SAFETY DATA SHEETS

This SDS packet was issued with item:

075023031

The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).

075022603 075022744 alex44

The safety data sheets (SDS) in this packet apply to one or more components included in the items listed below. Items listed below may require one or more SDS. Please refer to invoice for specific item number(s).

0750020750 075014907 075022611 075022629 075022637 075022645 075022652 075022660 075022678 075022686 075022694 075022702 075022710 075022728 075022736 075022751 075022769 075022777 075022785 075022918 075022926 075022934 075022942 075022959 075022967 075022975 075022991 075023007 075023015 075023049 075023056 075023064 075023072 075023213 075023239 075023262 075023288 075023296 075023304 075023312 075023320 075023346 075023353 075023361 075023379 075023395 075023403 075023411 075023429 075023437 075023510 075023528



MATERIAL SAFETY DATA SHEET

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PREPARED BY: Health, Safety and Environmental Coordinator

EMERGENCY PHONE: 1-800-424-9300 Chemtrec INTERNATIONAL TRANSPORTATION ACCIDENTS: 1-703-527-3887 Chemtrec

I.CHEMICAL PRODUCT IDENTIFICATION

Product Name: 030L White Strippable Booth Coating

Date Printed: 05/03/11 Revision Number: 2

Revision Date: 01/05/11 Supercedes: 10/08/10

II. COMPOSITION/INFORMATION ON INGREDIENTS - (EXPOSURE LIMITS - SEE SECTION VIII)

 INGREDIENT NAME
 CAS #
 %

 Water - for information only
 7732-18-5
 50.01 - 75.00

 Titanium dioxide
 13463-67-7
 1.01 - 5.00

 Triethanolamine
 102-71-6
 1.01 - 5.00

If ingredient percentages do not total 100%, the balance is due to rounding or applies to ingredient(s) deemed nonhazardous under 29 CFR 1910.1200 (Hazard Communication Standard).

III. HAZARDS IDENTIFICATION

	HMIS
HEALTH	2
FLAMMABILITY	0
REACTIVITY	0

 $0 = Least \ 1 = Slight$ 2 = Moderate 3 = High 4 = Extreme * = Chronic Health Effects

Routes of Entry: Inhalation, Ingestion, Skin contact, Eye contact.

Medical Conditions Aggravated: Lung disease.

Immediate (Acute) Health Effects:

Inhalation: Can cause moderate respiratory irritation, dizziness, weakness, fatigue, nausea and headache.

Skin Contact: Can cause moderate skin irritation, defatting, and dermatitis. Not likely to cause permanent damage.

Eye Contact: Contact with the eyes may cause moderate to severe eye injury. Eye contact may result in tearing

and reddening, but not likely to permanently injure eye tissue. Temporary vision impairment (cloudy

or blurred vision) is possible.

Skin Absorption: No known absorption hazard in normal industrial use.

Ingestion: Not normally toxic by ingestion. Can cause abdominal discomfort, nausea, vomiting and diarrhea.

Target Organ Acute Toxicity: Respiratory System.

Long-Term (Chronic) Health Effects:

Inhalation: Upon prolonged and/or repeated exposure, can cause moderate respiratory irritation, dizziness,

weakness, fatigue, nausea and headache.

Skin Contact: Upon prolonged or repeated contact, can cause moderate skin irritation, defatting, and dermatitis. Not

likely to cause permanent damage.

Eye Contact: Upon prolonged or repeated contact, can cause moderate to severe eye injury. Eye contact may result

in tearing and reddening, but not likely to permanently injure eye tissue. Temporary vision

impairment (cloudy or blurred vision) is possible.

Skin Absorption Upon prolonged or repeated exposure, no hazard in normal industrial use.

Carcinogenicity: IARC: No NTP: No OSHA: No

Target Organ Chronic Toxicity: Respiratory Tract.

NOTICE - Reports have associated repeated and prolonged occupational overexposure to solvents with brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling

the contents may be harmful or fatal.

IARC has recently re-evaluated titanium dioxide as possibly carcinogenic to humans (Group 2B) based on animal studies. However, human studies available to date do not suggest that occupational exposure to titanium dioxide increases cancer risk. The ACGIH classifies titanium dioxide as A4 (not classifiable as a human carcinogen). NTP does not classify it as carcinogenic. IARC's evaluation shows inadequate evidence of carcinogenicity in humans, but sufficient evidence of carcinogenicity in experimental animals. The evidence shows that high concentrations of powdered and ultrafine titanium dioxide dust caused respiratory tract cancer in rats exposed by either natural inhalation or direct introduction into the lungs. However, the same results are observed in people working in dusty environments. Therefore, IARC extended this idea to workers with exposures to titanium dioxide dust, if there are insufficient dust control measures in place. Based on the IARC decision, Canadian officials have agreed that titanium dioxide is classifiable as WHMIS D2A (carcinogen), and that it is not necessary to wait for release of the full monograph. OSHA requires the status on US MSDSs to change within 90 days of publication in the IARC monograph volume 93.

IV. FIRST AID

Inhalation: Remove to fresh air. If breathing is difficult, have a trained individual administer oxygen. Seek

medical attention if symptoms persist.

Eyes: Immediately flush eyes with plenty of luke warm water for at least 20 minutes retracting eyelids

often. Tilt the head to prevent chemical from transferring to the uncontaminated eye. Get immediate

medical attention and monitor the eye daily as advised by your physician.

Skin Contact: Wash with soap and water. Remove contaminated clothing and launder. Get medical attention if

irritation develops or persists.

Ingestion: Seek medical advice immediately. Provide ingredients information from Section II of this MSDS to

the medical care provider. Contact your local Poison Control Center (listed in the telephone book), or dial the local "Emergency" (911) number for additional information. Do not induce vomiting unless instructed to do so by a physician or other competent medical personnel. Never give anything by

mouth to an unconscious person.

