

SAFETY DATA SHEET

Corrosion Resistant Epoxy Primer 10P30-5

Section 1. Identification

GHS product identifier : Corrosion Resistant Epoxy Primer 10P30-5

Other means of identification : 10P30-5 Corrosion Resistant Primer

Product type : Liquid.

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

: FOR INDUSTRIAL USE ONLY

Supplier/Manufacturer : Akzo Nobel Coatings, Inc.

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USA

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

accepted)

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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

Section 2. Hazards identification

Classification of the substance or mixture

: FLAMMABLE LIQUIDS - Category 2 ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (inhalation) - Category 4 SKIN CORROSION/IRRITATION - Category 2

SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1

SKIN SENSITIZATION - Category 1 CARCINOGENICITY - Category 1A

SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2

AQUATIC HAZARD (ACUTE) - Category 2
AQUATIC HAZARD (LONG-TERM) - Category 2

Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 64.3% Percentage of the mixture consisting of ingredient(s) of unknown hazards to the

aquatic environment: 30%

GHS label elements

Hazard pictograms











Signal word : Danger

Hazard statements : Highly flammable liquid and vapor.

Harmful if swallowed or if inhaled. Causes serious eye damage.

Causes skin irritation.

May cause an allergic skin reaction.

May cause cancer.

May cause damage to organs through prolonged or repeated exposure.

Toxic to aquatic life with long lasting effects.

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 only outdoors or in a well-ventilated area. Avoid release to the environment. Do not breathe vapor. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.

Response : Collect spillage. Get medical attention if you feel unwell. IF exposed or concerned:

Get medical attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell. Rinse mouth. 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. Take off contaminated clothing and wash it 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.

Immediately call a POISON CENTER or physician.

Storage : Not applicable.

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

and international regulations.

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Section 2. Hazards identification

Other hazards which do not result in classification

: None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Hazardous ingredients

<u> </u>		
Ingredient name / Chemical name	%	CAS number
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin	10 - 25	25068-38-6
crystalline silica, respirable powder	10 - 25	14808-60-7
heptan-2-one	10 - 25	110-43-0
cyclohexanone	2.5 - 10	108-94-1
titanium dioxide	2.5 - 10	13463-67-7
pentazinc chromate octahydroxide	2.5 - 10	49663-84-5
strontium chromate	2.5 - 10	7789-06-2
4-methylpentan-2-one	2.5 - 10	108-10-1
Phenol, polymer with formaldehyde, glycidyl ether	2.5 - 10	28064-14-4
silicon dioxide	2.5 - 10	7631-86-9
xylene	1 - 2.5	1330-20-7

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

Section 4. First aid measures

Description of necessary first aid measures

Eye contact : Get r

: Get medical attention immediately. Call a poison center or physician. 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.

Chemical burns must be treated promptly by a physician.

Inhalation : Get medical attention immediately. Call a poison center or physician. Remove

victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. 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. 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.

Skin contact : Get medical attention immediately. Call a poison center or physician. 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. Chemical burns must be treated promptly by a physician. In the event of any complaints or symptoms, avoid further exposure.

Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion : Get medical attention immediately. Call a poison center or physician. 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. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person.

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Section 4. First aid measures

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

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : Causes serious eye damage.

Inhalation : Harmful if inhaled. May give off gas, vapor or dust that is very irritating or corrosive

to the respiratory system.

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

Ingestion : Harmful if swallowed. May cause burns to mouth, throat and stomach.

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:

> pain watering redness

Inhalation : No specific data.

Skin contact : Adverse symptoms may include the following:

pain or irritation

redness

blistering may occur

Ingestion : Adverse symptoms may include the following:

stomach pains

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.

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

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)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

: Use dry chemical, CO₂, water spray (fog) or foam.

Unsuitable extinguishing

media

: Do not use water jet.

Section 5. Fire-fighting measures

Specific hazards arising from the chemical

: Highly flammable liquid and vapor. 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. This material is toxic 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 halogenated compounds 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. Do not breathe 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 non-emergency 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). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

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

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Section 6. Accidental release measures

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 breathe vapor or mist. Do not ingest. Avoid release to the environment. 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 hygiene measures.

