

## **SAFETY DATA SHEET**

## **E250 DTM Epoxy Primer White**

## Section 1. Identification

GHS product identifier

**E250 DTM Epoxy Primer White** 

Other means of identification

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

: FOR INDUSTRIAL USE ONLY

Supplier/Manufacturer

: Akzo Nobel Coatings, Inc.

1845 Maxwell Troy, MI, 48084

USA

(800) 618-1010

Canadian Supplier

: Akzo Nobel Coatings Ltd. 110 Woodbine Downs Blvd. Unit #4 Etobicoke, Ontario

Canada M9W 5S6 +1 (800) 618-1010

Emergency telephone number : CHEMTREC +1 (800) 424-9300 (Inside the US)

CHEMTREC International +1 (703) 527-3887 (Outside the US, collect calls

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Safety Data Sheet Version

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: 21 January 2016

Akzo Nobel Coatings Inc. encourages and expects you to read and understand this entire MSDS, as there is important information throughout the document. Further, Akzo Nobel Coatings Inc. expects you to follow the precautions identified in this document unless your use conditions would necessitate other appropriate methods or actions.

To promote safe handling, each customer or recipient should: 1) Notify its employees, agents, contractors, and others whom it knows or believes will use this material of the information contained in this MSDS and any other information regarding hazards and safety; 2) Furnish this same information to each of its customers for the product; 3) Request its customers to notify their employees, customers, and other users of the product of this information; and 4) Notify its employees, agents, contractors, and others that the precautions identified for this product and any other products with which mixtures may be created are transferable and cumulative to the mixture.

## 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 substance or mixture

FLAMMABLE LIQUIDS - Category 3

SKIN CORROSION/IRRITATION - Category 2

SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A

SKIN SENSITIZATION - Category 1 CARCINOGENICITY - Category 2

#### **GHS label elements**

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### Section 2. Hazards identification

Hazard pictograms







Signal word

Hazard statements

: Warning

Flammable liquid and vapour. Causes serious eye irritation.

Causes skin irritation.

May cause an allergic skin reaction. Suspected of causing cancer.

Precautionary statements

Prevention

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves. Wear eye or face protection. Wear protective clothing. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Keep container tightly closed. Avoid breathing vapor. Wash hands thoroughly after handling. Contaminated work clothing must not be

allowed out of the workplace.

Response

IF exposed or concerned: Get medical attention. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If the irritation presides of the still restriction presides of the still restriction.

rinsing. If eye irritation persists: Get medical attention.

Storage

Store locked up. Store in a well-ventilated place. Keep cool.

Disposal

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

international regulations.

Hazards not otherwise

classified

: None known.

## Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	%	CAS number
titanium dioxide	15 - 20	13463-67-7
4-chloro-α,α,α-trifluorotoluene	15 - 20	98-56-6
Bisphenol A, polymer with glycidol, bis(glycidylether)	10 - 15	25036-25-3
trizinc bis(orthophosphate)	5 - 10	7779-90-0
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin	5 - 10	25068-38-6
1-methoxy-2-propanol	1-5	107-98-2
heptan-2-one	1-5	110-43-0
acetone	1-5	67-64-1
Talc , not containing asbestiform fibres	1-5	14807-96-6
aluminium orthophosphate	1-5	7784-30-7

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

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## Section 3. Composition/information on ingredients

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

#### Description of necessary first aid measures

Eye contact : immediately flush eyes with plenty of water, occasionally lifting the upper and lower

eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10

minutes. Get medical attention.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If

not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Skin contact : Wash with plenty of soap and water. Remove contaminated clothing and shoes. W

: Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean

shoes thoroughly before reuse.

Ingestion : Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and

keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery

position and get medical attention immediately. Maintain an open airway. Loosen tight

clothing such as a collar, tie, belt or waistband,

#### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

Eye contact : Causes serious eye irritation.

Inhalation : No known significant effects or critical hazards.

Skin contact : Causes skin irritation. May cause an allergic skin reaction.

Ingestion : No known significant effects or critical hazards.

#### Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:

pain or irritation watering

redness

Inhalation : No specific data.

Skin contact : Adverse symptoms may include the following:

irritation redness

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### Section 4. First aid measures

Ingestion

: No specific data.

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

Notes to physician

: In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Specific treatments

: No specific treatment.

Protection of first-aiders

: No action shall be taken involving any personal risk or without suitable training. 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)

## Section 5. Fire-fighting measures

#### Extinguishing media

Suitable extinguishing

media

: Use dry chemical, COz, water spray (fog) or foam.