V. FIRE FIGHTING MEASURES

Lower Flammable/Explosive Limit, % in air: 1.3 Upper Flammable/Explosive Limit, % in air: 8.5

Fire Hazards: Liquid material will not ignite or burn. Dried overspray and dried films from paints and organic

coatings can burn. This product, when dried or cured, may support combustion when subjected to

sources of ignition or heat in sufficient amount.

Extinguishing Media: Use alcohol resistant foam, carbon dioxide, or dry chemical when fighting fires. Water or foam may

cause frothing if liquid is burning but it still may be a useful extinguishing agent if carefully applied to

the surface of the fire. Do Not direct a stream of water into the hot burning liquid.

Fire Fighting Instructions: Do not enter fire area without proper protection including self- contained breathing apparatus and full

protective equipment.

Hazardous Combustion Products: Carbon dioxide, Carbon monoxide, Nitrogen containing gases.

VI. ACCIDENTAL RELEASE MEASURES

Health Consideration for Spill Response: Exposure to the spilled material may be irritating or harmful. Follow personal protective equipment

recommendations found in Section VIII of this MSDS. Additional precautions may be necessary based on special circumstances created by the spill including: the material spilled, the quantity of the spill, and the area in which the spill occurred. Also consider the expertise of employees in the area responding to the spill. Isolate area. Keep unnecessary personnel away.

Spill Mitigation Procedures:

General Methods: Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so.

Wear complete and proper personal protective equipment following the recommendation of Section VIII at a minimum. For liquid spills, dike with suitable absorbent material like granulated clay. Gather

and store in a sealed container pending a waste disposal evaluation.

Air Release: Ventilate the area by opening door and/or turning on fans and blowers.

Water Release: Retain all contaminated water for treatment.

Land Spills: Avoid runoff into storm sewers and ditches that lead to waterways.

VII. HANDLING AND STORAGE

Harmful or irritating; avoid overexposure to the material. Use only in a well ventilated area. As with

all chemicals, good industrial hygiene practices should be followed when handling this material. Do not get in eyes, on skin and clothing. Remove contaminated clothing and wash before reuse.

Storage: Store in a cool dry place. Isolate from incompatible materials. Keep container closed when not in use.

Store in a cool place in original container and protect from sunlight

VIII. ENGINEERING CONTROLS, PERSONAL PROTECTIVE EQUIPMENT, AND EXPOSURE LIMITS

Engineering Controls: Local exhaust ventilation, process enclosures, or other engineering controls are necessary when

handling or using this product to avoid overexposure. Engineering controls must be designed to control vapor concentrations to below levels published in 29 CFR 1910.1000. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended

exposure limits.

Protective Equipment:

Respiratory Tract: If general or local exhaust ventilation is not available or sufficient to reduce exposure to below

acceptable levels, then respiratory protection is required to avoid overexposure when handling this

product.

Eyes: Wear safety glasses with side shields when handling this product. When the possibility exists for eye

contact with splashing or spraying liquid, or airborne material, wear additional eye protection such as chemical splash goggles and/or face shield. Do not wear contact lenses. Have an eye wash station

available.

Skin: Wear protective gloves. Inspect gloves for chemical break-through and replace at regular intervals.

Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water

before eating, drinking, and when leaving work.

Protective Clothing: Wear chemically resistant gloves and apron. (Consult your safety equipment supplier).

CHEMICAL NAME	CAS #	ACGIH TLV	OSHA PEL	IDLH
Water - for information only	7732-18-5	No TLV	No PEL established	Not determined.
Titanium dioxide	13463 -67-7	10 mg/m3 TWA	15 mg/m3 TWA (total dust)	5000 mg/m3 IDLH
Triethanolamine	102-71-6	5 mg/m3 TWA	No PEL established	Not determined.

IX. PHYSICAL DATA

Appearance: White Liquid. Color: White

oH: N/A

Octanol/Water Coeff:
Solubility in Water:
Vapor Density:

Not Determined.
Complete.
N/A

Evaporation Rate: Not determined **Specific Gravity/Density:** 1.068 / 8.91 Lbs./Gl.

V.O.C. 0.53 Lbs/Gl less water & 64 g/l less water & 0.2 Lbs/Gl as exempt solvent; exempt solvent; packed

The VOC content is determined by using a percent solids basis, less water and exempt solvents, for adhesives, coatings and inks and the calculations of EPA Reference Method 24 or equivalent ASTM method approved by the executive office.

Initial Boiling Point: 100 °C; 212 °F **Initial Freezing Point:** 0 °C; 32 °F

X. STABILITY AND REACTIVITY

Stability Information: Stable under normal conditions.

Conditions to Avoid: Contamination., Contact with air, Visible lightDo not freeze.

Chemical Incompatibility: Acids, Aldehydes, Copper, Copper alloys, Strong acids, Strong alkalies.

Hazardous Decomposition Products: Carbon dioxide, Carbon monoxide, Nitrogen containing gases.

XI. TOXICOLOGICAL INFORMATION

Chemical Name LD50/LC50

Ethanol, 2,2',2"-nitrilotri- Oral LD50 Rat: 4920 uL/kg; Oral LD50 Mouse: 5846 mg/kg; Dermal LD50 Rabbit: >20 mL/kg

XII. ECOLOGICAL INFORMATION

Overview: Care should be taken to minimize releases of any industrial chemicals to the environment.

XIII. DISPOSAL CONSIDERATIONS

Waste Description for Unused Product: Waste description not determined.

Disposal Methods: Information in this MSDS is provided only as a guide. Consult with competent authority to determine

proper waste disposal procedures. Clean up and dispose of waste and clean-up materials in accordance

with all federal, state, and local environmental regulations.

Potential EPA Waste Codes: Not determined., .

Some Components Possibly Subjected to USEPA Land Disposal Restrictions:

When disposing of unused products or any waste, the preferred options are to send to a licensed reclaimer or to permitted incinerators. There may be some other ingredients subject to LDR categories. None expected.

