Material Safety Data Sheet

10PW20-4_Water Reducible Epoxy Primer

Code: 10PW20-4

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 1. Chemical product and company identification

Manufacturer

Akzo Nobel Coatings, Inc.
1 East Water Street
Waukegan, IL 60085
USA
+1(847) 625-4200

IN CASE OF EMERGENCY (HEALTH OR SPILLS):
CHEMTREC 1 (800) 424-9300 (Inside the US)
CHEMTREC International +1 (703) 527-3887 (Outside the US, collect calls accepted)

Product code : 10PW20-4

Product name : 10PW20-4_Water Reducible Epoxy Primer

Product use : Coatings or Coatings Component

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For the most recent update to this Material Safety Data Sheet, visit our website at http://www.akzonobel.com/aerospace
For additional information call (847) 625-4200.

Section 2. Hazards identification

Emergency overview : WARNING!

HARMFUL IF ABSORBED THROUGH SKIN OR IF SWALLOWED. CAUSES RESPIRATORY TRACT, EYE AND SKIN IRRITATION. CONTAINS MATERIAL THAT CAN CAUSE TARGET ORGAN DAMAGE. CANCER HAZARD - CONTAINS MATERIAL WHICH CAN CAUSE CANCER.

Potential acute health effects

Inhalation : Irritating to respiratory system.

Ingestion : Toxic if swallowed.

Skin : Toxic in contact with skin. Irritating to skin.

Eyes : Irritating to eyes.

Potential chronic health effects

Chronic effects : Contains material that can cause target organ damage.

Section 2. Hazards identification

Carcinogenicity : Contains material which can 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.

Target organs : Contains material which causes damage to the following organs: upper respiratory tract, skin, central nervous system (CNS), eye, lens or cornea.
Contains material which may cause damage to the following organs: blood, kidneys, lungs, liver, testes.

Over-exposure signs/symptoms

Inhalation : Adverse symptoms may include the following:
respiratory tract irritation
coughing

Ingestion : No specific data.

Skin : Adverse symptoms may include the following:
irritation
redness

Eyes : Adverse symptoms may include the following:
pain or irritation
watering
redness

Medical conditions aggravated by over-exposure : Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.

See toxicological information (Section 11)

Section 3. Composition/information on ingredients

Name	CAS number	% by weight
strontium chromate	7789-06-2	5 - 10
1-methoxy-2-propanol	107-98-2	5 - 10
epichlorhydrin formaldehyde-phenol polyme	9003-36-5	1 - 5
Titanium Dioxide Rutile	1317-80-2	1 - 5
phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane]	25036-25-3	1 - 5
2-(Propyloxy)ethanol	2807-30-9	1 - 5
Titanium dioxide	13463-67-7	1 - 5

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.

Section 4. First aid measures

Eye contact : Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.

Skin contact : In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.

Inhalation : Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

Section 4. First aid measures

Ingestion : Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

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.

Notes to physician : No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Section 5. Fire-fighting measures

Flammability of the product : In a fire or if heated, a pressure increase will occur and the container may burst.

Extinguishing media

Suitable : Use an extinguishing agent suitable for the surrounding fire.

Not suitable : None known.

Special exposure hazards : 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.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
halogenated compounds
metal oxide/oxides

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.

Special remarks on fire hazards : Not available.

Special remarks on explosion hazards : Not available.

Section 6. Accidental release measures

Personal precautions : 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. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).

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 for 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.

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

Handling : Put on appropriate personal protective equipment (see Section 8). 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. Avoid exposure - obtain special instructions before use. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. 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.

Storage : 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. 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

Product name	Exposure limits
strontium chromate	**ACGIH TLV (United States, 2/2010).** TWA: 0.0005 mg/m³, (measured as Cr) 8 hour(s). **OSHA PEL Z2 (United States, 11/2006).** CEIL: 1 mg/10m³ **OSHA PEL (United States, 6/2010).** TWA: 5 µg/m³ 8 hour(s). **NIOSH REL (United States, 12/2001).** TWA: 0.5 mg/m³, (as CR) 10 hour(s). **OSHA PEL (United States, 11/2006).** TWA: 0.5 mg/m³, (as Cr) 8 hour(s). **NIOSH REL (United States, 6/2009).** TWA: 0.001 mg/m³, (as CR) 10 hour(s).
1-methoxy-2-propanol	**ACGIH TLV (United States, 2/2010).** STEL: 553 mg/m³ 15 minute(s). STEL: 150 ppm 15 minute(s). TWA: 369 mg/m³ 8 hour(s). TWA: 100 ppm 8 hour(s). **NIOSH REL (United States, 6/2009).** STEL: 540 mg/m³ 15 minute(s). STEL: 150 ppm 15 minute(s). TWA: 360 mg/m³ 10 hour(s). TWA: 100 ppm 10 hour(s).
titanium dioxide	**OSHA PEL (United States, 6/2010).** TWA: 15 mg/m³ 8 hour(s). Form: Total dust **ACGIH TLV (United States, 2/2010).** TWA: 10 mg/m³ 8 hour(s).

Consult local authorities for acceptable exposure limits.

Recommended monitoring procedures : 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.

Engineering measures : Use only with adequate ventilation. 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.

Section 8. Exposure controls/personal protection

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. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Dry sanding, flame cutting and/or welding of the dry paint film will give rise to dust and/or hazardous fumes. Wet sanding/flatting should be used wherever possible. If exposure cannot be avoided by the provision of local exhaust ventilation, suitable respiratory protective equipment should be used.

