

SAFETY DATA SHEET

1. IDENTIFICATION OF THE MIXTURE AND OF THE SUPPLIER	
Product identifier	
Product	Thinner 2 K (Slow dry) [86-120]
Recommended use of chemical	Use as Thinner in paint
Restrictions on use	NO open flames, NO sparks, and No smoking.
Supplier's details	
Company	Big-Ben (Paints) Co., Ltd.
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
Emergency phone number	+ 66 2 811 1442 or + 66 2 811 1443
E-mail	bbp@bbp.co.th
2. HAZARDS IDENTIFICATION	
Classification of the substance or mixture This product has been classified in accordance with the hazard communication standard 29 CFR 1910.1200; the SDS and labels contain all the information as required by the standard.	
Flammable liquids	Category 2
Acute toxicity (Oral)	Category 5
Skin corrosion/irritation	Category 3
Reproductive toxicity	Category 2
Acute hazards to aquatic environment	Category 2
Remark: Percentage of mixture consisting of ingredient(s) of unknown oral toxicity:0% Percentage of mixture consisting of ingredient(s) of unknown dermal toxicity:0% Percentage of mixture consisting of ingredient(s) of unknown inhalation toxicity:93.82%	
GHS label elements	
Pictogram or symbol	
Signal word	DANGER
Hazard statement H225 Highly Flammable liquid and vapour H303 May be harmful if swallowed H316 Causes mild skin irritation H361 Suspected of damaging fertility or the unborn child H401 Toxic to aquatic life Precautionary statement	

[PREVENTION]

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

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.

P281 Use personal protective equipment as required.

P273 Avoid release to the environment.

[RESPONSE]

P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P370 + P378 In case of fire: Use Dry Chemical, Carbon dioxide (CO₂), Alcohol-resistant foam, Water spray. for extinction.

P312 Call a POISON CENTER/doctor/physician if you feel unwell.

P332 + P313 If skin irritation occurs: Get medical advice/attention.

P308 + P313 IF exposed or concerned: Get medical advice/attention.

[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	88.24
Toluene	108-88-3	5.58
Acetone	67-64-1	6.18

4. FIRST AID 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 contaminated 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 vomiting unless directed to do so by medical personnel.
Most important symptoms/effects, acute and delayed.	Dizziness. Drowsiness. Headache. Nausea. Vomiting. Weakness. Unconsciousness. Skin and eye redness. Pain. Nausea. Vomiting.

Indication of immediate medical attention and special treatment needed, if necessary.	Treat symptomatically.
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 mixture 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 fire-fighters	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-sparking 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 not leave containers open. Avoid repeated or prolonged contact with skin.
Conditions for safe storage, including any incompatibilities	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	<u>1-ACETOXY-2-ETHOXYETHANE</u> ¹ OSHA PEL-TWA 100 ppm (540 mg/m ³) Skin notation Y NIOSH REL-TWA 0.5 ppm (2.7 mg/m ³) Skin notation Y ACGIH TLV-TWA 5 ppm [1981] Skin notation Y Cal/OSHA PEL-TWA 5 ppm (27 mg/m ³) Skin notation Y <u>Toluene</u> ² OSHA PEL-TWA 200 ppm PEL-C 300 ppm; 500 ppm (Peak) [10 min maximum in an 8 hr shift]

	<p>Skin notation N</p> <p>NIOSH</p> <p>REL-TWA 100 ppm (375 mg/m³)</p> <p>REL-STEL 150 ppm (560 mg/m³)</p> <p>Skin notation N</p> <p>ACGIH</p> <p>TLV-TWA 20 ppm [2006]</p> <p>Skin notation N</p> <p>Cal/OSHA</p> <p>PEL-TWA 10 ppm (37 mg/m³)</p> <p>PEL-STEL 150 ppm (560 mg/m³)</p> <p>PEL-C 500 ppm</p> <p>Skin notation Y</p> <p><u>Acetone</u>³</p> <p>OSHA</p> <p>PEL-TWA 1000 ppm (2400 mg/m³)</p> <p>Skin notation N</p> <p>NIOSH</p> <p>REL-TWA 250 ppm (590 mg/m³)</p> <p>Skin notation N</p> <p>ACGIH</p> <p>TLV-TWA 250 ppm [2014]</p> <p>TLV-STEL 500 ppm [2014]</p> <p>Skin notation N</p> <p>Cal/OSHA</p> <p>PEL-TWA 500 ppm (1200 mg/m³)</p> <p>PEL-STEL 750 ppm (1780 mg/m³)</p> <p>PEL-C 3000 ppm</p> <p>Skin notation N</p>
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
Odor.	Aromatic like
Odor threshold	Not available
pH.	Not determined
Melting point/freezing point	Not available

