1. IDENTIFICATION OF THE MIXTURE AND OF THE SUPPLIER		
Product Identifier		
Product	Etch Primer White [82-5001]	
Recommended use of chemical	Use as Coating	
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 undefined
Acute toxicity - dermal	Category undefined
Acute toxicity - inhalation	Category undefined
Skin corrosion/irritation	Category undefined
Eye damage/irritation	Category undefined
Sentization - respiratory	Category undefined
Sentization - skin	Category undefined
Germ cell mutagenicity	Category undefined
Carcinogenicity	Category undefined
Toxic to reproduction	Category undefined
Specific target organ toxicity (single	Category undefined
exposure)	
Specific target organ toxicity	Category undefined
(repeated exposure)	
Aspiration hazard	Category undefined
Hazardous to the aquatic	Category undefined
environment - acute hazard	
Hazardous to the aquatic	Category undefined
environment - long-term hazard	
Hazard to the ozone layer	Category undefined

#### Remark:

Percentage of mixture consisting of ingredient(s) of unknown oral toxicity: 66.10%

Percentage of mixture consisting of ingredient(s) of unknown dermal toxicity: 82.35%

Percentage of mixture consisting of ingredient(s) of unknown inhalation toxicity: 49.42%

## **GHS** label elements

Pictogram or symbol	
Signal word	Danger

#### **Hazard statement:**

H224 Extremely flammable liquid and vapour

H303 May be harmful if swallowed

H310 Fatal in contact with skin

H315 Causes skin irritation

H371 May cause damage to organs

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.

P260 Do not breathe dust / fume / gas / mist / vapors / spray.

P262 Do not get in eyes, on skin, or on clothing.

P264 Wash thoroughly after handling.

P270 Do no eat, drink or smoke when using this product.

P273 Avoid release to the environment.

P280 Wear protective gloves / protective clothing / eye protection / face protection.

#### [RESPONSE]

P302+P350 IF ON SKIN Gently wash with plenty of soap and water.

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.

P309+P311 IF exposed or if you feel unwell Call a POISON CENTER or doctor / physician.

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).

P322 Specific measures (see on this label).

P332+P313 IF skin irritation occursGet medical advice / attention.

P361 Remove / Take off immediately all contaminated clothing.

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+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) 1-ACETOXY-2-ETHOXYETHANE 111-15-9 1.63 - 4.38 68648-78-2 6.41 - 15.19 Acetic acid ethenyl ester Acetone 67-64-1 2.32 - 5.30**Butyl Acetate** 123-86-4 4.96 - 10.21 Formaldehyde 25054-06-2 7.14 - 8.90 Methanol 67-56-1 3.59 - 8.09 Talcum powder 14807-96-6 13.11 - 28.69 6.80 - 12.62 Titanium Dioxide 13463-67-7 **Xylene** 1330-20-7 23.98 - 33.73

Remove to fresh air. If unconscious, place in recovery position and seek medical attention immediately.
Immediately flush with water for at least 15 minutes. Remove containinated clothing. Seek medical attention immediately. Wash thoroughly after handling.
Hold eyelids apart and immediately flush with plenty of water for 15 minutes. Seek medical advice. Remove contact lenses.
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.
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 <sub>2</sub> ). 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
oomammem and obaning ap	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,	Keep away from heat or flames. Keep in cool, dry, ventilated storage and in closed
including any incompatibilites	containers. Store away from oxidizing agent.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters	1-ACETOXY-2-ETHOXYETHANE OSHA
	PEL-TWA 100 <sup>16</sup>
	Skin notification Y <sup>16</sup>
	NIOSH
	REL-TWA 0.5 <sup>16</sup>
	Skin notification Y <sup>16</sup>
	ACGIH
	TLV-TWA 5 <sup>16</sup>
	Skin notification Y <sup>16</sup>
	CAL/OSHA
	PEL-TWA 5 <sup>16</sup>
	Skin notification Y <sup>16</sup>
	Acetic acid ethenyl ester Acetone OSHA
	PEL-TWA 1000 <sup>17</sup>
	Skin notification N <sup>17</sup>
	NIOSH