Conditions for safe storage, including any incompatibilities

: 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 well-ventilated 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

Exposure limits
ACGIH TLV (United States, 6/2013). TWA: 0.025 mg/m³ 8 hours. Form:
Respirable fraction
ACGIH TLV (United States, 6/2013).
TWA: 233 mg/m³ 8 hours. TWA: 50 ppm 8 hours.
ACGIH TLV (United States, 6/2013).
Absorbed through skin.
STEL: 50 ppm 15 minutes.
TWA: 20 ppm 8 hours.
ACGIH TLV (United States, 6/2013). TWA: 10 mg/m³ 8 hours.

Section 8. Exposure controls/personal protection

pentazinc chromate octahydroxide	ACGIH TLV (United States, 6/2013).
	TWA: 0.01 mg/m³, (measured as Cr) 8
	hours.
strontium chromate	ACGIH TLV (United States, 6/2013).
	TWA: 0.0005 mg/m³, (measured as Cr) 8
	hours.
4-methylpentan-2-one	ACGIH TLV (United States, 6/2013).
	STEL: 75 ppm 15 minutes.
	TWA: 20 ppm 8 hours.
xylene	ACGIH TLV (United States, 6/2013).
	STEL: 651 mg/m³ 15 minutes.
	STEL: 150 ppm 15 minutes.
	TWA: 434 mg/m ³ 8 hours.
	TWA: 100 ppm 8 hours.

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 and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

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.

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 anti-static 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

Odor

Physical state : Liquid.

Color : Green. : Solvent.

Odor threshold: Not available.pH: Not available.Melting/freezing point: Not available.Boiling point: 117°C (242.6°F)

boiling range : Not available.

Flash point : Closed cup: 16°C (60.8°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 : 1.483

Density : 12.38 lbs/gal 1.483 g/cm³

Solubility: Not available.Solubility in water: Not available.Partition coefficient: n-: Not available.

octanol/water

Auto-ignition temperature : Not available.

Decomposition temperature : Not available.

Viscosity : Kinematic (room temperature): 3.71 cm²/s (371 cSt)

 Weight Volatiles
 : 22.92% (w/w)

 Volume Volatiles
 : 39.91 %(v/v)

 Weight Solids
 : 77.08 %(w/w)

 Volume Solids
 : 60.09 %(v/v)

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Section 9. Physical and chemical properties

Regulatory VOC : 2.84 lbs/gal (340 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				
heptan-2-one	LD50 Oral	Rat	1600 mg/kg	-
cyclohexanone	LD50 Oral	Rat	1800 mg/kg	-
strontium chromate	LD50 Oral	Rat	3118 mg/kg	-
4-methylpentan-2-one	LD50 Oral	Rat	2080 mg/kg	-
xylene	LD50 Oral	Rat	4300 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
reaction product: bisphenol- A-(epichlorhydrin); epoxy resin	Eyes - Mild irritant	Rabbit	-	100 milligrams	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 microliters	-
	Skin - Severe irritant	Rabbit	-	24 hours 2 milligrams	-
heptan-2-one	Skin - Mild irritant	Rabbit	-	24 hours 14 milligrams	-
cyclohexanone	Eyes - Severe irritant	Rabbit	-	24 hours 250 Micrograms	-
	Eyes - Severe irritant	Rabbit	-	20 milligrams	-
	Skin - Mild irritant	Human	-	48 hours 50 Percent	-
	Skin - Mild irritant	Rabbit	-	500 milligrams	-
titanium dioxide	Skin - Mild irritant	Human	=	72 hours 300	-

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Section 11. Toxicological information

	•		
			Micrograms
			Intermittent
Eyes - Moderate irritant	Rabbit	-	24 hours 100 -
			microliters
Eves - Severe irritant	Rabbit	_	40 milligrams -
Skin - Mild irritant	Rabbit		24 hours 500 -
			milligrams
Eves - Mild irritant	Rabbit	_	24 hours 25 -
, , , , , , , , , , , , , , , , , , , ,			milligrams
Eyes - Mild irritant	Rabbit	-	87 milligrams -
Eves - Severe irritant	Rabbit	=	24 hours 5 -
			milligrams
Skin - Mild irritant	Rat	=	8 hours 60 -
			microliters
Skin - Moderate irritant	Rabbit	_	24 hours 500 -
			milligrams
Skin - Moderate irritant	Rabbit	-	100 Percent -
	Eyes - Severe irritant Skin - Mild irritant Eyes - Mild irritant Eyes - Mild irritant Eyes - Severe irritant Skin - Mild irritant Skin - Moderate irritant	Eyes - Severe irritant Rabbit Rabbit Eyes - Mild irritant Rabbit Eyes - Mild irritant Rabbit Eyes - Mild irritant Rabbit Eyes - Severe irritant Rabbit Skin - Mild irritant Rat Skin - Moderate irritant Rabbit	Eyes - Severe irritant Rabbit - Rabbit

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Name		Route of exposure	Target organs
4-methylpentan-2-one	Category 3	Not applicable.	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

N	ame		Route of exposure	Target organs
cr	ystalline silica, respirable powder	Category 2	Inhalation	Not determined

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 damage.