Unsuitable extinguishing

media

: Do not use water jet,

Specific hazards arising from the chemical

: Flammable liquid and vapour. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may

create fire or explosion hazard.

Hazardous thermal decomposition products

: Decomposition products may include the following materials:

carbon dioxide
carbon monoxide
phosphorus oxides
halogenated compounds
carbonyl halides
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. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

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. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

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## Section 6. Accidental release measures

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. Use spark-proof tools and explosion-proof equipment. 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.

Large spill

Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. 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). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. 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. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

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 hydiene measures.

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## Section 7. Handling and storage

including any incompatibilities

Conditions for safe storage, : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and wellventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. 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

Ingredient name	Exposure limits
Iltanium dioxide	OSHA PEL (United States, 2/2013).
	TWA: 15 mg/m³ 8 hours. Form: Total dust
	ACGIH TLV (United States, 3/2015).
	TWA: 10 mg/m³ 8 hours.
4-chloro-α,α,α-trifluorotoluene	None.
Bisphenol A, polymer with glycidol, bis(glycidylether)	None.
trizinc bis(orthophosphate)	None.
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin	None.
1-methoxy-2-propanol	ACGIH TLV (United States, 3/2015).
	STEL: 369 mg/m³ 15 minutes.
	STEL: 100 ppm 15 minutes.
	TWA: 184 mg/m³ 8 hours.
	TWA: 50 ppm 8 hours.
	NIOSH REL (United States, 10/2013).
·	STEL: 540 mg/m³ 15 minutes.
	STEL: 150 ppm 15 minutes.
	TWA: 360 mg/m³ 10 hours.
	TWA: 100 ppm 10 hours.
heptan-2-one	ACGIH TLV (United States, 3/2015).
•	TWA: 233 mg/m <sup>3</sup> 8 hours.
	TWA: 50 ppm 8 hours.
	NIOSH REL (United States, 10/2013).
	TWA: 465 mg/m³ 10 hours.
	TWA: 100 ppm 10 hours.
	OSHA PEL (United States, 2/2013).
	TWA: 465 mg/m³ 8 hours.
	TWA: 100 ppm 8 hours.
acetone	ACGIH TLV (United States, 3/2015).
	STEL: 500 ppm 15 minutes.
	TWA: 250 ppm 8 hours.
	NIOSH REL (United States, 10/2013).
	TWA: 590 mg/m³ 10 hours.
	TWA: 250 ppm 10 hours.
	OSHA PEL (United States, 2/2013).
	TWA: 2400 mg/m³ 8 hours.
	TWA: 1000 ppm 8 hours.
Talc , not containing asbestiform fibres	NIOSH REL (United States, 10/2013).
· · · · · · · · · · · · · · · · · · ·	TWA: 2 mg/m³ 10 hours, Form: Respirable

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	fraction
	ACGIH TLV (United States, 3/2015).
	TWA: 2 mg/m³ 8 hours. Form: Respirable
	fraction
	OSHA PEL Z3 (United States, 2/2013).
	TWA: 0.1 f/cc 8 hours. Form: containing
	asbestos
	STEL: 1 f/cc 30 minutes. Form: containing
	asbestos
	STEL: 1 f/cc 30 minutes, Form: not
	containing asbestos
	TWA: 20 mppcf 8 hours. Form: not
	containing asbestos
aluminium orthophosphate	ACGIH TLV (United States, 3/2015).
	TWA: 1 mg/m³ 8 hours. Form: Respirable
	fraction

## Appropriate engineering controls

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

## 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 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. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

#### Eye/face protection

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

#### Skin protection

#### 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.

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## Section 8. Exposure controls/personal protection

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. When there is a risk of ignition from static electricity, wear antistatic protective clothing. For the greatest protection from static discharges, clothing

should include anti-static overalls, boots and gloves.

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 : Use a properly fitted, air-purifying or air-fed respirator complying with an approved

standard if a risk assessment indicates this is necessary. 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.

## Section 9. Physical and chemical properties

**Appearance** 

Physical state : Liquid.

Color: White or light green.

Odor : SOLVENT.
Odor threshold : Not available.
pH : Not available.

pH : Not available.

Melting/freezing point : Not available.

Boiling point : 56°C (132.8°F)

boiling range : Not available.

Flash point : Closed cup: 25°C (77°F)

Evaporation rate : Not available.
Flammability (solid, gas) : Not available.
Upper/lower flammability or explosive limits

Upper: : Not determined.Lower: : Not determined.

Vapor pressure : Not available.
Vapor density : Not available.

Relative density : 1.639

Density : 13.68 lbs/gal 1.639 g/cm<sup>3</sup>

Solubility : Not available.

