

Revision Date: 22-Jan-2016

**Revision Number:** 1

1. PRODUCT AND COMPANY IDENTIFICATION

## Product Name Product Code Alternate Product Code Product Class Color Recommended use Restrictions on use

## 4508-9990 EPOXY A BLACK EXS2000GL

TZ2284 EPOXY Black Paint No information available

## Manufacturer

Benjamin Moore & Co. 101 Paragon Drive Montvale, NJ 07645 Phone: 800-225-5554 insl-x.com

#### Emergency Telephone Number(s) CHEMTREC (US): 800-424-9300

CHEMTREC (05): 800-424-9300 CHEMTREC (outside US): (703)-527-3887

2. HAZARDS IDENTIFICATION

## **Classification**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Skin sensitization	Category 1
Carcinogenicity	Category 2
Specific target organ toxicity (single exposure)	Category 2
Specific target organ toxicity (repeated exposure)	Category 2
Aspiration toxicity	Category 1
Flammable liquids	Category 3

## Label elements

## Warning

## Hazard statements

Causes skin irritation Causes serious eye irritation May cause an allergic skin reaction Suspected of causing cancer May cause damage to organs May cause damage to organs through prolonged or repeated exposure May be fatal if swallowed and enters airways Flammable liquid and vapor



Appearance liquid

Odor solvent

## **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 Wash face, hands and any exposed skin thoroughly after handling Contaminated work clothing should not be allowed out of the workplace Do not breathe dust/fume/mist/vapors/spray Do not eat, drink or smoke when using this product Keep away from heat/sparks/open flames/hot surfaces, no smoking Keep container tightly closed Ground/bond container and receiving equipment Use explosion-proof electrical/ventilating/lighting/equipment Use only non-sparking tools Take precautionary measures against static discharge Wear protective gloves/protective clothing/eye protection/face protection

## **Precautionary Statements - Response**

If exposed or concerned get medical attention

Eyes

If in eyes rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

If eye irritation persists get medical attention

## Skin

If skin irritation or rash occurs get medical attention

If on skin (or hair) take off immediately all contaminated clothing. Rinse skin with water

Wash contaminated clothing before reuse

## Ingestion

If swallowed immediately call a POISON CENTER or physician

Do NOT induce vomiting

#### Fire

In case of fire use CO2, dry chemical, or foam for extinction

## **Precautionary Statements - Storage**

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

## **Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

#### Hazards not otherwise classified (HNOC)

Not Applicable

Other information

No information available

#### Other hazards

**IMPORTANT:** Designed to be mixed with other components. Mixture will have hazards of all components. Before opening packages, read all warning labels. Follow all precautions.

## 3. COMPOSITION INFORMATION ON COMPONENTS

Chemical Name	CAS-No	Weight % (max)
Kaolin	1332-58-7	25
Benzyl alcohol	100-51-6	15
Xylene	1330-20-7	10
Propylene glycol monomethyl ether	107-98-2	10
Solvent naphtha, petroleum, light aromatic	64742-95-6	5
Propylene glycol monomethyl ether acetate	108-65-6	5
Ethyl benzene	100-41-4	5
1,2,4-Trimethylbenzene	95-63-6	5
Triethylenetetramine	112-24-3	5
Carbon black	1333-86-4	5
Titanium dioxide	13463-67-7	0.5

## 4. FIRST AID MEASURES

#### First aid measures

General Advice	If symptoms persist, call a physician. Show this safety data sheet to the doctor in attendance.
Eye Contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician.
Skin Contact	Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. If skin irritation persists, call a physician.
Inhalation	Move to fresh air. If symptoms persist, call a physician. If not breathing, give artificial respiration. Call a physician immediately.
Ingestion	Clean mouth with water and afterwards drink plenty of water. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Consult a physician.
Protection Of First-Aiders	Use personal protective equipment.
Most Important Symptoms/Effects	No information available.
Notes To Physician	Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Flammable Properties	Vapors may travel considerable distance to a source of ignition and flash back. Vapors may cause flash fire.
Suitable Extinguishing Media	Foam, dry powder or water. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Protective Equipment And Precautions For Firefighters	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent)