**REL-TWA 250<sup>17</sup>** 

Skin notification N<sup>17</sup>

ACGIH

TLV-TWA 2500<sup>17</sup>

TLV-STEL 500<sup>17</sup>

Skin notification N<sup>17</sup>

CAL/OSHA

PEL-TWA 500<sup>17</sup>

PEL-STEL 750<sup>17</sup>

PEL-C 3000<sup>17</sup>

Skin notification N<sup>17</sup>

Butyl Acetate OSHA

PEL-TWA 150<sup>18</sup>

Skin notification N<sup>23</sup>

NIOSH

REL-TWA 150<sup>23</sup>

REL-STEL 200<sup>23</sup>

Skin notification N<sup>23</sup>

**ACGIH** 

**TLV-TWA** 50<sup>23</sup>

TLV-STEL 150<sup>23</sup>

Skin notification N

CAL/OSHA

PEL-TWA 150<sup>23</sup>

PEL-STEL 200<sup>23</sup>

Skin notification N<sup>23</sup>

Formaldehyde Methanol OSHA

PEL-TWA 200<sup>19</sup>

Skin notification N<sup>19</sup>

NIOSH

**REL-TWA 200<sup>19</sup>** 

REL-STEL 250<sup>19</sup>

Skin notification Y<sup>19</sup>

ACGIH

TLV-TWA 200<sup>19</sup>

**TLV-STEL 250<sup>19</sup>** 

Skin notification Y<sup>19</sup>

CAL/OSHA

PEL-TWA 200<sup>19</sup>

PEL-STEL 250<sup>19</sup>

PEL-C 1000<sup>19</sup>

Skin notification Y<sup>19</sup>

Talcum powder OSHA

PEL-TWA 20 mppcf<sup>20</sup>

Skin notification N

NIOSH

REL-TWA 2 mg/m³ (resp)

Skin notification N

**ACGIH** 

TLV-TWA 2 mg/m³ (respirable particulate matter) [2009]

Skin notification N

CAL/OSHA

PEL-TWA 2 mg/m³ (respirable dust)

Skin notification N <u>Titanium Dioxide</u> OSHA PEL-TWA 15<sup>21</sup> Skin notification N<sup>21</sup> NIOSH Skin notification N<sup>21</sup> ACGIH TLV-TWA 10<sup>21</sup> Skin notification N<sup>21</sup> CAL/OSHA PEL-TWA 10<sup>21</sup> Skin notification N<sup>21</sup> <u>Xylene</u> OSHA PEL-TWA 100<sup>22</sup> Skin notification N<sup>22</sup> NIOSH **REL-TWA** 100<sup>22</sup> Skin notification N<sup>22</sup> ACGIH TLV-TWA 100<sup>22</sup> TLV-STEL 150<sup>22</sup> Skin notification N<sup>22</sup> CAL/OSHA PEL-TWA 100<sup>22</sup> PEL-STEL 150<sup>22</sup> PEL-C 300<sup>22</sup> Skin notification N<sup>22</sup> 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 PRO	OPERTIES
Appearance	High viscosity liquid
Odor	Organic Solvent
Odor threshold	Not available
рН	Not available
Melting point/freezing point	Not Available
Initial boiling point and boiling range	Not Available
Flash point	<23
Evaporation rate	Not available
Flammability (solid, gas)	Not available
Upper/lower flammability or	Not available
explosive limits	Not available
Vapor pressure	Not available
Vapor density	Not available
Relative density	1.13-1.23
Solubility(ies)	Soluble in organic solvent
Partition coefficient n-Octanol-water	Not available
Auto-ignition temperature	Not available
Decomposition temperature	Not available
Viscosity	75-81 KU @ 30C