Personal protection

Respiratory : 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.

Hands : 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.

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

Skin : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

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.

Section 9. Physical and chemical properties

Physical state	:	Liquid.
Flash point	:	Closed cup: 93.3°C (199.9°F)
Auto-ignition temperature	:	Not available.
upper flammability limit	:	Not determined.
Lower flammability limit	:	Not determined.
Appearance	:	Not available.
Odor	:	Mild.
Odor threshold	:	Not available.
Specific gravity	:	1.258
pH	:	Not available.
Boiling/condensation point	:	100°C (212°F)
Melting/freezing point	:	Not available.
Vapor pressure	:	Not available.
Vapor density	:	Heavier than air
Density	:	10.50 lbs/gal 1.258 g/cm^3
Evaporation rate	:	Not determined.
Coefficient of water/oil distribution	:	Not determined.
Weight Volatiles	:	51.1% (w/w)
Volume Volatiles	:	65.56 %(v/v)
Weight Solids	:	48.90 %(w/w)
Volume Solids	:	34.44 %(v/v)
VOC, minus water and exempt solvents	:	2.43 lbs/gal (291 g/l)

Section 10. Stability and reactivity

Stability : The product is stable.

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

Conditions to avoid : No specific data.

Materials to avoid : No specific data.

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Acute toxicity

Product/ingredient name	Result	Species	Dose
strontium chromate	LD50 Intratracheal	Rat	16.6 mg/kg
	LD50 Oral	Rat	3118 mg/kg
titanium dioxide	LD Intratracheal	Rat	>100 ug/kg
	TDLo Intratracheal	Rat	5 mg/kg
	TDLo Intratracheal	Rat	1.6 mg/kg
	TDLo Intratracheal	Rat	1.25 mg/kg
	TDLo Oral	Rat	60 g/kg
2-(propyloxy)ethanol	LD50 Dermal	Rabbit	960 uL/kg
	LD50 Oral	Rat	3090 mg/kg
	LD50 Oral	Rat	3089 mg/kg
1-methoxy-2-propanol	LD50 Dermal	Rabbit	13 g/kg
	LD50 Intraperitoneal	Rat	3720 mg/kg
	LD50 Intravenous	Rat	>4200 mg/kg
	LD50 Oral	Rat	6600 mg/kg
	LD50 Subcutaneous	Rat	7800 mg/kg
	LDLo Oral	Rat	3739 mg/kg

Not available.

Not available.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
titanium dioxide	Skin - Mild irritant	Human	-	72 hours 300 Micrograms Intermittent	-
2-(propyloxy)ethanol	Eyes - Severe irritant	Rabbit	-	24 hours 750 Micrograms	-
	Eyes - Severe irritant	Rabbit	-	100 milligrams	-
	Skin - Mild irritant	Guinea pig	-	500 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
1-methoxy-2-propanol	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Mild irritant	Rabbit	-	500 milligrams	-
Formaldehyde, polymer with (chloromethyl)oxirane and phenol	Skin - Mild irritant	Rabbit	-	24 hours 500 microliters	-

Carcinogenicity

Not available.

Classification

Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA

Section 11. Toxicological information

strontium chromate	A2	1	-	+	Proven.	+
Rutile (TiO2)	-	2B	-	-	-	-
2-(propyloxy)ethanol	-	-	-	None.	-	-
titanium dioxide	A4	2B	-	+	-	-

Mutagenicity

Not available.

Teratogenicity

Conclusion/Summary : Not available.

Reproductive toxicity

Not available.

Section 12. Ecological information

Environmental effects : No known significant effects or critical hazards.

Aquatic ecotoxicity : Not available.

Biodegradability : Not available.

:

Other adverse effects : No known significant effects or critical hazards.

Ecotoxicological data for one or more components are known and will be made available on request.

Section 13. Disposal considerations

Waste disposal : The generation of waste should be avoided or minimized wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. 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. 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 14. Transport information

The transportation description provided below is based on a one gallon container shipped within the United States, by highway only.

UN number	Proper shipping name	Class	Packing group	Additional information
NOT REGULATED				

Section 15. Other Regulatory Information and Pictograms

United States

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

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

SARA 313

Form R - Reporting requirements :

Product name	CAS number	Concentration
strontium chromate	7789-06-2	5 - 10
2-(propyloxy)ethanol	2807-30-9	1 - 5

California Prop. 65 : WARNING: This product contains a chemical known to the State of California to cause cancer.

Canada

WHMIS (Canada) : Class B-3: Combustible liquid with a flash point between 37.8°C (100°F) and 93.3°C (200°F).
Class D-1B: Material causing immediate and serious toxic effects (Toxic).
Class D-2A: Material causing other toxic effects (Very toxic).
Class D-2B: Material causing other toxic effects (Toxic).

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

Canada inventory : At least one component is not listed in DSL but all such components are listed in NDSL.

International regulations

International lists : **Australia inventory (AICS)**: At least one component is not listed.
China inventory (IECSC): At least one component is not listed.
Japan inventory: At least one component is not listed.
Korea inventory: At least one component is not listed.
New Zealand Inventory of Chemicals (NZIoC): At least one component is not listed.
Philippines inventory (PICCS): At least one component is not listed.

Section 16. Other information

Health	*	2
Flammability		2
Physical hazards		0

Notice to reader

Section 16. Other information

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.