	and full protective gear.
Hazardous Combustion Products	Burning may result in carbon dioxide, carbon monoxide and other combustion products of varying composition which may be toxic and/or irritating.
Specific Hazards Arising From The Chemical	Flammable. Flash back possible over considerable distance. Keep product and empty container away from heat and sources of ignition. Closed containers may rupture if exposed to fire or extreme heat. Thermal decomposition can lead to release of irritating gases and vapors.
Sensitivity To Mechanical Impact	No
Sensitivity To Static Discharge	Yes
Flash Point Data Flash Point (°F) Flash Point (°C) Flash Point Method	80 27 PMCC
Flammability Limits In Air	
Lower Explosion Limit Upper Explosion Limit	Not available Not available
NFPA Health: 2 Flammability: 3 Inst	ability: 0 Special: Not Applicable

## NFPA Legend

#### 0 - Not Hazardous

- 1 Slightly
- 2 Moderate
- 3 High
- 4 Severe

The ratings assigned are only suggested ratings, the contractor/employer has ultimate responsibilities for NFPA ratings where this system is used.

Additional information regarding the NFPA rating system is available from the National Fire Protection Agency (NFPA) at www.nfpa.org.

## 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Remove all sources of ignition. Take precautions to prevent flashback. Ground and bond all containers and handling equipment. Take precautionary measures against static discharges. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Use personal protective equipment.
Other Information	Prevent further leakage or spillage if safe to do so. Do not allow material to contaminate ground water system. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. Local authorities should be advised if significant spillages cannot be contained.
Environmental Precautions	See Section 12 for additional Ecological Information.
Methods For Clean-Up	Dam up. Soak up with inert absorbent material. Use a non-sparking or explosion proof means to transfer material to a sealed, appropriate container for disposal. Clean contaminated surface thoroughly.
	7. HANDLING AND STORAGE

Handling	Avoid contact with skin, eyes and clothing. Wear personal protective equipment. Do not breathe vapors or spray mist. Use only in ventilated areas. Prevent vapor build-up by providing adequate ventilation during and after use.	
	Take precautionary measures against static discharges. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Keep away from heat, sparks and flame. Do not smoke. Extinguish all flames and pilot lights, and turn off stoves, heaters, electric motors and other sources of ignition during use and until all vapors are gone. Ignition and/or flash back may occur.	
Storage	Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat. Keep away from open flames, hot surfaces and sources of ignition. Keep in properly labeled containers. Keep out of the reach of children.	
Incompatible Materials	Incompatible with strong acids and bases and strong oxidizing agents.	
<b>Technical measures/Precautions</b> Ensure adequate ventilation. Use only where airflow will keep vapors from buildir up in or near the work area in adjoining rooms. Comply with all national, state, ar local codes pertaining to the storage, handling, dispensing and disposal of flammable liquids.		
	Dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. All equipment should be non-sparking and explosion proof. Use explosion proof electrical equipment for ventilation, lighting and material handling.	

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

## **Exposure Limits**

Chemical Name	ACGIH	OSHA
Kaolin	2 mg/m <sup>3</sup> - TWA	15 mg/m <sup>3</sup> - TWA total 5 mg/m <sup>3</sup> - TWA
Xylene	100 ppm - TWA 150 ppm - STEL	100 ppm - TWA 435 mg/m³ - TWA
Propylene glycol monomethyl ether	100 ppm - TWA 150 ppm - STEL	N/E
Ethyl benzene	20 ppm - TWA	100 ppm - TWA 435 mg/m³ - TWA
Carbon black	3.5 mg/m <sup>3</sup> - TWA	3.5 mg/m <sup>3</sup> - TWA
Titanium dioxide	10 mg/m³ - TWA	15 mg/m³ - TWA

#### Legend

ACGIH - American Conference of Governmental Industrial Hygienists Exposure Limits OSHA - Occupational Safety & Health Administration Exposure Limits N/E - Not Established

# Appropriate engineering controls

#### Engineering Measures

Ensure adequate ventilation, especially in confined areas.