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 INFORMAT	ION
Acute toxicity (oral)	ATEmix = 3336.67 mg/kg (Category undefined)
	1-ACETOXY-2-ETHOXYETHANE LD50 (rat) oral = 2900.00 mg/kg <sup>1</sup>
	Acetone LD50 (rat) oral = 5800.00 mg/kg <sup>2</sup>
	Butyl Acetate LD50 (rat) oral = 10736.00 mg/kg <sup>3</sup>
	Methanol LD50 (rat) oral = 1187.00 mg/kg <sup>4</sup>
	Titanium Dioxide LD50 (rat) oral = 10000.00 mg/kg <sup>5</sup>
Acute toxicity (dermal)	ATEmix = 32.78 mg/kg (Classify undefined)
	1-ACETOXY-2-ETHOXYETHANE LD50 (rabbit) dermal = 10300.00 mg/kg <sup>1</sup>
	Acetone LD50 (rabbit) dermal = 7426.00 mg/kg <sup>2</sup>
	Butyl Acetate LD50 (rabbit) dermal = 16.00 mg/kg <sup>3</sup>
Acute toxicity (dermal)	ATEmix = 354.36 mg/kg (Classify undefined)
	Acetone LC50 (rat) inhalation = 76.00 mg/kg <sup>2</sup>
	Butyl Acetate LC50 (rat) inhalation = 740.00 mg/kg <sup>3</sup>
	Methanol LC50 (rat) inhalation = 115.90 mg/kg <sup>4</sup>
	Xylene LC50 (rat) inhalation = 6360.00 mg/kg <sup>6</sup>
Skin corrosion and skin irritation	Causes skin irritation (Xylene)
Serious eye damage or eye irritation	(Acetone)
Respirator and skin sensitzation	)
Skin sentization	)
Germ cell mutagenicity	)
Carcinogenicity	)
Reproductive toxicity	)
Specific target organ toxicity	May cause damage to organs (Acetone,Butyl Acetate,Methanol)
following single exposure	
Specific target organ toxicity	)
following repeated exposure	
Aspiration hazard	

## 12. ECOLOGICAL INFORMATION

Acute aquatic hazard	Very toxic to aquatic life	
	1-ACETOXY-2-ETHOXYETHANE LC50 (fish) 96 hr = 40 mg/L <sup>10</sup>	
	Acetone LC50 (fish) 96 hr = $4740 \text{ mg/L}^2$	
	Butyl Acetate LC50 (fish) 96 hr = 18 mg/L <sup>3</sup>	
	EC48 (shrimp) 48 hr = $32 \text{ mg/L}^3$	
	$\frac{\text{Methanol}}{\text{LC50 (fish) 96 hr}} = 15400 \text{ mg/L}^4$	
	EC48 (shrimp) 48 hr = $18260 \text{ mg/L}^4$	
	ErC-EC72 (Fungi) 96 hr = 2200 mg/ $L^4$	
	Talcum powder LC50 (fish) 96 hr = $0.089 \text{ mg/L}^{11}$	
	EC48 (shrimp) 48 hr = 0.00368 mg/L	
	ErC-EC72 (Fungi) 96 hr = 0.007203 mg/L	
	<u>Titanium Dioxide</u> EC48 (shrimp) 48 hr = $100 \text{ mg/L}^5$	
	ErC-EC72 (Fungi) 96 hr = $35.9 \text{ mg/L}^5$	
	<u>Xylene</u> LC50 (fish) 96 hr = 3.30 mg/L <sup>12</sup>	