XIV. TRANSPORTATION INFORMATION

Agency Basic Description and Label

DOT Not regulated per DOT.

Hazardous Substance

None expected.

XV. REGULATORY INFORMATION

Regulation

SARA 313 Reportable: This product contains no Section 313 chemicals at or above de minimis values.

TSCA Inventory: All components of this product are listed in, or exempt from, the TSCA 8(b) Inventory.

M.S.D.S. Reportable HAP(s): This product contains no HAP chemicals at or above de minimis values..

California Proposition 65: The following statement is made in order to comply with the California Safe Drinking Water and Toxic Enforcement Act of 1986 -

Proposition 65: "WARNING: This product contains chemical(s) known to the State of California to cause cancer and birth defects, or

other reproductive harm."

SARA/CERCLA Section 302: N/A

XVI. ADDITIONAL INFORMATION

Major References: VENDOR'S MSDS's, PAINT & COATINGS HANDBOOK, EPA'S LIST OF LISTS, AND OTHER PUBLISHED MATERIALS.

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Safety Data Sheet

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 6.01

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 12/29/17
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 08/14/17

SECTION 1: Identification

1.1. Product identifier

6028/6029/5916 3MTM ESPETM FILTEKTM SUPREME ULTRA UNIVERSAL RESTORATIVE

1.2. Recommended use and restrictions on use

Recommended use

Dental Product, Restorative

Restrictions on use

For use only by dental professionals

1.3. Supplier's details

MANUFACTURER: 3M

DIVISION: Oral Care Solutions Division

ADDRESS: 3M Center, St. Paul, MN 55144-1000, USA

Telephone: 1-888-3M HELPS (1-888-364-3577)

1.4. Emergency telephone number

1-800-364-3577 or (651) 737-6501 (24 hours)

SECTION 2: Hazard identification

This document has been prepared in accordance with the U.S. OSHA Hazard Communication Standard, which requires the inclusion of all known hazards of the product or ingredients regardless of the potential risk. The risks of the hazards communicated in this document may vary depending on the potential for exposure.

2.1. Hazard classification

Skin Sensitizer: Category 1.

2.2. Label elements

Signal word

Warning

Symbols

Exclamation mark |

Pictograms

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Hazard Statements

May cause an allergic skin reaction.

Precautionary Statements

Prevention:

Avoid breathing dust/fume/gas/mist/vapors/spray.

Wear protective gloves.

Contaminated work clothing must not be allowed out of the workplace.

Response:

IF ON SKIN: Wash with plenty of soap and water.

If skin irritation or rash occurs: Get medical advice/attention.

Wash contaminated clothing before reuse.

Disposal:

Dispose of contents/container in accordance with applicable local/regional/national/international regulations.

SECTION 3: Composition/information on ingredients

Ingredient	C.A.S. No.	% by Wt
SILANE TREATED CERAMIC	444758-98-9	60 - 80 Trade Secret *
SILANE TREATED SILICA	248596-91-0	1 - 10 Trade Secret *
DIURETHANE DIMETHACRYLATE (UDMA)	72869-86-4	1 - 10 Trade Secret *
BISPHENOL A POLYETHYLENE GLYCOL	41637-38-1	1 - 10 Trade Secret *
DIETHER DIMETHACRYLATE		
BISPHENOL A DIGLYCIDYL ETHER	1565-94-2	1 - 10 Trade Secret *
DIMETHACRYLATE (BISGMA)		
SILANE TREATED ZIRCONIA	None	1 - 5 Trade Secret *
POLYETHYLENE GLYCOL DIMETHACRYLATE	25852-47-5	< 5 Trade Secret *
Triethylene glycol dimethacrylate	109-16-0	< 1 Trade Secret *

^{*}The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation:

Remove person to fresh air. If you feel unwell, get medical attention.

Skin Contact:

Immediately wash with soap and water. Remove contaminated clothing and wash before reuse. If signs/symptoms develop, get medical attention.

Eye Contact:

Flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. If signs/symptoms persist, get

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medical attention.

If Swallowed:

Rinse mouth. If you feel unwell, get medical attention.

4.2. Most important symptoms and effects, both acute and delayed

See Section 11.1. Information on toxicological effects.

4.3. Indication of any immediate medical attention and special treatment required

Not applicable

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

In case of fire: Use a fire fighting agent suitable for ordinary combustible material such as water or foam to extinguish.

5.2. Special hazards arising from the substance or mixture

None inherent in this product.

Hazardous Decomposition or By-Products

Substance

Carbon monoxide Carbon dioxide

Condition

During Combustion
During Combustion

5.3. Special protective actions for fire-fighters

No special protective actions for fire-fighters are anticipated.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate area. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Collect as much of the spilled material as possible. Place in a closed container approved for transportation by appropriate authorities. Clean up residue. Seal the container. Dispose of collected material as soon as possible in accordance with applicable local/regional/national/international regulations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid breathing of dust created by cutting, sanding, grinding or machining. A no-touch technique is recommended. If skin contact occurs, wash skin with soap and water. Acrylates may penetrate commonly-used gloves. If product contacts glove, remove and discard glove, wash hands immediately with soap and water and then re-glove. Avoid breathing dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wash contaminated clothing before reuse. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.) Do not get in eyes.

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7.2. Conditions for safe storage including any incompatibilities

Store away from heat. Store away from oxidizing agents.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

No occupational exposure limit values exist for any of the components listed in Section 3 of this SDS.

8.2. Exposure controls

8.2.1. Engineering controls

Use in a well-ventilated area.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended:

Safety Glasses with side shields

Skin/hand protection

See Section 7.1 for additional information on skin protection.