## Personal Protective Equipment

Eye/Face ProtectionSafety glasses with side-shields.Skin ProtectionLong sleeved clothing. Protective gloves.Respiratory ProtectionUse only with adequate ventilation. In operations where exposure limits are

exceeded, use a NIOSH approved respirator that has been selected by a technically qualified person for the specific work conditions. When spraying the product or applying in confined areas, wear a NIOSH approved respirator specified for paint spray or organic vapors.

#### **Hygiene Measures**

Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing before re-use. Wash thoroughly after handling.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance Odor **Odor Threshold** Density (lbs/gal) **Specific Gravity** Hα Viscosity (cps) Solubility Water Solubility **Evaporation Rate** Vapor Pressure Vapor Density Wt. % Solids Vol. % Solids Wt. % Volatiles Vol. % Volatiles VOC Regulatory Limit (g/L) **Boiling Point (°F) Boiling Point (°C)** Freezing Point (°F) Freezing Point (°C) Flash Point (°F) Flash Point (°C) **Flash Point Method** Flammability (solid, gas) **Upper Explosion Limit** Lower Explosion Limit Autoignition Temperature (°F) Autoignition Temperature (°C) **Decomposition Temperature (°F) Decomposition Temperature (°C)** Partition Coefficient (n-octanol/water)

liquid solvent No information available 9.55 - 9.65 1.14 - 1.16 No information available 65 - 75 55 - 65 25 - 35 35 - 45 < 340 248 120 No information available No information available 80 27 PMCC Not applicable No information available No information available

## 10. STABILITY AND REACTIVITY

Reactivity	No data available
Chemical Stability	Stable under normal conditions. Hazardous polymerisation does not occur.
Conditions To Avoid	Keep away from open flames, hot surfaces, static electricity and sources of ignition. Sparks. Elevated temperature.
Incompatible Materials	Incompatible with strong acids and bases and strong oxidizing agents.

Hazardous Decomposition Proc	ducts	Thermal decomposition can lead to release of irritating gases and vapors.	
Possibility Of Hazardous Reactions		None under normal conditions of use.	
1	1. TOXICOLOGI	CAL INFORMATION	
Product Information			
Information on likely routes of e	exposure		
Principal Routes of Exposure	Eye contact, skin cont	act and inhalation.	
Acute Toxicity			
Product Information	Repeated or prolonged exposure to organic solvents may lead to permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling vapors may be harmful or fatal.		
Information on toxicological effects			
Symptoms	No information available		
Delayed and immediate effects as well as chronic effects from short and long-term exposure			
Eye contact Skin contact	Contact with eyes may cause irritation. May cause skin irritation and/or dermatitis. Prolonged skin contact may defat the		
Ingestion	skin and produce dermatitis. Harmful if swallowed. Ingestion may cause irritation to mucous membranes. Small amounts of this product aspirated into the respiratory system during ingestion or vomiting may cause mild to severe pulmonary injury, possibly progressing to death.		
Inhalation	Harmful by inhalation. High vapor / aerosol concentrations are irritating to the eyes, nose, throat and lungs and may cause headaches, dizziness, drowsiness, unconsciousness, and other central nervous system effects.		
Sensitization:	No information available		
Neurological Effects Mutagenic Effects	No information availat		
Reproductive Effects	No information available.		
Developmental Effects	No information available.		
Target Organ Effects STOT - repeated exposure	No information available. Causes damage to organs through prolonged or repeated exposure if inhaled.		
STOT - single exposure Other adverse effects	Central nervous syste May cause disorder a No information availab	nd damage to the. Respiratory system.	
Aspiration Hazard	May be harmful if swallowed and enters airways. Small amounts of this product aspirated into the respiratory system during ingestion or vomiting may cause mild to severe pulmonary injury, possibly progressing to death.		
Numerical measures of toxicity	-		
The following values are calculated based on chapter 3.1 of the GHS document			