Long term aquatic hazard	Very toxic to aquatic life with long lasting effects
	Acetone NOEC fish = $530 \text{ mg/L}^2$
	NOEC fungi = $430 \text{ mg/L}^2$
	Butyl Acetate
	NOEC fish = $23 \text{ mg/L}^3$
	NOEC shrimp = 23 mg/L <sup>3</sup>
	NOEC fungi = 196 mg/L <sup>3</sup>
	$\frac{\text{Methanol}}{\text{NOEC fish}} = 446.7 \text{ mg/L}^4$
	NOEC shrimp = 208 mg/L <sup>9</sup>
	Talcum powder  NOEC fish = 0.0014 mg/L
	NOEC shrimp = 0.00146 mg/L
	NOEC fungi = 918.089 mg/L
	<u>Titanium Dioxide</u> NOEC shrimp = 1.72-5 mg/L <sup>14</sup>
	NOEC fungi = 1 mg/L <sup>15</sup>
	Xylene NOEC fish = 1.30 mg/L <sup>13</sup>
	NOEC shrimp = $1.57 \text{ mg/L}^7$
	NOEC fungi = 0.44 mg/L <sup>7</sup>
Persistance and degradability	Not rapidly degradable
Bioaccumulative potential	Bioaccumulative potential
	1-ACETOXY-2-ETHOXYETHANE log KOW = 0.24 <sup>24</sup>
	BCF = $3^{24}$
	<u>Acetone</u>
	$\log KOW = -0.24^{25}$
	BCF = $0.69^{25}$
	Butyl Acetate log KOW = 1.78 <sup>26</sup>
	$BCF = 7.00^{26}$
	$\frac{\text{Methanol}}{\log \text{KOW}} = -0.77^{27}$
	BCF = $10^{27}$
	<u>Xylene</u> log KOW = 3.20 <sup>28</sup>
	BCF = 14.80 <sup>28</sup>
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	3
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: 26 August 2022 References 1. https://toxnet.nlm.nih.gov/cgi-bin/sis/search2/f?./temp/~m8awRK:3 (3-5-19) 2. https://echa.europa.eu/brief-profile/-/briefprofile/100.000.602 (23-12-19) 3. https://echa.europa.eu/brief-profile/-/briefprofile/100.004.236#ScientificProperties (17-12-19) 4. https://echa.europa.eu/brief-profile/-/briefprofile/100.000.599 (17-12-19) 5. https://toxnet.nlm.nih.gov/cgi-bin/sis/search2/f?./temp/~Q1zAvm:3 (3-5-19) https://www.epa.govt.nz/database-search/chemical-classification-and-information-database-ccid/view/682 (04-05-19) 7. https://echa.europa.eu/brief-profile/-/briefprofile/100.014.124 (24-12-19) 8. https://echa.europa.eu/brief-profile/-/briefprofile/100.004.236 (04-05-19) 9. https://echa.europa.eu/brief-profile/-/briefprofile/100.000.599 (3-5-19) 10. https://toxnet.nlm.nih.gov/cgi-bin/sis/search2/f?./temp/~7TG1XJ:1 (03-05-19) 11. https://echa.europa.eu/brief-profile/-/briefprofile/100.035.328 (7/8/19) 12. https://www.epa.govt.nz/database-search/chemical-classification-and-information-database-ccid/view/682 (04-05-19 13. https://echa.europa.eu/brief-profile/-/briefprofile/100.014.124 (04-05-19) 14. https://echa.europa.eu/brief-profile/-/briefprofile/100.033.327 (3-5-19) 15. https://echa.europa.eu/brief-profile/-/briefprofile/100.033.327 (3-5-19 16. https://www.osha.gov/chemicaldata/chemResult.html?recNo=122 (3-5-19) 17. https://www.osha.gov/chemicaldata/chemResult.html?recNo=476 (23-12-19) 18. www.oshhttps://www.osha.gov/chemicaldata/chemResult.html?recNo=178 (17-12-19)a.gov 19. https://www.osha.gov/chemicaldata/chemResult.html?recNo=474 (3-5-19) 20. https://www.osha.gov/chemicaldata/chemResult.html?recNo=277 (7/8/19) 21. https://www.osha.gov/chemicaldata/chemResult.html?recNo=246 (3-5-19) 22. https://www.osha.gov/chemicaldata/chemResult.html?recNo=228 (04-05-19) 23. https://www.osha.gov/chemicaldata/chemResult.html?recNo=178 (17-12-19) 24. https://pubchem.ncbi.nlm.nih.gov/compound/8095#section=Environmental-Fate-Exposure-Summary (03-05-19) 25. https://pubchem.ncbi.nlm.nih.gov/compound/180 (23-12-19) 26. https://pubchem.ncbi.nlm.nih.gov/compound/31272#section=Environmental-Abiotic-Degradation (04-05-19) 27. https://pubchem.ncbi.nlm.nih.gov/compound/887#section=Environmental-Fate-Exposure-Summary (3-5-19)

28. https://pubchem.ncbi.nlm.nih.gov/compound/7929#section=Environmental-Fate (04-05-19)