I. IDENTIFICATION OF THE MIXTURE AND OF THE SUPPLIER		
Product Identifier	oduct Identifier	
Product	Clearcoat 2K 4:1 Clearguard [45-8050]	
Recommended use of chemical	Use as 2K Clear Topcoat	
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 5
Acute toxicity - dermal	Category 2
Skin corrosion/irritation	Category 2
Eye damage/irritation	Category 2A
Specific target organ toxicity (single exposure)	Category 3
Specific target organ toxicity (repeated exposure)	Category 2
Aspiration hazard	Category 1
Hazardous to the aquatic environment - acute hazard	Category 2
Hazardous to the aquatic environment - long-term hazard	Category 3

Remark:

Percentage of mixture consisting of ingredient(s) of unknown oral toxicity: 51.80%

Percentage of mixture consisting of ingredient(s) of unknown dermal toxicity: 71.35%

Percentage of mixture consisting of ingredient(s) of unknown inhalation toxicity: 78.69%

GHS label elements

Pictogram of Symbol	
Signal word	Danger

Hazard statement:

H224 Extremely flammable liquid and vapour

H303 May be harmful if swallowed

H304 May be fatal if swallowed and enters airways

H310 Fatal in contact with skin

H315 Causes skin irritation

H319 Causes serious eye irritation

H335 May cause respiratory irritation

H336 May cause drowsiness or dizziness

H373 May cause damage to organs through prolonged or repeated exposure

H401 Toxic to aquatic life

H412 Harmful 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.

P261 Avoid breathing 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.

P271 Use only outdoors or in a well-ventilated area.

P273 Avoid release to the environment.

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

IRESPONSE1

P301+P310 IF SWALLOWED Immediately call a POISON CENTER or doctor / physician.

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.

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.

P314 Get medical advice / attention if you feel unwell.

P321 Specific treatment (see on this label).

P322 Specific measures (see on this label).

P331 Do NOT induce vomiting.

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

P337+P313 IF eye irritation persistsGet 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.

[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)	
1,2,3-Trimethyl Benzen	526-73-8	1.99 - 4.59	
1,2,4-Trimethyl Benzene	95-63-6	15.37 - 28.81	
1,3,5-Trimethyl Benzen	108-67-8	1.71 - 4.60	
Acrylic Polymer	-	19.31 - 53.81	
Butyl Acetate	123-86-4	6.90 - 8.81	
Cumene	98-82-8	1.50 - 5.05	
Dimethyl glutarate	1119-40-0	1.37 - 2.19	
Ethyl Benzene	100-41-4	5.61 - 14.77	
Xylene	1330-20-7	4.42 - 10.43	
n-Propyl Benzene	103-65-1	2.35 - 4.37	
Others	-	0.01 - 0.01	

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 containinated 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,	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

1,2,3-Trimethyl Benzen 1,2,4-Trimethyl Benzene 1,3,5-Trimethyl Benzen
Acrylic Polymer Butyl Acetate

OSHA PEL-TWA 150¹⁵ Skin notification N¹⁷ NIOSH REL-TWA 150¹⁷ REL-STEL 200¹⁷

Skin notification N¹⁷

ACGIH TLV-TWA 50¹⁷

TLV-STEL 150¹⁷ Skin notification N

CAL/OSHA

PEL-TWA 150¹⁷

PEL-STEL 200¹⁷

Skin notification N¹⁷

<u>Cumene</u>

OSHA

PEL-TWA 50⁴⁴

Skin notification Y44

NIOSH

REL-TWA 50⁴⁴

Skin notification Y⁴⁴

ACGIH

TLV-TWA 50⁴⁴

Skin notification N⁴⁴

CAL/OSHA

PEL-TWA 50⁴⁴

Skin notification Y44

<u>Dimethyl glutarate</u> <u>Ethyl Benzene</u> OSHA

PEL-TWA 100³⁴

Skin notification N³⁴

NIOSH

REL-TWA 100³⁴

REL-STEL 12534

Skin notification N³⁴

ACGIH

TLV-TWA 20³⁴

Skin notification N³⁴

CAL/OSHA

PEL-TWA 100³⁴

PEL-STEL 125³⁴

Skin notification N34

Xylene OSHA

PEL-TWA 100¹⁶

Skin notification N¹⁶

NIOSH

REL-TWA 100¹⁶

Skin notification N¹⁶

ACGIH

TLV-TWA 100¹⁶

TLV-STEL 150¹⁶

Skin notification N¹⁶

CAL/OSHA

PEL-TWA 100¹⁶

	PEL-STEL 150 ¹⁶ PEL-C 300 ¹⁶ Skin notification N ¹⁶ n-Propyl Benzene Others
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	Liquid Clear
Odor	Organic solvent
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
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	0.85 - 0.95 g/cm3
Solubility(ies)	Soluble in Organic solvent
Partition coefficient n-Octanol-water	Not Available
Auto-ignition temperature	Not Available
Decomposition temperature	Not Available
Viscosity	20-21 second by Ford cup No.4