ATEmix (oral)	6549 mg/kg
ATEmix (dermal)	4942 mg/kg
ATEmix (inhalation-dust/mist)	5.8 mg/L

Acute Toxicity Component Kaolin LD50 Oral: > 5000 mg/kg (Rat) Benzyl alcohol LD50 Oral: 1230-1660 mg/kg (Rat) LD50 Dermal: 2,000 mg/kg (Rabbit) LC50 Inhalation (Vapor): > 5,000 mg/m<sup>3</sup> (Rat) **Xvlene** LD50 Oral: 4300 mg/kg (Rat) LD50 Dermal: > 1700 mg/kg (Rabbit) LC50 Inhalation (Vapor): 5000 ppm (Rat, 4 hr.) Propylene glycol monomethyl ether LD50 Oral: 6,600 mg/kg (Rat) LD50 Dermal: 13,000 mg/kg (Rabbit) LC50 Inhalation (Vapor): 10,000 ppm (Rat) Solvent naphtha, petroleum, light aromatic LD50 Oral: 8400 mg/kg (Rat) Propylene glycol monomethyl ether acetate LD50 Oral: 8532 mg/kg (Rat) LD50 Dermal: > 5000 mg/kg (Rabbit) LC50 Inhalation (Vapor): > 4345 ppm Ethvl benzene LD50 Oral: 3500 mg/kg (Rat) LD50 Dermal: > 5000 mg/kg (Rabbit) LC50 Inhalation (Vapor): 55000 mg/m<sup>3</sup> (Rat, 2 hr.) 1,2,4-Trimethylbenzene LD50 Oral: 5000 mg/kg (Rat) LC50 Inhalation (Vapor): 18000 mg/m<sup>3</sup> (Rat, 4 hr.) Triethylenetetramine LD50 Oral: 2500 mg/kg (Rat) LD50 Dermal: 805 mg/kg (Rabbit) Carbon black LD50 Oral: > 15400 mg/kg (Rat) LD50 Dermal: > 3000 mg/kg (Rabbit) Titanium dioxide LD50 Oral: > 10000 mg/kg (Rat) LD50 Dermal: > 10000 mg/m<sup>3</sup> (Rabbit) LC50 Inhalation (Dust): > 6.82 mg/L (Rat, 4 hr.)

## **Carcinogenicity**

The information below indicates whether each agency has listed any ingredient as a carcinogen:.

Chemical Name	IARC	NTP	OSHA Carcinogen
	2B - Possible Human		Listed
Ethyl benzene	Carcinogen		
	2B - Possible Human		Listed
Carbon black	Carcinogen		
	2B - Possible Human		Listed
Titanium dioxide	Carcinogen		

• Although IARC has classified titanium dioxide as possibly carcinogenic to humans (2B), their summary concludes: "No significant exposure to titanium dioxide is thought to occur during the use of products in which titanium dioxide is bound to other materials, such as paint."

#### Legend

IARC - International Agency for Research on Cancer NTP - National Toxicity Program OSHA - Occupational Safety & Health Administration

## 12. ECOLOGICAL INFORMATION

## Ecotoxicity Effects

The environmental impact of this product has not been fully investigated.

## Product Information

## Acute Toxicity to Fish

No information available

## Acute Toxicity to Aquatic Invertebrates

No information available

## Acute Toxicity to Aquatic Plants

No information available

## Persistence / Degradability

No information available.

## **Bioaccumulation / Accumulation**

No information available.

## Mobility in Environmental Media

No information available.

Ozone Not Applicable

## <u>Component</u>

## Acute Toxicity to Fish

<u>Xylene</u> LC50: 13.5 mg/L (Rainbow Trout - 96 hr.) <u>Ethyl benzene</u> LC50: 12.1 mg/L (Fathead Minnow - 96 hr.) <u>Titanium dioxide</u> LC50: > 1000 mg/L (Fathead Minnow - 96 hr.)

## Acute Toxicity to Aquatic Invertebrates

Ethyl benzene EC50: 1.8 mg/L (Daphnia magna - 48 hr.)

