

TSCA Inventory Status: Listed Canada DSL: Listed Canadian Regulations.

WHMIS Hazard Class(es): D2B

All components of this product are on the Canadian Domestic Substances List.

WHMIS Pictograms:



SECTION 16: ADDITIONAL INFORMATION

HMIS Ratings:

HMIS Health Hazard: 2*
HMIS Fire Hazard: 1
HMIS Reactivity: 1
HMIS Personal Protection: X



* Chronic Health Effects

SDS Revision Date: May 19, 2015
SDS Revision Notes: GHS Update

SDS Format: In accordance to OSHA GHS 1910.1200

SDS Author: Actio Corporation

Disclaimer:

The information in this Safety Data Sheet (SDS) is believed to be correct as of the date issued. ITW Performance Polymers MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COURSE OF PERFORMANCE OR USAGE OF TRADE. User is responsible for determining whether the ITW Performance Polymers product is fit for a particular purpose and suitable for user's method of use or application. Given the variety of factors that can affect the use and application of a ITW Performance Polymers product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the ITW Performance Polymers product to determine whether it is fit for a particular purpose and suitable for user's method of use or application. ITW Performance Polymers provides information in electronic form as a service to its customers. Due to the remote possibility that electronic transfer may have resulted in errors, omissions or alterations in this information, ITW Performance Polymers makes no representations as to its completeness or accuracy. In addition, information obtained from a database may not be as current as the information in the MSDS available directly from ITW Performance Polymers.

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Component B - SDS

SECTION 1: IDENTIFICATION

Product identifier used on the label:

Product Name: CC4500 BRUSHABLE CERAMIC WHITE HARDENER

Other means of identification:

Synonyms: None.

Recommended use of the chemical and restrictions on use:

Product Use/Restriction: Not applicable.

<u>Chemical manufacturer address and telephone number:</u>

Manufacturer Name: ITW

Address: 30 Endicott Street Danvers, MA 01923

General Phone Number: (978) 777-1100

Emergency phone number:

Emergency Phone Number: (800) 424-9300

CHEMTREC: For emergencies in the US, call CHEMTREC: 800-424-9300

SECTION 2: HAZARD(S) IDENTIFICATION

 $\underline{\hbox{Classification of the chemical in accordance with CFR 1910.1200(d)(f):}\\$

GHS Pictograms:



Signal Word: DANGER

Acute Inhalation Toxicity. Category 3. GHS Class:

Serious Eye Damage. category 1. Skin corrosion. category 1. Reproductive toxicity. Category 2.

Skin Sensitization. category 1. Specific Target Organ Toxicity - STOT, Single Exposure SE. Category 3.

Hazard Statements: H331 - Toxic if inhaled.

H318 - Causes serious eye damage. H314 - Causes severe skin burns and eye damage.

H361 - Suspected of damaging fertility or the unborn child. H317 - May cause an allergic skin reaction. H335 - May cause respiratory irritation

Precautionary Statements: P201 - Obtain special instructions before use.

P202 - Do not handle until all safety precautions have been read and understood. P260 - Do not breathe dust/fume/gas/mist/vapours/spray.

P261 - Avoid breathing dust/fume/gas/mist/vapours/spray

P261 - Avoid breatning dust/rume/yas/mist/vapouis/spray.
P264 - Wash hands thoroughly after handling.
P271 - Use only outdoors or in a well-ventilated area.
P272 - Contaminated work clothing should not be allowed out of the workplace.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do not induce vomiting.
P302+P352 - IF ON SKIN: Wash with plenty of 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 victim 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.
P308+P313 - IF exposed or concerned: Get medical advice/attention.
P310 - Immediately call a POISON CENTER or doctor/physician.
P311 - Call a POISON CENTER or doctor/physician.

P311 - Call a POISON CENTER or doctor/physician.
P312 - Call a POISON CENTER or doctor/physician if you feel unwell.
P321 - Specific treatment (see ... on this label).
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.

P363 - Wash contaminated clothing before reuse.

P403+P233 - Store in a well-ventilated place. Keep container tightly closed.

P405 - Store locked up.

P501 - Dispose of contents/container in accordance with Local, State, Federal and Provincial regulations.

Hazards not otherwise classified that have been identified during the classification process:

Route of Exposure: Eyes. Skin. Inhalation. Ingestion.

Potential Health Effects:

Eve: Corrosive. Will cause eye burns, permanent tissue damage, and blindness.

Skin: Contact causes severe skin irritation and possible burns. may cause permanent skin damage. Allergic

reactions are possible

May cause skin sensitization, an allergic reaction, which becomes evident on reexposure to this

Inhalation: Toxic if inhaled. May cause severe respiratory system irritation. Exposure to decomposition products

may cause a health hazard. Serious effects may be delayed following exposure.

Inaestion: Harmful if swallowed. Corrosive to the gastrointestinal tract.

Chronic Health Effects: Prolonged skin contact causes burns.

Repeated or prolonged inhalation may cause toxic effects.