Respiratory protection

None required.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

General Physical Form:Specific Physical Form:

Paste

Odor, Color, Grade: Slight acrylate odor, Tooth colored

Odor threshold No Data Available pН Not Applicable **Melting point** No Data Available **Boiling Point** Not Applicable **Flash Point** No flash point **Evaporation rate** Not Applicable Flammability (solid, gas) Not Classified Flammable Limits(LEL) Not Applicable Flammable Limits(UEL) Not Applicable Vapor Pressure Not Applicable **Vapor Density** Not Applicable **Density** 1.9 g/cm3

Specific Gravity1.9 [Ref Std:WATER=1] **Solubility In Water**1.9 Data Available

Solubility- non-water

No Data Available
Partition coefficient: n-octanol/ water

Autoignition temperature

No Data Available
No Data Available
No Data Available
No Data Available

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12/29/17

ViscosityNo Data AvailableMolecular weightNo Data AvailableVolatile Organic CompoundsNot ApplicableVOC Less H2O & Exempt SolventsNot Applicable

SECTION 10: Stability and reactivity

10.1. Reactivity

This material is considered to be non reactive under normal use conditions.

10.2. Chemical stability

Stable.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Heat

10.5. Incompatible materials

Strong oxidizing agents

10.6. Hazardous decomposition products

Substance

Condition

None known.

Refer to section 5.2 for hazardous decomposition products during combustion.

SECTION 11: Toxicological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labeling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

This document has been prepared in accordance with the U.S. OSHA Hazard Communication Standard, which requires the inclusion of all known hazards of the product or ingredients regardless of the potential risk. The risks of the hazards communicated in this document may vary depending on the potential for exposure.

The information below represents toxicological information associated with the individual components of the uncured

The information below represents toxicological information associated with the individual components of the uncured product. Once properly mixed and/or cured, the product is safe for its intended use.

11.1. Information on Toxicological effects

Signs and Symptoms of Exposure

Based on test data and/or information on the components, this material may produce the following health effects:

Inhalation:

Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

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Skin Contact:

Contact with the skin during product use is not expected to result in significant irritation. Allergic Skin Reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

Eye Contact:

Contact with the eyes during product use is not expected to result in significant irritation.

Ingestion:

May be harmful if swallowed.

Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

Toxicological Data

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

Acute Toxicity

Name	Route	Species	Value
Overall product	Dermal		No data available; calculated ATE >5,000 mg/kg
Overall product	Ingestion		No data available; calculated ATE2,000 - 5,000 mg/kg
SILANE TREATED CERAMIC	Dermal		LD50 estimated to be > 5,000 mg/kg
SILANE TREATED CERAMIC	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg
SILANE TREATED SILICA	Dermal		LD50 estimated to be > 5,000 mg/kg
SILANE TREATED SILICA	Ingestion		LD50 estimated to be > 5,000 mg/kg
BISPHENOL A POLYETHYLENE GLYCOL DIETHER DIMETHACRYLATE	Dermal	Professio nal judgeme nt	LD50 estimated to be > 5,000 mg/kg
DIURETHANE DIMETHACRYLATE (UDMA)	Dermal	Professio nal judgeme nt	LD50 estimated to be > 5,000 mg/kg
BISPHENOL A POLYETHYLENE GLYCOL DIETHER DIMETHACRYLATE	Ingestion	Rat	LD50 > 2,000 mg/kg
DIURETHANE DIMETHACRYLATE (UDMA)	Ingestion	Rat	LD50 > 5,000 mg/kg
BISPHENOL A DIGLYCIDYL ETHER DIMETHACRYLATE (BISGMA)	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg
BISPHENOL A DIGLYCIDYL ETHER DIMETHACRYLATE (BISGMA)	Dermal	Professio nal judgeme nt	LD50 estimated to be 2,000 - 5,000 mg/kg
SILANE TREATED ZIRCONIA	Dermal		LD50 estimated to be > 5,000 mg/kg
SILANE TREATED ZIRCONIA	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg
POLYETHYLENE GLYCOL DIMETHACRYLATE	Dermal		LD50 estimated to be > 5,000 mg/kg
POLYETHYLENE GLYCOL DIMETHACRYLATE	Ingestion	Rat	LD50 > 5,000 mg/kg
Triethylene glycol dimethacrylate	Dermal	Professio nal judgeme nt	LD50 estimated to be > 5,000 mg/kg
Triethylene glycol dimethacrylate	Ingestion	Rat	LD50 10,837 mg/kg

 \overline{ATE} = acute toxicity estimate

Skin Corrosion/Irritation

Skiii Corrosion/irritation		
Name	Species	Value
	*	
SILANE TREATED CERAMIC	similar	No significant irritation
	compoun	
	ds	
SILANE TREATED SILICA	Professio	No significant irritation
	nal	
	judgeme	

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	nt	
BISPHENOL A DIGLYCIDYL ETHER DIMETHACRYLATE (BISGMA)	Not	Minimal irritation
	available	
SILANE TREATED ZIRCONIA	Rabbit	No significant irritation
Triethylene glycol dimethacrylate	Guinea	Mild irritant
	pig	

Serious Eye Damage/Irritation

Name	Species	Value
SILANE TREATED CERAMIC	similar	Mild irritant
	compoun	
	ds	
SILANE TREATED SILICA	Professio	No significant irritation
	nal	
	judgeme	
	nt	
BISPHENOL A DIGLYCIDYL ETHER DIMETHACRYLATE (BISGMA)	Not	Moderate irritant
	available	
SILANE TREATED ZIRCONIA	Rabbit	Mild irritant
Triethylene glycol dimethacrylate	Professio	Moderate irritant
	nal	
	judgeme	
	nt	

Skin Sensitization

Name	Species	Value
SILANE TREATED CERAMIC	similar	Not classified
	compoun	
	ds	
BISPHENOL A POLYETHYLENE GLYCOL DIETHER	Guinea	Not classified
DIMETHACRYLATE	pig	
DIURETHANE DIMETHACRYLATE (UDMA)	Guinea	Sensitizing
	pig	
BISPHENOL A DIGLYCIDYL ETHER DIMETHACRYLATE (BISGMA)	Guinea	Sensitizing
	pig	_
Triethylene glycol dimethacrylate	Human	Sensitizing
	and	
	animal	

Respiratory Sensitization

For the component/components, either no data are currently available or the data are not sufficient for classification.