Solubility in water : Not available.

Partition coefficient: n- : Not available.

octanol/water

**Decomposition temperature** 

Auto-Ignition temperature : Not available.

Viscosity : Kinematic (room temperature): 10.86 cm²/s (1086 cSt)

: Not available,

 Weight Volatiles
 : 28.78% (w/w)

 Volume Volatiles
 : 44.01 %(v/v)

 Weight Solids
 : 71.22 %(w/w)

 Volume Solids
 : 55.99 %(v/v)

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## Section 9. Physical and chemical properties

Regulatory VOC

: 1.73 lbs/gal (207 g/l) minus water and exempt solvents

## Section 10. Stability and reactivity

Reactivity

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

Chemical stability

: The product is stable.

Possibility of hazardous

reactions

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

Conditions to avoid

: Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

Incompatible materials

: Reactive or incompatible with the following materials:

oxidizing materials

Hazardous decomposition

products

: Under normal conditions of storage and use, hazardous decomposition products should

not be produced.

## Section 11. Toxicological information

### Information on toxicological effects

#### **Acute toxicity**

Product/ingredient name	Result Species		Dose	Exposure	
4-chloro-α,α,α-trifluorotoluene	LC50 Inhalation Vapor	Rat	22000 mg/m³	4 hours	
	LD50 Dermal	Rabbit	>2700 mg/kg	-	
	LD50 Oral	Rat	13 g/kg	-	
	LD50 Oral	Rat	>6800 mg/kg	-	
1-methoxy-2-propanol	LD50 Dermal	Rabbit	13 g/kg	-	
	LD50 Oral	Rat	6600 mg/kg	-	
heptan-2-one	LD50 Oral	Rat	1600 mg/kg	-	
acetone	LD50 Oral	Rat	5800 mg/kg	-	

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
titanium dioxide	Skin - Mild irritant	Human	-	72 hours 300 Micrograms Intermittent	-
reaction product: bisphenol- A-(epichlorhydrin); epoxy resin	Eyes - Mild irritant	Rabbit	-	100 milligrams	-
TCSH1	Skin - Moderate irritant	Rabbit	-	24 hours 500 microliters	-
	Skin - Severe irritant	Rabbit	-	24 hours 2 milligrams	-
1-methoxy-2-propanol	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	<u>.</u>
	Skin - Mild irritant	Rabbit	-	500	-

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# Section 11. Toxicological information

	OL C. MATTER Y	Ph. F 2 14		milligrams	
heptan-2-one	Skin - Mild irritant	Rabbit	-	24 hours 14	-
				milligrams	
acetone	Eyes - Mild irritant	Human	-	186300 parts	-
				per million	
	Eyes - Mild irritant	Rabbit	-	10 microliters	-
	Eyes - Moderate irritant	Rabbit	-	24 hours 20	-
	·			milligrams	
	Eyes - Severe irritant	Rabbit	-	20 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500	-
				milligrams	
	Skin - Mild irritant	Rabbit	-	395	-
	_			milligrams	
Talc , not containing	Skin - Mild irritant	Human	-	72 hours 300	_
asbestiform fibres				Micrograms	
				Intermittent	
l .	I	1			

#### Sensitization

Not available.

#### **Mutagenicity**

Not available.

#### Carcinogenicity

Not available.

#### Classification

Product/ingredient name	OSHA	IARC	NTP
titanium dioxide	-	2B	-

### Reproductive toxicity

Not available.

#### **Teratogenicity**

Not available.

#### Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
1-methoxy-2-propanol acetone			Narcotic effects Narcotic effects

#### Specific target organ toxicity (repeated exposure)

Not available.

#### **Aspiration hazard**

Not available.

Information on the likely

routes of exposure

: Not available.

Potential acute health effects

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## Section 11. Toxicological information

Eye contact

: Causes serious eye irritation.

Inhalation

: No known significant effects or critical hazards.

Skin contact

: Causes skin irritation. May cause an allergic skin reaction.

Ingestion

: No known significant effects or critical hazards.

#### Symptoms related to the physical, chemical and toxicological characteristics

Eye contact

: Adverse symptoms may include the following:

pain or irritation

watering redness

Inhalation

: No specific data.

Skin contact

: Adverse symptoms may include the following:

irritation

redness

Ingestion

: No specific data.

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

#### Short term exposure

Potential immediate

: Not available.

effects

Potential delayed effects

: Not available.

#### Long term exposure

Potential immediate

: Not available.

effects

Potential delayed effects

: Not available.

#### Potential chronic health effects

Not available.

