1. IDENTIFICATION OF THE MIXTURE AND OF THE SUPPLIER

Product Identifier	
Product	Epoxy Primer Green [58-3016]
Recommended use of chemical	Use as Primer
Restriction on use	No open flames, No spraks, and No smoking
Supplier's details	
Company	Big-Ben (Paints) Company Limited
Address	38 Mu 7 Suanluangruamjai Road Suanluang Krathumban Samutsakorn 74110 Thailand
Telephone number	+66 2 811 1442 or +66 2 811 1443
Fax number	+66 2 811 0632
E-mail	bbp@bbp.co.th
Emergency phone number	+66 2 811 1442 or + 66 2 811 1443

2. HAZARD IDENTIFICATION

Classification of the substance or mixture

This product has been classified in accordance with the hazard communication standard 29 CSR 1910.1200; the SDS and labels contain all the information as required by the standard.

Flammable liquids	Category 1
Acute toxicity - oral	Category 3
Skin corrosion/irritation	Category 2
Eye damage/irritation	Category 1
Sentization - skin	Category 1
Specific target organ toxicity (single exposure)	Category 3
Hazardous to the aquatic environment - acute hazard	Category 1
Hazardous to the aquatic environment - long-term hazard	Category 1

Remark:

Percentage of mixture consisting of ingredient(s) of unknown oral toxicity: 59.06%

Percentage of mixture consisting of ingredient(s) of unknown dermal toxicity: 92.51%

Percentage of mixture consisting of ingredient(s) of unknown inhalation toxicity: 60.08%

GHS label elements

Pictogram or symbol	
Signal word	**Danger**

Hazard statement:

H224 Extremely flammable liquid and vapour

H301 Toxic if swalloed

H315 Causes skin irritation

H317 May cause an allergic skin reaction

H318 Causes serious eye damage

H335 May cause respiratory irritation

H336 May cause drowsiness or dizziness

H400 Very toxic to aquatic life

H410 Very toxic to aquatic life with long lasting effects

Precautionary statement

[PREVENTION]

P210 Keep away from heat / sparks / open flames / hot surfaces. No smoking.

P233 Keep container tightly closed.

P240 Ground / bond container and receiving equipment.

P241 Use explosion-proof electrical / ventilating / lighting / equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.
P261 Avoid breathing dust / fume / gas / mist / vapors / spray.
P264 Wash thoroughly after handling.
P270 Do no eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P272 Contaminated work clothing should not be allowed out of the workplace.
P273 Avoid release to the environment.
P280 Wear protective gloves / protective clothing / eye protection / face protection.

[RESPONSE]

P301+P310 IF SWALLOWED Immediately call a POISON CENTER or doctor / physician.
P302+P352 IF ON SKIN Wash with plenty of soap and water.
P303+P361+P353 IF ON SKIN (or hair) Remove / Take off immediately all contaminated clothing. Rinse skin with water / shower.
P304+P340 IF INHALED Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+P351+P338 IF IN EYES Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER or doctor / physician.
P312 Call a POISON CENTER or doctor / physician if you feel unwell.
P321 Specific treatment (see on this label).
P330 Rinse mouth.
P332+P313 IF skin irritation occursGet medical advice / attention.
P333+P313 IF skin irritation or rash occurs Get medical advice / attention.
P362 Take off contaminated clothing and wash before reuse.
P363 Wash contaminated clothing before reuse.
P370+P378 In case of fire Use dry sand, dry chemical or alcohol-resistant foam for extinction.
P391 Collect spillage.

[STORAGE]

P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P403+P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.

[DISPOSAL]

P501 Dispose of contents / container in accordance with local / regional / national / international regulations.

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Chemical name	CAS No.	Content % (w/w)
2-Methylpropanol-1;2-Methylpropyl alcoho	78-83-1	2.76 - 4.28
2-PROPANOL	67-63-0	0.06 - 0.15
Barite	7727-43-7	4.05 - 11.02
Blue	28654-73-1	0.02 - 0.05
Epoxy Resin	25068-38-6	11.43 - 38.50
Ethyl Benzene	100-41-4	0.03 - 0.07
Magnesium Dioxide	1309-48-4	2.13 - 5.33
Methylcarbinol	64-17-5	0.07 - 0.16
Silicon Dioxide	7631-86-9	5.68 - 8.30
Titanium Dioxide	13463-67-7	5.63 - 10.57
Xylene	1330-20-7	20.27 - 36.33
dizinc(2+) potassium bis(dioxochromiumbis(olate)) hydroxide	11103-86-9	3.90 - 7.86