Germ Cell Mutagenicity

Name		Value
BISPHENOL A POLYETHYLENE GLYCOL DIETHER DIMETHACRYLATE	In Vitro	Not mutagenic
BISPHENOL A DIGLYCIDYL ETHER DIMETHACRYLATE (BISGMA)	In Vitro	Some positive data exist, but the data are not sufficient for classification
SILANE TREATED ZIRCONIA	In Vitro	Some positive data exist, but the data are not sufficient for classification
Triethylene glycol dimethacrylate	In Vitro	Some positive data exist, but the data are not sufficient for classification

Carcinogenicity

curemogenery			
Name	Route	Species	Value
SILANE TREATED CERAMIC	Inhalation	similar compoun ds	Some positive data exist, but the data are not sufficient for classification
SILANE TREATED ZIRCONIA	Inhalation	Multiple animal species	Some positive data exist, but the data are not sufficient for classification
Triethylene glycol dimethacrylate	Dermal	Mouse	Not carcinogenic

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test Result	Exposure Duration
BISPHENOL A DIGLYCIDYL ETHER DIMETHACRYLATE (BISGMA)	Ingestion	Not classified for female reproduction	Mouse	NOAEL 0.8 mg/kg/day	premating & during gestation
BISPHENOL A DIGLYCIDYL ETHER DIMETHACRYLATE (BISGMA)	Ingestion	Not classified for male reproduction	Mouse	NOAEL 0.8 mg/kg/day	premating & during gestation
BISPHENOL A DIGLYCIDYL ETHER DIMETHACRYLATE (BISGMA)	Ingestion	Not classified for development	Mouse	NOAEL 0.8 mg/kg/day	premating & during gestation
Triethylene glycol dimethacrylate	Ingestion	Not classified for female reproduction	Mouse	NOAEL 1 mg/kg/day	1 generation
Triethylene glycol dimethacrylate	Ingestion	Not classified for male reproduction	Mouse	NOAEL 1 mg/kg/day	1 generation
Triethylene glycol dimethacrylate	Ingestion	Not classified for development	Mouse	NOAEL 1 mg/kg/day	1 generation

Target Organ(s)

Specific Target Organ Toxicity - single exposure

For the component/components, either no data are currently available or the data are not sufficient for classification.

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
SILANE TREATED CERAMIC	Inhalation	pulmonary fibrosis	Not classified	similar compoun ds	NOAEL Not available	
BISPHENOL A DIGLYCIDYL ETHER DIMETHACRYLATE (BISGMA)	Ingestion	endocrine system liver nervous system kidney and/or bladder	Not classified	Mouse	NOAEL 0.8 mg/kg/day	premating & during gestation
SILANE TREATED ZIRCONIA	Inhalation	pulmonary fibrosis	Not classified	Multiple animal species	NOAEL Not available	
SILANE TREATED ZIRCONIA	Inhalation	respiratory system	Not classified	Human	NOAEL Not available	occupational exposure
Triethylene glycol dimethacrylate	Dermal	kidney and/or bladder blood	Not classified	Mouse	NOAEL 833 mg/kg/day	78 weeks

Aspiration Hazard

For the component/components, either no data are currently available or the data are not sufficient for classification.

Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

SECTION 12: Ecological information

Ecotoxicological information

Please contact the address or phone number listed on the first page of the SDS for additional ecotoxicological information on this material and/or its components.

Chemical fate information

Please contact the address or phone number listed on the first page of the SDS for additional chemical fate information on this material and/or its components.

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SECTION 13: Disposal considerations

13.1. Disposal methods

Dispose of contents/ container in accordance with the local/regional/national/international regulations.

Dispose of completely cured (or polymerized) material in a permitted industrial waste facility. As a disposal alternative, incinerate uncured product in a permitted waste incineration facility. If no other disposal options are available, waste product that has been completely cured or polymerized may be placed in a landfill properly designed for industrial waste.

EPA Hazardous Waste Number (RCRA): Not regulated

SECTION 14: Transport Information

For Transport Information, please visit http://3M.com/Transportinfo or call 1-800-364-3577 or 651-737-6501.

SECTION 15: Regulatory information

15.1. US Federal Regulations

Contact 3M for more information.

EPCRA 311/312 Hazard Classifications:

Physical Hazards
Not applicable

Health Hazards

Respiratory or Skin Sensitization

Additional TSCA Information

Components	CAS No	Consent Order/SNUR
SILANE TREATED SILICA	248596-91-0	Allowed use(s): Coating additive.

15.2. State Regulations

Contact 3M for more information.

California Proposition 65

<u>Ingredient</u>	<u>C.A.S. No.</u>	<u>Classification</u>
Toluene	108-88-3	Developmental Toxin

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

15.3. Chemical Inventories

This material contains one or more substances not listed on the TSCA Inventory. Commercial use of this material is regulated by the FDA.

Contact 3M for more information.

15.4. International Regulations

Contact 3M for more information.

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This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SECTION 16: Other information

NFPA Hazard Classification

Health: 2 Flammability: 1 Instability: 0 Special Hazards: None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

 Document Group:
 26-5783-1
 Version Number:
 6.01

 Issue Date:
 12/29/17
 Supercedes Date:
 08/14/17

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SAFETY DATA SHEET

Date of issue/Date of revision

8 January 2015

Version 2



Section 1. Identification

Product name : 030-E / 030-FT / 030-FD ALL PURPOSE BRIGHT WHITE

Product code : Z6208BW
Other means of : Not available.

identification

Product type : Liquid.

Relevant identified uses of the substance or mixture and uses advised against

Product use : Industrial applications.

Use of the substance/ : C

mixture

: Coating. Paints. Painting-related materials.