Initial boiling point and boiling range	110°C at 1 atm
Flash point	4°C
Evaporation rate	5.6 (Butyl acetate = 1)
Flammability (solid, gas)	Not applicable
Upper/lower flammability or explosive limits	Not available
Vapour pressure	24 kPa (180 mmHg) at 20 °C
Vapour density	Not available
Relative density	0.92 g/cm ³
Solubility (ies)	Soluble in Aromatic solvent
Partition coefficient: n-Octanol-water	Not available
Auto-ignition temperature	Not available
Decomposition temperature	Not available
Viscosity	Not available
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
Conditions 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 = 3066.63 mg/kg (Category 5) ⁴ 1-ACETOXY-2-ETHOXYETHANE LD50(rat)oral = 2900 mg/kg ⁵ Toluene LD50(rat)oral = 5000 mg/kg ⁶ Acetone LD50(rat)oral = 5800 mg/kg
Acute toxicity(dermal)	ATEmix = 10785.47 mg/kg (Not classified) ⁴ 1-ACETOXY-2-ETHOXYETHANE LD50(rabbit)dermal = 10300 mg/kg ⁵ Toluene LD50(rabbit)dermal = 14100 mg/kg ⁶ Acetone LD50(rabbit)dermal = 20000 mg/kg
Acute toxicity (inhalation: vapour)	ATEmix = 76 mg/L (Not classified) ⁶ Acetone LC50(rat)inhalation:4hr = 76 mg/l
Skin corrosion and skin irritation	Causes mild skin irritation (Toluene)
Serious eye damage or eye irritation	Not classified
Respiratory and skin sensitization	Not classified
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Suspected of damaging fertility or the unborn child (Toluene)
Specific target organ toxicity following single exposure	Not classified
Specific target organ toxicity following repeated exposure	Not classified

12. ECOLOGICAL INFORMATION	
Acute aquatic hazard	<p>Toxic to aquatic life.</p> <p><u>1-ACETOXY-2-ETHOXYETHANE</u>⁷</p> <p>LC50(fish)96hr. = 40 mg/L</p> <p><u>Toluene</u>⁸</p> <p>LC50(fish)96hr. = 7.3 mg/L</p> <p>EC50(crustacean)48hr. = 6 mg/L</p> <p>EC50(algae)72or96hr. = 12.5 mg/L</p> <p><u>Acetone</u>⁹</p> <p>LC50(fish)96hr. = 4740 mg/L</p>
Long- term aquatic hazard	<p>Not classified.</p> <p><u>Toluene</u>⁸</p> <p>NOEC(fish) = 1.4 mg/L</p> <p>NOEC(crustacean) = 7.4 mg/L</p> <p>NOEC(algae) = 10 mg/L</p> <p><u>Acetone</u>⁹</p> <p>NOEC(fish) = 530 mg/L</p> <p>NOEC(algae) = 430 mg/L</p>
Persistence and degradability	Rapidly Degradable (Toluene)
Bioaccumulative potential	<p>Not bioaccumulative</p> <p><u>1-ACETOXY-2-ETHOXYETHANE</u>¹⁰</p> <p>Log Kow = 0.24</p> <p>BCF = 3</p> <p><u>Toluene</u>¹¹</p> <p>Log Kow = 2.73</p> <p>BCF = 13</p> <p><u>Acetone</u>¹²</p> <p>Log Kow = -0.24</p> <p>BCF = 0.69</p>
Mobility in soil.	The product is insoluble in water. If released to water, some of the components will have a 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.	Paints
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 Substances Produced or Imported in USA (TSCA)	All component in this product are listed
Inventory of Existing Chemical Substances Produced or Imported in China (IECSC)	All component in this product are listed
Toxic Substance Control Act (TSCA)	All component in this product are listed
16. OTHER INFORMATION	
Issue date: 22/10/2019	
References	
1 https://www.osha.gov/chemicaldata/chemResult.html?recNo=122 (22-10-19)	
2 https://www.osha.gov/chemicaldata/chemResult.html?recNo=89 (22-10-19)	
3 https://www.osha.gov/chemicaldata/chemResult.html?recNo=476 (22-10-19)	
4 https://toxnet.nlm.nih.gov/cgi-bin/sis/search2/f?./temp/~m8awRK:3 (3-5-19)	
5 https://toxnet.nlm.nih.gov/cgi-bin/sis/search2/f?./temp/~VMFBml:3 (3-5-19)	
6 https://toxnet.nlm.nih.gov/cgi-bin/sis/search2/f?./temp/~umiA8O:3:ntxv (3-5-19)	
7 https://toxnet.nlm.nih.gov/cgi-bin/sis/search2/f?./temp/~7TG1XJ:1 (3-5-19)	
8 https://toxnet.nlm.nih.gov/cgi-bin/sis/search2/f?./temp/~IQhZ8l:1 (3-5-19)	
9 https://echa.europa.eu/brief-profile/-/briefprofile/100.000.602 (3-5-19)	
10 https://pubchem.ncbi.nlm.nih.gov/compound/8095#section=Environmental-Fate-Exposure-Summary (3-5-19)	
11 https://pubchem.ncbi.nlm.nih.gov/compound/1140#section=Environmental-Fate (3-5-19)	
12 https://pubchem.ncbi.nlm.nih.gov/compound/180 (22-10-19)	
This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.	