4. FIRST AND MEASURES	
Inhalation	Remove to fresh air. If unconscious, place in recovery position and seek medical attention immediately.
Skin contact	Immediately flush with water for at least 15 minutes. Remove contaiminated clothing. Seek medical attention immediately. Wash thoroughly after handling.
Eye contact	Hold eyelids apart and immediately flush with plenty of water for 15 minutes. Seek medical advice. Remove contact lenses.
Ingestion	Rinse mouth with water. Never give anything by mouth to an unconscious person. Obtain medical attention. If swallowed, DO NOT induce vomitting unless directed to do so by medical personnel.
Most important symptoms/effects, acute and delayed	Dizziness. Drowsiness. Headache. Nausea. Vomitting. Weakness. Unconsciousness. Skin and eye redness. Pain. Nausea. Vomitting.

5. FIRE FIGHTING MEASURES	
Suitable extinguishing media	Dry chemical. Carbon Dioxide (CO_2). Alcohol-resistant foam. Water spray.
Unsuitable extinguishing media	High volume water jet.
Specific hazards arising from the chemical	Flammable liquid. Vapors can form an ignitable misture with air. Vapors can flow along surfaces to a distant ignition source and flash back. Container may rupture on heating.
Specific protective equipment and precautions for firefighters	Wear self-contained breathing apparatus and full protective clothing for firefighting.

6. ACCIDENTAL RELEASE MEASURES	
Personal precautions, protective equipment, and emergency procedures	Keep unnecessary personnel away. Prevent further leakage or spillage if safe to do so. Use personal protective equipment. Use only non-sparkling tools.
Environmental precautions	Prevent the material from entering drains or water courses.
Methods and materials for containment and cleaning up	Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local/national regulations.

7. HANDLING AND STORAGE	
Precautions for safe handling	Avoid breathing vapor and contact with eyes, skin, and clothing. Do no leave containers open. Avoid repeated or prolonged contact with skin.
Conditions for safe storage, including any incompatibilites	Keep away from heat or flames. Keep in cool, dry, ventilated storage and in closed containers. Store away from oxidizing agent.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION	
Control parameters	2-Methylpropanol-1;2-Methylpropyl alcoho OSHA PEL-TWA 100[21] Skin notification N[21] NIOSH REL-TWA 50[21] Skin notification N[21] ACGIH Skin notification N[21] CAL/OSHA Skin notification N[21] 2-PROPANOL OSHA PEL-TWA 400[22] Skin notification N[22] NIOSH REL-TWA 400[22] REL-STEL 500[22] Skin notification N[22] ACGIH TLV-TWA 200[22] TLV-STEL 400[22] Barite

OSHA

Skin notification N[27]

NIOSH

Skin notification N[27]

ACGIH

Skin notification N[27]

CAL/OSHA

Skin notification N[27]

Blue

Epoxy Resin

Ethyl Benzene

OSHA

PEL-TWA 100[23]

Skin notification N[23]

NIOSH

REL-TWA 100[23]

REL-STEL 125[23]

Skin notification N[23]

ACGIH

TLV-TWA 20[23]

Skin notification N[23]

CAL/OSHA

PEL-TWA 100[23]

PEL-STEL 125[23]

Skin notification N[23]

Magnesium Dioxide

Methylcarbinol

OSHA

PEL-TWA 1000[24]

NIOSH

REL-TWA 1000[24]

ACGIH

TLV-TWA 1000[24]

Silicon Dioxide

Titanium Dioxide

OSHA

PEL-TWA 15[25]

Skin notification N[25]

NIOSH

Skin notification N[25]

ACGIH

TLV-TWA 10[25]

Skin notification N[25]

CAL/OSHA

PEL-TWA 10[25]

Skin notification N[25]

Xylene

OSHA

PEL-TWA 100[26]

Skin notification N[26]

NIOSH

REL-TWA 100[26]

Skin notification N[26]

ACGIH

TLV-TWA 100[26]

TLV-STEL 150[26]

Skin notification N[26]

CAL/OSHA

PEL-TWA 100[26]

PEL-STEL 150[26]

