

Revision Date: 13-Sep-2018

Revision Number: 4

1. PRODUCT AND COMPANY IDENTIFICATION

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

EPOXY SWIMMING POOL PAINT ROYAL BLUE IG-4024 TD2175

EPOXY Dark blue Paint No information available

Manufacturer

Benjamin Moore & Co. 101 Paragon Drive Montvale, NJ 07645 Phone: 1-866-708-9180 insl-x.com

Emergency Telephone

CHEMTREC (US): 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 2A	
Respiratory sensitization	Category 1	
Skin sensitization	Category 1	
Carcinogenicity	Category 2	
Reproductive toxicity	Category 2	
Specific target organ toxicity (single exposure)	Category 3	
Specific target organ toxicity (repeated exposure)	Category 1	
Aspiration toxicity	Category 1	
Flammable liquids	Category 3	

Label elements

Danger

Hazard statements Causes skin irritation Causes serious eye irritation May cause allergy or asthma symptoms or breathing difficulties if inhaled May cause an allergic skin reaction Suspected of causing cancer Suspected of damaging fertility or the unborn child May cause respiratory irritation. May cause drowsiness or dizziness Causes damage to organs through prolonged or repeated exposure May be fatal if swallowed and enters airways Flammable liquid and vapor



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

In case of inadequate ventilation wear respiratory protection

Contaminated work clothing should not be allowed out of the workplace

Do not breathe dust/fume/gas/mist/vapors/spray

Do not eat, drink or smoke when using this product

Use only outdoors or in a well-ventilated area

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. 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

Keep cool

Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/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 advice/attention

Skin

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

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

Wash contaminated clothing before reuse

Inhalation

If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Ingestion

IF SWALLOWED: Immediately call a POISON CENTER or doctor/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 container tightly closed

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-%
Polyamine adduct	-	25
Kaolin	1332-58-7	20
Benzyl alcohol	100-51-6	15
Titanium dioxide	13463-67-7	10
Solvent naphtha, petroleum, light aromatic	64742-95-6	10
Xylene	1330-20-7	10
1,2,4-Trimethylbenzene	95-63-6	5
Triethylenetetramine	112-24-3	5
Ethyl benzene	100-41-4	5
Copper chlorophthalocyanine	12239-87-1	5
Propylene glycol monomethyl ether	107-98-2	5
Cumene	98-82-8	0.5

4. FIRST AID MEASURES

Description of 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 while removing all contaminated clothes and shoes. If skin irritation persists, call a physician. Wash clothing before reuse. Destroy contaminated articles such as shoes.
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	May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause allergic skin reaction.
Notes To Physician	Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Flammable Properties			nsiderable distance to a source of <. Vapors may cause flash fire.
Suitable Extinguishing Media			water. Use extinguishing measures local circumstances and the ent.
Protective Equipment And Preca Firefighters	autions For		elf-contained breathing apparatus SHA/NIOSH (approved or equivalent) ar.
Hazardous combustion products	S		carbon dioxide, carbon monoxide products of varying composition nd/or irritating.
Specific Hazards Arising From The Chemical		distance. Keep produc heat and sources of ig rupture if exposed to f	ck possible over considerable ct and empty container away from gnition. Closed containers may fire or extreme heat. Thermal ad to release of irritating gases and
Sensitivity To Mechanical Impac	t	No	
Sensitivity To Static Discharge		Yes	
Flash Point Data Flash Point (°F) Flash Point (°C) Method		80.0 27.0 PMCC	
Flammability Limits In Air			
Lower flammability limit: Upper flammability limit:		Not available Not available	
NFPA Health: 2	Flammability: 3	Instability: 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 Cleaning 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.
Technical measures/Precaution	s Ensure adequate ventilation. Use only where airflow will keep vapors from building up in or near the work area in adjoining rooms. Comply with all national, state, and 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 TLV	OSHA PEL
Kaolin	2 mg/m³ - TWA	15 mg/m³ - TWA 5 mg/m³ - TWA
Titanium dioxide	10 mg/m³ - TWA	15 mg/m ³ - TWA
Xylene	100 ppm - TWA 150 ppm - STEL	100 ppm - TWA 435 mg/m³ - TWA
Ethyl benzene	20 ppm - TWA	100 ppm - TWA 435 mg/m³ - TWA
Copper chlorophthalocyanine	1 mg/m³ - TWA	N/E
Propylene glycol monomethyl ether	50 ppm - TWA 100 ppm - STEL	N/E
Cumene	50 ppm - TWA	50 ppm - TWA 245 mg/m³ - TWA prevent or reduce skin absorptio

Legend

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

Appro	priate	engineering
contro	ls	

Ensure adequate ventilation, especially in confined areas. **Engineering Measures Personal Protective Equipment Eye/Face Protection** Safety glasses with side-shields. **Skin Protection** Long sleeved clothing. Protective gloves. Use only with adequate ventilation. In operations where exposure limits are **Respiratory Protection** 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. Avoid contact with skin, eyes and clothing. Remove and wash contaminated **Hygiene Measures** clothing before re-use. Wash thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance Odor Odor Threshold Density (Ibs/gal) Specific Gravity pH Viscosity (cps) liquid solvent No information available 9.8 - 9.9 1.18 - 1.20 No information available No information available

Solubility(ies) Water solubility **Evaporation Rate** Vapor pressure @20 °C (kPa) 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) Method Flammability (solid, gas) Upper flammability limit: Lower flammability limit: Autoignition Temperature (°F) Autoignition Temperature (°C) **Decomposition Temperature (°F) Decomposition Temperature (°C)** Partition coefficient

No information available 65 - 75 60 - 70 25 - 35 30 - 40 < 340 248.0 120.0 No information available No information available 80.0 27.0 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 Products	Thermal decomposition can lead to release of irritating gases and vapors.
Possibility of hazardous reactions	None under normal conditions of use.