Depending on solution concentration, material may be corrosive to skin, mucous membranes and eyes. Vapors may cause respiratory irritation. Signs/Symptoms:

Target Organs: Eyes. Skin. Respiratory system. Digestive system.

Aggravation of Pre-Existing

Individuals with pre-existing skin disorders, asthma, allergies or known sensitization may be more

susceptible to the effects of this product.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures:

Chemical Name	CAS#	Ingredient Percent	EC Num.
Diethylenetriamine	111-40-0	30 - 60 by weight	
Phenol, 4,4'-(1-methylethylidene)bis-	80-05-7	13 - 30 by weight	

SECTION 4: FIRST AID MEASURES

Description of necessary measures:

Immediately flush eyes with plenty of water for at least 15 to 20 minutes. Ensure adequate flushing of the eyes by separating the eyelids with fingers. Get immediate medical attention.Eye Contact:

Immediately wash skin with plenty of soap and water for 15 to 20 minutes, while removing Skin Contact: contaminated clothing and shoes. Get medical attention if irritation develops or persists.

If inhaled, remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention. Inhalation:

 $If swallowed, do \ NOT \ induce \ vomiting. \ Call \ a \ physician \ or poison \ control \ center \ immediately. \ Never \ give$ Ingestion:

anything by mouth to an unconscious person.

Most important symptoms/effects, acute and delayed:

Other First Aid: Adverse symptoms may include the following: pain or irritation, redness or blistering may occur,

reduced fetal weight, increase in fetal deaths, and skeletal malformation.

Indication of immediate medical attention and special treatment needed:

Note to Physicians: Symptomatic and supportive therapy as needed. Following severe exposure, observe patient for at

least 48 hours.

SECTION 5: FIRE FIGHTING MEASURES

Suitable and unsuitable extinguishing media:

Use carbon dioxide (CO2) or dry chemical when fighting fires involving this material. Suitable Extinguishing Media:

Unsuitable extinguishing media: None known.

Specific hazards arising from the chemical:

Hazardous Combustion

Byproducts:

Thermal decomposition or burning may produce noxious products including carbon monoxide, carbon

dioxide, and nitrogen oxides.

Special protective equipment and precautions for fire-fighters:

As in any fire, wear Self-Contained Breathing Apparatus (SCBA), MSHA/NIOSH (approved or equivalent) Protective Equipment:

and full protective gear.

Fire Fighting Instructions: Use an extinguishing agent suitable for the surrounding fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Personal Precautions: Evacuate area and keep unnecessary and unprotected personnel from entering the spill area.

Environmental precautions:

Environmental Precautions: Avoid runoff into storm sewers, ditches, and waterways.

Methods and materials for containment and cleaning up:

Spill Cleanup Measures: Absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container.

Provide ventilation. Clean up spills immediately observing precautions in the protective equipment

section. After removal, flush spill area with soap and water to remove trace residue. Corrosive. Avoid personal contact and breathing vapors or mists. Ventilate area. Use proper personal

protective equipment as listed in Section 8.

Reference to other sections:

Other Precautions: Pump or shovel to storage/salvage vessels.

SECTION 7: HANDLING and STORAGE

Precautions for safe handling:

Handling: Use with adequate ventilation. Avoid breathing vapor, aerosol or mist. Avoid contact with eyes and skin.

Do not reuse containers without proper cleaning or reconditioning.

Hygiene Practices:

Special Handling Procedures: Provide appropriate ventilation/respiratory protection against decomposition products (see Section 10)

during welding/flame cutting operations and to protect against dust during sanding/grinding of cured

product.

Conditions for safe storage, including any incompatibilities:

Store in a cool, dry, well ventilated area away from sources of heat and incompatible materials. Keep Storage:

container tightly closed when not in use. Do not store in reactive metal containers. Keep away from acids, oxidizers.

SECTION 8: EXPOSURE CONTROLS, PERSONAL PROTECTION

EXPOSURE GUIDELINES:

<u>Diethylenetriamine</u>:

DEVCON® Brushable Ceramic white Revision:: 9/10/2015

Stock No. 11770

Guideline ACGIH: Skin: Yes. TLV-TWA: 1 ppm

Appropriate engineering controls:

Engineering Controls: Use appropriate engineering control such as process enclosures, local exhaust ventilation, or other

engineering controls to control airborne levels below recommended exposure limits. Good general ventilation should be sufficient to control airborne levels. Where such systems are not effective wear suitable personal protective equipment, which performs satisfactorily and meets OSHA or other recognized standards. Consult with local procedures for selection, training, inspection and maintenance of the personal protective equipment.

Individual protection measures:

Eye/Face Protection: Wear appropriate protective glasses or splash goggles as described by 29 CFR 1910.133, OSHA eye

and face protection regulation, or the European standard EN 166.

Skin Protection Description: Chemical-resistant gloves and chemical goggles, face-shield and synthetic apron or coveralls should be

used to prevent contact with eyes, skin or clothing.

Respiratory Protection:

A NIOSH approved air-purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed

permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.