Uses advised against : Not applicable.

Supplier : Chemco Manufacturing

Emergency telephone

number

: Chemtrec 800-424-9300

Technical Phone Number

Section 2. Hazards identification

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard

(29 CFR 1910.1200).

Classification of the : CARCINOGENICITY - Category 1A

substance or mixture TOXIC TO REPRODUCTION (Unborn child) - Category 1B

TOXIC TO REPRODUCTION (Fertility) - Category 2

Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 10.2%

GHS label elements

Hazard pictograms

Signal word : Danger

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Product name ZR-6208 ALL PURPOSE BRIGHT WHITE

Section 2. Hazards identification

Hazard statements

: May cause cancer.

May damage the unborn child. Suspected of damaging fertility.

Precautionary statements

Prevention

: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required.

Response

: IF exposed or concerned: Get medical attention.

Storage

: Store locked up.

Disposal

: Dispose of contents and container in accordance with all local, regional, national and

international regulations.

Supplemental label

elements

: Sanding and grinding dusts may be harmful if inhaled. This product contains crystalline silica which can cause lung cancer or silicosis. The risk of cancer depends on the duration and level of exposure to dust from sanding surfaces or mist from spray

applications. Emits toxic fumes when heated.

Hazards not otherwise

classified

: None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Product name : ZR-6208 ALL PURPOSE BRIGHT WHITE

Ingredient name	%	CAS number
Limestone	7 - 13	1317-65-3
titanium dioxide	3 - 7	13463-67-7
propane-1,2-diol	1 - 5	57-55-6
2-(2-butoxyethoxy)ethanol	1 - 5	112-34-5
butyl benzyl phthalate	0.5 - 1.5	85-68-7
Distillates (petroleum), solvent-refined light naphthenic	0.1 - 1	64741-97-5
vinyl acetate	0.1 - 1	108-05-4
crystalline silica, respirable powder (<10 microns)	0.1 - 1	14808-60-7

SUB codes represent substances without registered CAS Numbers.

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

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

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

If ingestion, irritation, any type of overexposure or symptoms of overexposure occur during or persists after use of this product, contact a POISON CONTROL CENTER, EMERGENCY ROOM OR PHYSICIAN immediately; have Safety Data Sheet information available. Never give anything by mouth to an unconscious or convulsing person.

Description of necessary first aid measures

Eye contact

: Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention.

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Section 4. First aid measures

Inhalation : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is

irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained

personnel.

Skin contact : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water

or use recognized skin cleanser. Do NOT use solvents or thinners.

Ingestion : If swallowed, seek medical advice immediately and show this container or label. Keep

person warm and at rest. Do NOT induce vomiting.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact
 Inhalation
 Skin contact
 Ingestion
 No known significant effects or critical hazards.
 No known significant effects or critical hazards.
 No known significant effects or critical hazards.
 No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : No specific data.

Inhalation : Adverse symptoms may include the following:

reduced fetal weight increase in fetal deaths skeletal malformations

Skin contact : Adverse symptoms may include the following:

reduced fetal weight increase in fetal deaths skeletal malformations

Ingestion : Adverse symptoms may include the following:

reduced fetal weight increase in fetal deaths skeletal malformations

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large

quantities have been ingested or inhaled.

Specific treatments : No specific treatment.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. If it is

suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water

before removing it, or wear gloves.

See toxicological information (Section 11)

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Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

: Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media

: None known.

Specific hazards arising from the chemical

: In a fire or if heated, a pressure increase will occur and the container may burst. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous thermal decomposition products : Decomposition products may include the following materials: carbon dioxide

carbon monoxide metal oxide/oxides

Special protective actions for fire-fighters

: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders: If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For nonemergency personnel".

Environmental precautions

: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill

: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

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Product name ZR-6208 ALL PURPOSE BRIGHT WHITE

Section 6. Accidental release measures

Large spill

: Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures

: Put on appropriate personal protective equipment (see Section 8). Avoid exposure obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Special precautions

: If this material is part of a multiple component system, read the Safety Data Sheet(s) for the other component or components before blending as the resulting mixture may have the hazards of all of its parts.

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

including any incompatibilities

Conditions for safe storage, : Do not store below the following temperature: 5°C (41°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

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Section 8. Exposure controls/personal protection

Ingredient name	Exposure limits
Imestone	OSHA PEL (United States, 2/2013). TWA: 5 mg/m³ 8 hours. Form: Respirable
titanium dioxide	fraction TWA: 15 mg/m³ 8 hours. Form: Total dust OSHA PEL (United States, 2/2013). TWA: 15 mg/m³ 8 hours. Form: Total dust ACGIH TLV (United States, 4/2014).
propane-1,2-diol	TWA: 10 mg/m³ 8 hours. IPEL (PPG). TWA: 10 mg/m³
2-(2-butoxyethoxy)ethanol	ACGIH TLV (United States, 4/2014). TWA: 10 ppm 8 hours. Form: Inhalable fraction and vapor
Distillates (petroleum), solvent-refined light naphthenic	ACGIH TLV (United States, 4/2014). TWA: 5 mg/m³ 8 hours. Form: Inhalable fraction OSHA PEL (United States, 2/2013).
vinyl acetate	TWA: 5 mg/m³ 8 hours. ACGIH TLV (United States, 4/2014). STEL: 53 mg/m³ 15 minutes. STEL: 15 ppm 15 minutes. TWA: 35 mg/m³ 8 hours.
crystalline silica, respirable powder (<10 microns)	TWA: 10 ppm 8 hours. OSHA PEL Z3 (United States, 2/2013). TWA: 10 MG/M3 / (%SiO2+2) 8 hours. Form: Respirable TWA: 250 MPPCF / (%SiO2+5) 8 hours.
	Form: Respirable ACGIH TLV (United States, 4/2014). TWA: 0.025 mg/m³ 8 hours. Form: Respirable fraction Respirable