PEL-C 300[26]

Skin notification N[26]

	dizinc(2+) potassium bis(dioxochromiumbis(olate)) hydroxide
Appropriate engineering controls	Provide adequate ventilation. Install local exhaust.
Personal protective equipment	
Respiratory protection	Organic vapor respirator
Hand protection	Rubber gloves. Neoprene.
Eye protection	Safety goggle.
Skin and body protection	Wear suitable clothing

9. PHYSICAL AND CHEMICAL PROPERTIES	
Appearance	High viscosity liquid paint
Odor	Aromatic like
Odor threshold	Not Available
pH	Not Available
Melting point/freezing point	Not Available
Initial boiling point and boiling range	Not Available
Flash point	lower than 23 C
Evaporation rate	Not Available
Flammability (solid, gas)	Not Available
Upper/lower flammability or explosive limits	Not Available Not Available
Vapor pressure	Not Available
Vapor density	Not Available
Relative density	1.35-1.45
Solubility(ies)	Not Available
Partition coefficient n-Octanol-water	Not Available
Auto-ignition temperature	Not Available
Decomposition temperature	Not Available
Viscosity	70-75 KU

10. STABILITY AND REACTIVITY	
Reactivity	Reacts violently with strong acids and strong oxidants
Chemical stability	Stable under normal storage and handling conditions
Possibility of hazardous reaction	Will not occur
Condition to avoid	High temperatures, sparks, open flame, and all other sources of ignition
Incompatible materials	Strong oxidizing agents, strong acids
Hazardous decomposition products	Not available

11. TOXICOLOGICAL INFORMATION	
Acute toxicity (oral)	ATEmix = 269.81 mg/kg (Category 3) 2-Methylpropanol-1;2-Methylpropyl alcoho LD50 (rat) oral = 2460.00 mg/kg[1] 2-PROPANOL LD50 (rat) oral = 4710.00 mg/kg[2] Barite LD50 (rat) oral = 30700.00 mg/kg[3] Ethyl Benzene LD50 (rat) oral = 3500.00 mg/kg[4] Magnesium Dioxide LD50 (rat) oral = 3870.00 mg/kg Methylcarbinol LD50 (rat) oral = 1187.00 mg/kg[5] Titanium Dioxide LD50 (rat) oral = 10000.00 mg/kg[6] dizinc(2+) potassium bis(dioxochromiumbis(olate)) hydroxide LD50 (rat) oral = 57.18 mg/kg[7]
Acute toxicity (dermal)	ATEmix = 12870.00 mg/kg (Not classified) 2-PROPANOL LD50 (rabbit) dermal = 12870.00 mg/kg[2]
Acute toxicity (dermal)	ATEmix = 1610.35 mg/kg (Not classified) 2-PROPANOL LC50 (rat) inhalation = 72.60 mg/kg[2] Methylcarbinol LC50 (rat) inhalation = 115.90 mg/kg[5] Xylene LC50 (rat) inhalation = 6360.00 mg/kg[8] dizinc(2+) potassium bis(dioxochromiumbis(olate)) hydroxide LC50 (rat) inhalation = 510.00 mg/kg[7]
Skin corrosion and skin irritation	Causes skin irritation (2-Methylpropanol-1;2-Methylpropyl alcoho,Epoxy Resin,Xylene)
Serious eye damage or eye irritation	Causes serious eye damage (2-Methylpropanol-1;2-Methylpropyl alcoho,2-PROPANOL,Epoxy Resin)
Respirator and skin sensitzation	Not classified
Skin sentization	May cause an allergic skin reaction (Epoxy Resin)
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Not classified
Specific target organ toxicity following single exposure	May cause respiratory irritation (2-Methylpropanol-1;2-Methylpropyl alcoho,2-PROPANOL)
Specific target organ toxicity following repeated exposure	Not classified
Aspiration hazard	Not classified