Inhalation : Harmful if inhaled. May give off gas, vapor or dust that is very irritating or corrosive

to the respiratory system.

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

Ingestion: Harmful if swallowed. May cause burns to mouth, throat and stomach.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:

pain watering redness

Inhalation : No specific data.

Skin contact : Adverse symptoms may include the following:

pain or irritation

redness

blistering may occur

Ingestion : Adverse symptoms may include the following:

stomach pains

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 : May cause damage to organs through prolonged or repeated exposure. Once

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

low levels.

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

Mutagenicity: No known significant effects or critical hazards.Teratogenicity: No known significant effects or critical hazards.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

Section 11. Toxicological information

Route	ATE value
Oral	1453.8 mg/kg
Dermal	5108.9 mg/kg
Inhalation (gases)	146437.9 ppm
Inhalation (vapors)	17.39 mg/l
Inhalation (dusts and mists)	48.81 mg/l

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Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
heptan-2-one	Acute LC50 131000 to 137000 μg/l Fresh water	Fish - Pimephales promelas	96 hours
cyclohexanone	Acute EC50 32.9 mg/l Fresh water	Algae - Chlamydomonas reinhardtii - Exponential growth phase	72 hours
	Acute LC50 630000 µg/l Fresh water Chronic EC10 3.56 mg/l Fresh water	Fish - Pimephales promelas Algae - Chlamydomonas reinhardtii - Exponential growth phase	96 hours 72 hours
titanium dioxide	Acute EC50 5.83 mg/l Fresh water	Algae - Pseudokirchneriella subcapitata - Exponential growth phase	72 hours
	Acute LC50 3 mg/l Fresh water	Crustaceans - Ceriodaphnia dubia - Neonate	48 hours
	Acute LC50 5.5 ppm Fresh water	Daphnia - Daphnia magna - Juvenile (Fledgling, Hatchling, Weanling)	48 hours
	Acute LC50 1000 mg/l Fresh water Chronic NOEC 0.984 mg/l Fresh water	Fish - Pimephales promelas Algae - Pseudokirchneriella subcapitata - Exponential growth phase	96 hours 72 hours
4-methylpentan-2-one	Acute LC50 505000 to 514000 μg/l Fresh water	Fish - Pimephales promelas	96 hours
	Chronic NOEC 78 mg/l Fresh water Chronic NOEC 168 mg/l Fresh water	Daphnia - Daphnia magna Fish - Pimephales promelas - Embryo	21 days 33 days
silicon dioxide	Acute EC50 55.5 mg/l Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
	Chronic NOEC 4.6 mg/l Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
xylene	Acute LC50 8500 μg/l Marine water	Crustaceans - Palaemonetes	48 hours
	Acute LC50 13400 μg/l Fresh water	Fish - Pimephales promelas	96 hours

Persistence and degradability

Not available.

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Section 12. Ecological information

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
reaction product: bisphenol-A-(epichlorhydrin); epoxy	2.64 to 3.78	31	low
resin heptan-2-one	2.26	-	low
cyclohexanone	0.86	-	low
titanium dioxide	-	352	low
pentazinc chromate octahydroxide	-	60960	high
4-methylpentan-2-one	1.9	-	low
xylene	3.12	8.1 to 25.9	low

Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Other adverse effects

: No known significant effects or critical hazards.

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 nonrecyclable 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.

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Section 14. Transport information

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

Section 15. Regulatory information

U.S. Federal regulations

United States inventory

(TSCA 8b)

: All components are listed or exempted.

SARA 311/312

Classification :

SARA 313

	Product name	CAS number	%
Form R - Reporting 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

International lists

National inventory

Australia : At least one component is not listed.

Canada : At least one component is not listed.

China : All components are listed or exempted.

Europe : All components are listed or exempted.

Japan : At least one component is not listed.

Malaysia : At least one component is not listed.

New Zealand : At least one component is not listed.

Philippines :

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Section 15. Regulatory information

Republic of Korea : All components are listed or exempted.

Taiwan : At least one component is not listed.

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.

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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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

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Section 16. Other information

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.