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

Acute toxicity (oral)	ATEmix = 3563.52 mg/kg (Category 5)
Acute toxicity (oral)	
	1,2,4-Trimethyl Benzene LD50 (rat) oral = 3280.00 mg/kg ³⁸
	Butyl Acetate LD50 (rat) oral = 10736.00 mg/kg ³
	Cumene LD50 (rat) oral = 1400.00 mg/kg ²⁴
	Dimethyl glutarate LD50 (rat) oral = 5000.00 mg/kg^5
	Ethyl Benzene LD50 (rat) oral = 3500.00 mg/kg ²⁴
	n-Propyl Benzene LD50 (rat) oral = 6040.00 mg/kg ³⁹
Acute toxicity (dermal)	ATEmix = 56.09 mg/kg (Classify 2)
	1,2,4-Trimethyl Benzene LD50 (rabbit) dermal = 3160.00 mg/kg ³⁸
	Butyl Acetate LD50 (rabbit) dermal = 16.00 mg/kg ³
Acute toxicity (dermal)	ATEmix = 124.93 mg/kg (Not classified)
	Butyl Acetate LC50 (rat) inhalation = 740.00 mg/kg ³
	Cumene LC50 (rat) inhalation = 8000.00 mg/kg ²⁴
	Dimethyl glutarate LC50 (rat) inhalation = 11.00 mg/kg ⁵
	Xylene LC50 (rat) inhalation = 6360.00 mg/kg ⁷
Skin corrosion and skin irritation	Causes skin irritation (1,2,4-Trimethyl Benzene,Xylene)
Serious eye damage or eye irritation	Causes serious eye irritation (1,2,4-Trimethyl Benzene)
Respirator and skin sensitzation	Not classified
Skin sentization	Not classified
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Not classified
Specific target organ toxicity	May cause respiratory irritation (1,2,4-Trimethyl Benzene,1,3,5-Trimethyl Benzen,Butyl
following single exposure	Acetate,Cumene)
Specific target organ toxicity	May cause damage to organs through prolonged or repeated exposure (Ethyl Benzene)
following repeated exposure	
Aspiration hazard	May be fatal if swallowed and enters airways (Cumene,Ethyl Benzene)

12. ECOLOGICAL INFORMATION

Acute aquatic hazard	Toxic to aquatic life
	<u>1,2,4-Trimethyl Benzene</u> LC50 (fish) 96 hr = 7.72 mg/L ⁴⁰
	EC48 (shrimp) 48 hr = 3.60 mg/L ⁴⁰
	<u>1,3,5-Trimethyl Benzen</u> LC50 (fish) 96 hr = 12.52 mg/L ³¹
	ErC-EC72 (Fungi) 96 hr = 53.00 mg/L ³¹
	Butyl Acetate LC50 (fish) 96 hr = 18 mg/L ³
	EC48 (shrimp) 48 hr = 32 mg/L ³
	<u>Cumene</u> LC50 (fish) 96 hr = 2.70 mg/L ⁴³
	EC48 (shrimp) 48 hr = 7.40 mg/L ⁴³
	ErC-EC72 (Fungi) 96 hr = 2.60 mg/L ⁴³
	Ethyl Benzene LC50 (fish) 96 hr = 4.20 mg/L ³⁰
	EC48 (shrimp) 48 hr = 2.10 mg/L ²⁸
	ErC-EC72 (Fungi) 96 hr = 4.60 mg/L ²⁸
	<u>Xylene</u> LC50 (fish) 96 hr = 3.30 mg/L ¹¹

Long term aquatic hazard	Harmful to aquatic life with long lasting effects 1.3.5-Trimethyl Benzen NOEC fish = 0.40 mg/L ⁴¹ NOEC shrimp = 24.20 mg/L ⁴¹ Butyl Acetate NOEC fish = 23 mg/L ³ NOEC shrimp = 23 mg/L ³ NOEC fungi = 196 mg/L ³ Cumene NOEC fish = 0.38 mg/L ⁴² NOEC shrimp = 0.35 mg/L ⁴² NOEC fungi = 0.73-1.49 mg/L ⁴² Ethyl Benzene NOEC fish = 3.30 mg/L ²⁸ NOEC shrimp = 1 mg/L ²⁸ NOEC fungi = 3.4 mg/L ²⁸ Xylene NOEC fish = 1.30 mg/L ¹³
	NOEC shrimp = 1.57 mg/L^8 NOEC fungi = 0.44 mg/L^8
Persistance and degradability	Rapidly degradable (Butyl Acetate,Dimethyl glutarate,Ethyl Benzene,Xylene)
Bioaccumulative potential	Bioaccumulative potential
'	1,2,3-Trimethyl Benzen log KOW = 3.66 ⁴⁵
	BCF = 133-259 ⁴⁵
	1,2,4-Trimethyl Benzene log KOW = 3.78 ⁴⁰
	BCF = 31.275 ⁴⁰
	$\frac{1,3,5-\text{Trimethyl Benzen}}{\log \text{KOW} = 3.42^{46}}$
	BCF = 23-342 ⁴⁶
	Butyl Acetate log KOW = 1.78 ²⁰
	BCF = 7.00 ²⁰
	Cumene log KOW = 3.66 ⁴⁷
	BCF = 35.50 ⁴⁷
	Ethyl Benzene log KOW = 3.03 ²⁸
	BCF = 110 ²⁸
	$\frac{\text{Xylene}}{\text{log KOW}} = 3.20^{21}$
	$BCF = 14.80^{21}$
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
	1.7

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	All component in this product are listed
substance produced or imported in	
USA (TSCA)	
Toxic substance control act (TSCA)	All component in this product are listed

16. OTHER INFORMATION

14. TRANSPORT INFORMATION

Issue date: 25 August 2022

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