12. ECOLOGICAL INFORMATION	
Acute aquatic hazard	Very toxic to aquatic life <u>2-Methylpropanol-1;2-Methylpropyl alcoho</u> LC50 (fish) 96 hr = 1430 mg/L[9] EC48 (shrimp) 48 hr = 1100 mg/L[9] ErC-EC72 (Fungi) 96 hr = 593 mg/L[9] <u>2-PROPANOL</u> LC50 (fish) 96 hr = 6120 mg/L[2] <u>Barite</u> LC50 (fish) 96 hr = 3.5 mg/L[14] EC48 (shrimp) 48 hr = 14.5 mg/L[14] ErC-EC72 (Fungi) 96 hr = 1.15 mg/L[14] <u>Blue</u> LC50 (fish) 96 hr = 146 mg/L[15] EC48 (shrimp) 48 hr = 100 mg/L[15] ErC-EC72 (Fungi) 96 hr = 100 mg/L[15] <u>Epoxy Resin</u> EC48 (shrimp) 48 hr = 2 mg/L[10] <u>Ethyl Benzene</u> LC50 (fish) 96 hr = 4.20 mg/L[16] EC48 (shrimp) 48 hr = 2.10 mg/L[13] ErC-EC72 (Fungi) 96 hr = 4.60 mg/L[13] <u>Methylcarbinol</u> LC50 (fish) 96 hr = 14200 mg/L[5]

	EC48 (shrimp) 48 hr = 10000 mg/L[5] ErC-EC72 (Fungi) 96 hr = 675 mg/L[5] Titanium Dioxide EC48 (shrimp) 48 hr = 100 mg/L[6] ErC-EC72 (Fungi) 96 hr = 35.9 mg/L[6] Xylene LC50 (fish) 96 hr = 3.30 mg/L[17] dizinc(2+) potassium bis(dioxochromiumbis(olate)) hydroxide LC50 (fish) 96 hr = 0.33 mg/L[7] EC48 (shrimp) 48 hr = 0.155 mg/L[7] ErC-EC72 (Fungi) 96 hr = 0.1125 mg/L[7]
Long term aquatic hazard	Very toxic to aquatic life with long lasting effects 2-Methylpropanol-1;2-Methylpropyl alcoho NOEC shrimp = 20 mg/L[9] NOEC fungi = 53 mg/L[9] Barite NOEC fish = 1.26 mg/L[14] NOEC shrimp = 2.9 mg/L[14] NOEC fungi = 1.15 mg/L[14] Ethyl Benzene NOEC fish = 3.30 mg/L[13] NOEC shrimp = 1 mg/L[13] NOEC fungi = 3.4 mg/L[13] Methylcarbinol NOEC fish = 250 mg/L[5] NOEC shrimp = 2 mg/L[5] NOEC fungi = 280 mg/L[5] Titanium Dioxide NOEC shrimp = 1.72-5 mg/L[19] NOEC fungi = 1 mg/L[20] Xylene NOEC fish = 1.30 mg/L[18] NOEC shrimp = 1.57 mg/L[11] NOEC fungi = 0.44 mg/L[11] dizinc(2+) potassium bis(dioxochromiumbis(olate)) hydroxide NOEC fish = 0.056 mg/L[7] NOEC shrimp = 0.075 mg/L[7] NOEC fungi = 0.01 mg/L[7]
Persistance and degradability	Rapidly degradable (2-Methylpropanol-1;2-Methylpropyl alcoho,Ethyl Benzene,Xylene)
Bioaccumulative potential	Bioaccumulative potential 2-Methylpropanol-1;2-Methylpropyl alcoho log KOW = 0.76[28] BCF = 3[28] Ethyl Benzene log KOW = 3.03[13] BCF = 110[13] Methylcarbinol log KOW = -0.35[5] BCF = 3[30] Xylene log KOW = 3.20[29] BCF = 14.80[29]
Mobility in soil	The product is insoluable in water. If released to water, some of the components will have tendency to evaporate while other components are expected to be highly mobile in soil and have the potential to reach underground water supplies.
Other adverse effects	Not available

13. DISPOSAL CONSIDERATIONS	
Disposal methods	Disposing of this material/container should be done under all the regulations or handled by authorized waste collector in your country
Container disposal	Do not re-use empty containers

14. TRANSPORT INFORMATION	
Labels required	
UN number	1263
UN proper shipping name	Paint
Transport hazard class(es)	3
Packing group	III
Environmental hazards	Not applicable
Special precautions	Not applicable
Transport in bulk	Not applicable

15. REGULATORY INFORMATION	
Inventory of existing chemical substance produced or imported in USA (TSCA)	All component in this product are listed
Toxic substance control act (TSCA)	All component in this product are listed

16. OTHER INFORMATION
Issue date: 19 August 2022
References
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