Other Protective: Facilities storing or utilizing this material should be equipped with an eyewash and a deluge shower

safety station.

Notes: Only established PEL and TLV values for the ingredients are listed.

SECTION 9: PHYSICAL and CHEMICAL PROPERTIES

PHYSICAL AND CHEMICAL PROPERTIES:

Physical State Appearance: Liquid.
Color: Clear

Odor: Amine odor.

Odor Threshold: Not determined.

Boiling Point: >392°F (>200°C)

Melting Point: Not determined.

Specific Gravity: 1.07

Solubility: miscible.

Vapor Density: >1 (air = 1)

Vapor Pressure: Not determined.

Percent Volatile: Not determined.

Evaporation Rate: Not determined.

pH: 11

Viscosity: Not determined.

Coefficient of Water/Oil Not determined.
Distribution:

Flash Point: >200°F (93.3°C)
Flash Point Method: Closed Cup.

Lower Flammable/Explosive Limit: Not determined.

Upper Flammable/Explosive Limit: Not determined.

Auto Ignition Temperature: Not determined.

VOC Content: Not determined.

9.2. Other information:

Percent Solids by Weight 100

SECTION 10: STABILITY and REACTIVITY

Chemical Stability:

Chemical Stability: Stable under normal temperatures and pressures.

Possibility of hazardous reactions:

Hazardous Polymerization: Not reported.

Conditions To Avoid:

Conditions to Avoid: No specific data.

<u>Incompatible Materials:</u>

Incompatible Materials: No specific data.

SECTION 11: TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION:

Diethylenetriamine:

Skin: Administration onto the skin - Rabbit LD50 - Lethal dose, 50 percent kill: 1090 mg/kg [Details of toxic effects not reported other than lethal dose value] (RTECS)

Oral - Rat LD50 - Lethal dose, 50 percent kill: 1080 mg/kg [Behavioral - Convulsions or effect on Ingestion:

seizure threshold] (RTECS)

Phenol, 4,4'-(1-methylethylidene)bis-:

Eye: Administration into the eye - Rabbit Standard Draize test: 250 ug/24H [Severe] (RTECS)

Skin: Administration onto the skin - Rabbit LD50 - Lethal dose, 50 percent kill: 3 mL/kg [Details of toxic effects not reported other than lethal dose value] (RTECS)

Inhalation: Inhalation - Rat LC50 - Lethal concentration, 50 percent kill: >170 mg/m3/6H [Details of toxic effects

not reported other than lethal dose value]
Inhalation - Rat LC50 - Lethal concentration, 50 percent kill: >170 mg/m3 [Details of toxic effects not

reported other than lethal dose value] (RTECS)

Ingestion: Oral - Rat LD50 - Lethal dose, 50 percent kill: 1200 mg/kg [Reproductive - Fertility - female fertility

index (e.g., number females pregnant per number sperm positive females; number females pregnant per number females mated)]

Oral - Rat LD50 - Lethal dose, 50 percent kill: 4240 mg/kg [Kidney/Ureter/Bladder - Other changes in

urine composition1

Oral - Rat LD50 - Lethal dose, 50 percent kill: 3250 mg/kg [Details of toxic effects not reported other than lethal dose value] (RTECS)

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity:

Ecotoxicity: No ecotoxicity data was found for the product.

Environmental Fate: No environmental information found for this product.

SECTION 13: DISPOSAL CONSIDERATIONS

Description of waste:

Waste Disposal: Consult with the US EPA Guidelines listed in 40 CFR Part 261.3 for the classifications of hazardous

waste prior to disposal. Furthermore, consult with your state and local waste requirements or guidelines, if applicable, to ensure compliance. Arrange disposal in accordance to the EPA and/or state and local

quidelines.

SECTION 14: TRANSPORT INFORMATION

DOT Shipping Name: Refer to Bill of Lading Refer to Bill of Lading DOT UN Number:

IATA Shipping Name: Refer to Bill of Lading IATA UN Number: Refer to Bill of Lading

IMDG UN Number: Refer to Bill of Lading Refer to Bill of Lading IMDG Shipping Name:

SECTION 15: REGULATORY INFORMATION

Safety, health and environmental regulations specific for the product:

Diethylenetriamine:

TSCA Inventory Status: Listed Canada DSL: Listed Phenol, 4,4'-(1-methylethylidene)bis-: TSCA Inventory Status:

Section 313: EPCRA - 40 CFR Part 372 - (SARA Title III) Section 313 Listed Chemical.

California PROP 65: Listed: developmental.

Canada DSL:

Canadian Regulations. WHMIS Hazard Class(es): D2B; E; D2A

All components of this product are on the Canadian Domestic Substances List.

WHMIS Pictograms:





SECTION 16: ADDITIONAL INFORMATION

HMIS Ratings:

HMIS Health Hazard: 3*
HMIS Fire Hazard: 1
HMIS Reactivity: 0
HMIS Personal Protection: X



* Chronic Health Effects

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SDS Author: Actio Corporation

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