Key to abbreviations

Α	= Acceptable Maximum Peak	S	 Potential skin absorption
ACGIH	 American Conference of Governmental Industrial Hygienists. 	SR	 Respiratory sensitization
C	= Ceiling Limit	SS	= Skin sensitization
F	= Fume	STEL	= Short term Exposure limit values
IPEL	= Internal Permissible Exposure Limit	TD	= Total dust
OSHA	 Occupational Safety and Health Administration. 	TLV	= Threshold Limit Value
R	= Respirable	TWA	= Time Weighted Average
Z	= OSHA 29CFR 1910.1200 Subpart Z - Toxic and Hazardous Substances		

Consult local authorities for acceptable exposure limits.

procedures

Recommended monitoring: If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

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Section 8. Exposure controls/personal protection

Appropriate engineering controls

: If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Environmental exposure controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures : Wash hands, forearms

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.

Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection Skin protection

: Safety glasses with side shields.

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be

worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the

protection time of the gloves cannot be accurately estimated.

Body protection : 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.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected

based on the task being performed and the risks involved and should be approved by a

specialist before handling this product.

Respiratory protection : Respirator selection must be based on known or anticipated exposure levels, the

hazards of the product and the safe working limits of the selected respirator. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying

with an approved standard if a risk assessment indicates this is necessary.

Section 9. Physical and chemical properties

Appearance

Physical state : Liquid.

Color : Not available.
Odor : Not available.
Odor threshold : Not available.
pH : Not available.
Melting point : Not available.

Boiling point : >37.78°C (>100°F)

Flash point : Closed cup: 93.33°C (200°F)

Auto-ignition temperature : Not available.

Decomposition temperature : Not available.

Flammability (solid, gas) : Not available.

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Section 9. Physical and chemical properties

: Not available.

Lower and upper explosive

(flammable) limits

Evaporation rate : 0.34 (butyl acetate = 1)

: 2.3 kPa (17.2 mm Hg) [room temperature] Vapor pressure

Vapor density : Not available.

Relative density : 1.17 : 9.76 Density (lbs / gal)

: Insoluble in the following materials: cold water. Solubility

Partition coefficient: n-

octanol/water

: Not available.

Viscosity : Kinematic (40°C (104°F)): >0.21 cm²/s (>21 cSt)

: 65% (v/v), 54.78% (w/w) Volatility

: 45.22 % Solid. (w/w)

Section 10. Stability and reactivity

: No specific test data related to reactivity available for this product or its ingredients. Reactivity

Chemical stability : The product is stable.

Possibility of hazardous

reactions

: Under normal conditions of storage and use, hazardous reactions will not occur.

: When exposed to high temperatures may produce hazardous decomposition products. Conditions to avoid

Refer to protective measures listed in sections 7 and 8.

: Keep away from the following materials to prevent strong exothermic reactions: Incompatible materials

oxidizing agents, strong alkalis, strong acids.

Hazardous decomposition

products

: Decomposition products may include the following materials: carbon monoxide, carbon

dioxide, smoke, oxides of nitrogen.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
trtanium dioxide	LD50 Oral	Rat	>10 g/kg	7-1
propane-1,2-diol	LD50 Dermal	Rabbit	20800 mg/kg	-
	LD50 Oral	Rat	20 g/kg	-
2-(2-butoxyethoxy)ethanol	LD50 Dermal	Rabbit	2700 mg/kg	-
	LD50 Oral	Rat	4500 mg/kg	-
butyl benzyl phthalate	LC50 Inhalation Vapor	Rat	>6700 mg/m ³	4 hours
	LD50 Dermal	Rabbit	>10 g/kg	-
	LD50 Dermal	Rat	6700 mg/kg	-

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Product code 030-E / 030-FT / 030-FD / 6208BW Date of issue 8 January 2015 Version 2 Product name ZR-6208 ALL PURPOSE BRIGHT WHITE Section 11. Toxicological information LD50 Oral Rat 2.33 g/kg LD50 Dermal Distillates (petroleum), Rabbit >5000 mg/kg solvent-refined light naphthenic Rat LD50 Oral >5000 mg/kg 4 hours vinyl acetate LC50 Inhalation Vapor Mouse 1460 ppm LC50 Inhalation Vapor 11400 mg/m³ Rat 4 hours LC50 Inhalation Vapor Rat 3680 ppm 4 hours LD50 Dermal Rabbit 2335 mg/kg LD50 Oral Rat 2.5 g/kg : There are no data available on the mixture itself. Conclusion/Summary Irritation/Corrosion Conclusion/Summary Skin : There are no data available on the mixture itself. : There are no data available on the mixture itself. Eyes : There are no data available on the mixture itself. Respiratory Sensitization Conclusion/Summary : There are no data available on the mixture itself. Skin Respiratory : There are no data available on the mixture itself. Mutagenicity : There are no data available on the mixture itself. Conclusion/Summary Carcinogenicity Conclusion/Summary : There are no data available on the mixture itself. Classification Product/ingredient name **OSHA** IARC NTP 2B titanium dioxide butyl benzyl phthalate 3 2B vinyl acetate crystalline silica, respirable 1 Known to be a human carcinogen. powder (<10 microns) Carcinogen Classification code: IARC: 1, 2A, 2B, 3, 4 NTP: Known to be a human carcinogen; Reasonably anticipated to be a human carcinogen

Not listed/not regulated: -

Reproductive toxicity

: There are no data available on the mixture itself. Conclusion/Summary

Teratogenicity

: There are no data available on the mixture itself. Conclusion/Summary

Specific target organ toxicity (single exposure)

Name	Category
vinyl acetate	Category 3

Specific target organ toxicity (repeated exposure)

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Section 11. Toxicological information

Name	Category
winyl acetate crystalline silica, respirable powder (<10 microns)	Category 1 Category 1

Target organs

: Contains material which may cause damage to the following organs: blood, lungs, liver, mucous membranes, upper respiratory tract, skin, eyes, central nervous system (CNS), nose/sinuses.