## Acute Toxicity to Aquatic Plants

Ethyl benzene EC50: 4.6 mg/L (Green algae (Scenedesmus subspicatus), 72 hrs.)

# 13. DISPOSAL CONSIDERATIONS Waste Disposal Method Dispose of in accordance with federal, state, provincial, and local regulations. Local requirements may vary, consult your sanitation department or state-designated environmental protection agency for more disposal options. Empty Container Warning Emptied containers may retain product residue. Follow label warnings even after container is emptied. Residual vapors may explode on ignition.

## 14. TRANSPORT INFORMATION

#### DOT

Proper Shipping Name Hazard Class UN-No Packing Group Reportable Quantity (RQ) Description	Paint 3 UN1263 III Ethylbenzene: RQ kg= 454.00, Xylenes mixed isomers: RQ kg= 45.40 UN1263, Paint, 3, III, RQ
ICAO / IATA	Contact the preparer for further information.
IMDG / IMO	Contact the preparer for further information.
	15. REGULATORY INFORMATION

## International Inventories

DSL: Canada	Yes - All components are listed or exempt.
TSCA: United States	Yes - All components are listed or exempt.

## Federal Regulations

#### SARA 311/312 hazardous categorization

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	Yes
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

#### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical Name	CAS-No	<u>Weight % (max)</u>	CERCLA/SARA 313 (de minimis concentration)
Xylene	1330-20-7	10	1.0
Ethyl benzene	100-41-4	5	0.1
1,2,4-Trimethylbenzene	95-63-6	5	1.0

#### Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61) This product contains the following HAPs:

Chemical Name	CAS-No	Weight % (max)	Hazardous Air Pollutant
Vulana	4000 00 7	40	(HAP)
Xylene	1330-20-7	10	Listed
Ethyl benzene	100-41-4	5	Listed

## State Regulations

## **California Proposition 65**

This product may contain small amounts of materials known to the state of California to cause cancer or reproductive

harm.

#### State Right-to-Know

Chemical Name	Massachusetts	New Jersey	Pennsylvania
Kaolin	Х	Х	Х
Benzyl alcohol	Х		Х
Xylene	Х	Х	Х
Propylene glycol monomethyl ether	Х	Х	Х
Ethyl benzene	Х	Х	Х
1,2,4-Trimethylbenzene	Х	Х	Х
Triethylenetetramine	Х	Х	Х
Carbon black	X	Х	X
Titanium dioxide	X	Х	X

#### Legend

X - Listed

## 16. OTHER INFORMATION

Reactivity: 0

PPE: -

<u>HMIS</u> - Health: 2\* HMIS Legend

- 0 Minimal Hazard 1 - Slight Hazard
- 1 Slight Hazard
- 2 Moderate Hazard
- 3 Serious Hazard
- 4 Severe Hazard
- \* Chronic Hazard

X - Consult your supervisor or S.O.P. for "Special" handling instructions.

Flammability: 3

Note: The PPE rating has intentionally been left blank. Choose appropriate PPE that will protect employees from the hazards the material will present under the actual normal conditions of use.

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, has chosen to provide them. HMIS® ratings are to be used only in conjunction with a fully implemented HMIS® program by workers who have received appropriate HMIS® training. HMIS® is a registered trade and service mark of the NPCA. HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

**WARNING!** If you scrape, sand, or remove old paint, you may release lead dust. LEAD IS TOXIC. EXPOSURE TO LEAD DUST CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE. Wear a NIOSH approved respirator to control lead exposure. Clean up carefully with a HEPA vacuum and a wet mop. Before you start, find out how to protect yourself and your family by contacting the National Lead Information Hotline at 1-800-424-LEAD or log on to www.epa.gov/lead.

Prepared By	Product Stewardship Department Benjamin Moore & Co. 101 Paragon Drive Montvale, NJ 07645 855-724-6802
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#### Disclaimer

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federal, provincial, and local laws and regulations.

## END OF SAFETY DATA SHEET