11. TOXICOLOGICAL INFORMATION

Product Information

Information on likely routes of exposure

Principal Routes of Exposure Eye contact, skin contact and inhalation.

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.
cal, chemical and toxicological characteristics
No information available
as well as chronic effects from short and long-term exposure
Contact with eyes may cause irritation. May cause skin irritation and/or dermatitis. Prolonged skin contact may defat the 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.
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.
Respiratory sensitizer May cause allergy or asthma symptoms or breathing difficulties if inhaled May cause an allergic skin reaction
No information available.
No information available. Possible risk of impaired fertility. Possible risk of harm to the unborn child. No information available.
No information available. Causes damage to organs through prolonged or repeated exposure if inhaled. Central nervous system. Causes damage to organs through prolonged or repeated exposure.
May cause disorder and damage to the. Respiratory system. No information available.
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

3444 mg/kg
3061 mg/kg
6.6 mg/L
2238.8 mg/L

Acute Toxicity Component Information

<u>Kaolin</u> 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/m³ (Rat) Titanium dioxide LD50 Oral: > 10000 mg/kg (Rat) Solvent naphtha, petroleum, light aromatic LD50 Oral: 8400 mg/kg (Rat) **Xvlene** LD50 Oral: 4300 mg/kg (Rat) LD50 Dermal: > 1700 mg/kg (Rabbit) LC50 Inhalation (Vapor): 5000 ppm (Rat, 4 hr.) 1,2,4-Trimethylbenzene LD50 Oral: 5000 mg/kg (Rat) LC50 Inhalation (Vapor): 18000 mg/m³ (Rat, 4 hr.) Triethylenetetramine LD50 Oral: 2500 mg/kg (Rat) LD50 Dermal: 805 mg/kg (Rabbit) Ethyl benzene LD50 Oral: mg/kg (Rat) LD50 Dermal: > mg/kg (Rabbit) LC50 Inhalation (Vapor): mg/m³ (Rat, 2 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) Cumene LD50 Oral: > 1400 mg/kg (Rat) LD50 Dermal: 12300 µL/kg (Rabbit) LC50 Inhalation (Vapor): 39000 mg/kg (Rat, 4 hr.)

Carcinogenicity

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

Chemical name	IARC	NTP	OSHA
	2B - Possible Human		Listed
Titanium dioxide	Carcinogen		
	2B - Possible Human		Listed
Ethyl benzene	Carcinogen		
	2B - Possible Human	Reasonably	Listed
Cumene	Carcinogen	Anticipated Human	
		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

There is no data for this product.

Mobility in Environmental Media

No information available.

<u>Ozone</u>

Not applicable

Component Information

Acute Toxicity to Fish

<u>Titanium dioxide</u> LC50: > 1000 mg/L (Fathead Minnow - 96 hr.) <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.)

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, 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 Description	PAINT 3 UN1263 III UN1263, PAINT, 3, III
ICAO / IATA	Contact the preparer for further information.
IMDG / IMO	Contact the preparer for further information.
	15. REGULATORY INFORMATION

International Inventories

TSCA: United States	Yes - All components are listed or exempt.
DSL: Canada	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.	Weight-%	CERCLA/SARA 313 (de minimis concentration)
Xylene	1330-20-7	10	1.0
1,2,4-Trimethylbenzene	95-63-6	5	1.0
Ethyl benzene	100-41-4	5	0.1
Copper chlorophthalocyanine	12239-87-1	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-%	Hazardous Air Pollutant (HAP)
Xylene	1330-20-7	10	Listed
Ethyl benzene	100-41-4	5	Listed
Cumene	98-82-8	0.5	Listed

US State Regulations

California Proposition 65

MARNING: Cancer and Reproductive Harm– www.P65warnings.ca.gov

State Right-to-Know

Chemical name	Massachusetts	New Jersey	Pennsylvania
Kaolin	Х	Х	Х
Benzyl alcohol	Х		Х
Titanium dioxide	Х	Х	Х
Xylene	Х	X	Х
1,2,4-Trimethylbenzene	Х	Х	Х
Triethylenetetramine	Х	Х	Х
Ethyl benzene	Х	Х	Х
Copper chlorophthalocyanine		Х	Х
Propylene glycol monomethyl ether	Х	Х	Х
2-Butoxyethanol	Х	X	Х

Legend

X - Listed

16. OTHER INFORMATION

HMIS - Health: 2*

Flammability: 3

Reactivity: 0 PPE: -

HMIS Legend

- 0 Minimal 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.

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 800-225-5554
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Disclaimer

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END OF SAFETY DATA SHEET