Aspiration hazard

Name	Result	
Distillates (petroleum), solvent-refined light naphthenic	ASPIRATION HAZARD - Category 1	

Information on the likely routes of exposure

Potential acute health effects

: No known significant effects or critical hazards. Eye contact Inhalation : No known significant effects or critical hazards. : No known significant effects or critical hazards. Skin contact Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eve contact : No specific data.

Inhalation : Adverse symptoms may include the following:

reduced fetal weight increase in fetal deaths skeletal malformations

Skin contact : Adverse symptoms may include the following:

> reduced fetal weight increase in fetal deaths skeletal malformations

: Adverse symptoms may include the following: Ingestion

> reduced fetal weight increase in fetal deaths skeletal malformations

Delayed and immediate effects and also chronic effects from short and long term exposure

Conclusion/Summary

: There are no data available on the mixture itself. This product contains crystalline silica which can cause lung cancer or silicosis. The risk of cancer depends on the duration and level of exposure to dust from sanding surfaces or mist from spray applications. If splashed in the eyes, the liquid may cause irritation and reversible damage. Ingestion may cause nausea, diarrhea and vomiting. This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Short term exposure

Potential immediate

effects

: There are no data available on the mixture itself.

Potential delayed effects

: There are no data available on the mixture itself.

Long term exposure

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Section 11. Toxicological information

Potential immediate

: There are no data available on the mixture itself.

effects

Potential delayed effects : There are no data available on the mixture itself.

Potential chronic health effects

General : No known significant effects or critical hazards.

Carcinogenicity: May cause cancer. Risk of cancer depends on duration and level of exposure.

Mutagenicity: No known significant effects or critical hazards.

Teratogenicity: May damage the unborn child.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : Suspected of damaging fertility.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Oral Dermal	108685.3 mg/kg 141541.3 mg/kg
Inhalation (vapors)	259.5 mg/l

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
tranium dioxide vinyl acetate	Acute LC50 >100 mg/l Fresh water Acute LC50 31080 to 36630 µg/l Fresh water	Daphnia - Daphnia magna Fish - Poecilia reticulata	48 hours 96 hours

Persistence and degradability

Not available.

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
propane-1,2-diol 2-(2-butoxyethoxy)ethanol butyl benzyl phthalate Distillates (petroleum), solvent-refined light naphthenic vinyl acetate	-0.92	-	low
	0.56	-	low
	4.73	16.22	low
	3.9 to 6	-	high

Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

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Product name ZR-6208 ALL PURPOSE BRIGHT WHITE

Section 13. Disposal considerations

Disposal methods

: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations. Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees. Section 6. Accidental release measures

14. Transport information

	DOT	IMDG	IATA
UN number	UN3082	Not regulated.	Not regulated.
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. [butyl benzyl phthalate)	*	-
Transport hazard class (es)	9	•	-
Packing group	III	-	
Environmental hazards	No.	No.	No.
Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.
Product RQ (lbs)	9634.9	Not applicable.	Not applicable.
RQ substances	(butyl benzyl phthalate)	Not applicable.	Not applicable.

Additional information

DOT

: Package sizes shipped in quantities less than the product reportable quantity are not subject to the

RQ (reportable quantity) transportation requirements.

: None identified. IMDG

IATA : None identified.

Special precautions for user : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in

the event of an accident or spillage.

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United States inventory (TSCA 8b): All components are listed or exempted.

Australia inventory (AICS) : At least one component is not listed.

Canada inventory (DSL) : All components are listed or exempted.

China inventory (IECSC) : All components are listed or exempted.

Europe inventory (REACH): Please contact your supplier for information on the inventory status of this material.

Japan inventory (ENCS) : At least one component is not listed.

Korea inventory (KECI) : At least one component is not listed.

New Zealand (NZIoC) : Not determined.

Philippines inventory (PICCS) : All components are listed or exempted.

United States

United States - TSCA 5(a)2 - Final significant new use rules:

sodium nitrite Listed

SARA 302/304

SARA 304 RQ : 2074585.4 lbs / 941861.8 kg [212033.9 gal / 802635.8 L]

Composition/information on ingredients

Name	EHS	SARA 302 TPQ		SARA 304 RQ	
		(lbs)	(gallons)	(lbs)	(gallons)
vinyl acetate	Yes.	1000	129	5000	644.8

SARA 311/312

Classification : Delayed (chronic) health hazard

Composition/information on ingredients

Name	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
tranium dioxide	No.	No.	No.	No.	Yes.
2-(2-butoxyethoxy)ethanol	Yes.	No.	No.	Yes.	No.
butyl benzyl phthalate	No.	No.	No.	Yes.	Yes.
Distillates (petroleum), solvent-refined light naphthenic	No.	No.	No.	No.	Yes.
vinyl acetate	Yes.	No.	Yes.	Yes.	Yes.
crystalline silica, respirable powder (<10 microns)	No.	No.	No.	No.	Yes.

SARA 313

<u>Chemical name</u> <u>CAS number</u> <u>Concentration</u>

Supplier notification : 2-(2-butoxyethoxy)ethanol 112-34-5 1 - 5 vinvl acetate 108-05-4 0.1 - 1

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

Additional environmental information is contained on the Environmental Data Sheet for this product, which can be obtained from your Chemco Manufacturing representative.

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California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

Section 16. Other information

Hazardous Material Information System (U.S.A.)

Health: 2 * Flammability: 1 Physical hazards: 0

(*) - Chronic effects

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)

Health: 2 Flammability: 1 Instability: 0

Date of previous issue : 10/18/2014.

Organization that prepared : EHS

the MSDS

Key to abbreviations : ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships,

1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

UN = United Nations

Indicates information that has changed from previously issued version.

Disclaimer

The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by Chemco Manufacturing, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.

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