General

: Once sensitized, a severe allergic reaction may occur when subsequently exposed to

very low levels.

Carcinogenicity

: Suspected of causing cancer. Risk of cancer depends on duration and level of

exposure.

Mutagenicity

No known significant effects or critical hazards.No known significant effects or critical hazards.

Teratogenicity

Developmental effects

: No known significant effects or critical hazards.

Fertility effects

: No known significant effects or critical hazards.

#### Numerical measures of toxicity

#### Acute toxicity estimates

Route	ATE value				
Oral	15390.8 mg/kg	***************************************			
Inhalation (gases)	43286.6 ppm				
Inhalation (vapors)	105,8 mg/l				
Inhalation (dusts and mists)	14.43 mg/l				

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## Section 11. Toxicological information

## Section 12. Ecological information

#### **Toxicity**

Product/ingredient name	Result	Species	Exposure
trizinc bis(orthophosphate)	Acute EC50 0,04 mg/l	Daphnia - Daphnia magna	48 hours
, , ,	Acute IC50 0.136 mg/l	Algae - Selenastrum capricornutum	72 hours
	Acute LC50 0.021 mg/l	Fish - Lepomis Macrochirus	96 hours
	Acute LC50 0.05 mg/l	Fish - Oncorhynchus Mykiss	96 hours
heptan-2-one	Acute LC50 131000 to 137000 μg/l Fresh water	Fish - Pimephales promelas	96 hours
acetone	Acute EC50 20.565 mg/l Marine water	Algae - Ulva pertusa	96 hours
	Acute LC50 6000000 µg/l Fresh water	Crustaceans - Gammarus pulex	48 hours
	Acute LC50 10000 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 5600 ppm Fresh water	Fish - Poecilia reticulata	96 hours
	Chronic NOEC 4.95 mg/l Marine water	Algae - Ulva pertusa	96 hours
	Chronic NOEC 0.016 ml/L Fresh water	Crustaceans - Daphnildae	21 days
	Chronic NOEC 0.1 ml/L Fresh water	Daphnia - Daphnia magna - Neonate	21 days
	Chronic NOEC 5 µg/l Marine water	Fish - Gasterosteus aculeatus - Larvae	42 days

#### Persistence and degradability

Not available.

#### Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
titanium dioxide	_	352	low
trizinc bis(orthophosphate)	-	60960	high
reaction product: bisphenol-A-	2.64 to 3.78	31	low
(epichlorhydrin); epoxy resin			
1-methoxy-2-propanol	<1	-	low
heptan-2-one	2.26	-	low
acetone	-0,23	_	low

#### **Mobility in soil**

Soil/water partition coefficient (Koc)

: Not available.

Other adverse effects

: No known significant effects or critical hazards.

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## 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. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## Section 14. Transport information

Special precautions for user : The actual shipping description for this product may vary based several factors including, but not limited to, the volume of material, size of the container, mode of transport and use of exemptions or exceptions found in the applicable regulations. The information provided in Section 14 is one possible shipping description for this product. Consult your shipping specialist or supplier for appropriate assignment of the DOT information.

> 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.

	DOT Classification	TDG Classification	Mexico Classification	IMDG	IATA
UN number	UN1263	UN1263	UN1263	UN1263	UN1263
UN proper shipping name	PAINT	PAINT	PAINT	PAINT	PAINT
Transport hazard class(es)	3	3 (1) (1) (1)	3	3	3
Packing group	111	111	III	111	111
Environmental hazards	No.	Yes.	No.	No.	No.

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## Section 15. Regulatory information

#### U.S. Federal regulations

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

#### SARA 311/312

Classification

: Fire hazard

Immediate (acute) health hazard Delayed (chronic) health hazard

#### **SARA 313**

	Product name	CAS number	%
Form R - Reporting	trizinc bis(orthophosphate)	7779-90-0	5 - 10
requirements			

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.

#### California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

WARNING: This product contains less than 1% of a chemical known to the State of California to cause birth defects or other reproductive harm.

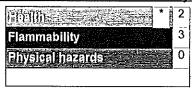
#### International lists

#### **National inventory**

Australia : All components are listed or exempted. Canada : All components are listed or exempted. China : At least one component is not listed. Europe : All components are listed or exempted. Japan : At least one component is not listed. : At least one component is not listed. Malaysia New Zealand : At least one component is not listed. **Philippines** : All components are listed or exempted. Republic of Korea : All components are listed or exempted. Taiwan : All components are listed or exempted.

## Section 16. Other information

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



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 SDSs 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.

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### Section 16. Other information

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

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



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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

#### **History**

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0004

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

#### Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.