

## 1. IDENTIFICATION OF THE MIXTURE AND OF THE SUPPLIER

## **Product Identifier**

Product Thinner 2K (Fast Dry) [86-116]

Recommended use of chemical Use as Thinner

Restriction on use No open flames, No sparks, and No smoking

Supplier's details

Company Big-Ben Chemical Company Limited

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## 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 2
Acute toxicity - oral Category 5
Acute toxicity - dermal Category 1
Eye damage/irritation Category 2A
Specific target organ toxicity Category 3

(single exposure)

Hazardous to the aquatic environment - Category 3

acute hazard

Remark:

Percentage of mixture consisting of ingredient(s) of unknown oral toxicity: 0.00% Percentage of mixture consisting of ingredient(s) of unknown dermal toxicity: 0.00%

Percentage of mixture consisting of ingredient(s) of unknown inhalation toxicity: 34.00%

# **GHS label elements**

Pictogram or symbol







Signal word Danger

## Hazard statement:

H225 Highly Flammable liquid and vapour

H303 May be harmful if swallowed

H310 Fatal in contact with skin

H319 Causes serious eye irritation

H335 May cause respiratory irritation

H336 May cause drowsiness or dizziness

H402 Harmful to aquatic life

# **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.

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.

# [RESPONSE]

P302+P350 IF ON SKIN Gently 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.

P322 Specific measures (see on this label).

P337+P313 IF eye irritation persistsGet medical advice / attention.

P361 Remove / Take off immediately all contaminated clothing.

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 INFORM	MATION ON INGREDIENTS
-1 1 1	

Chemical name	CAS No.	Content % (w/w)
1-ACETOXY-2-ETHOXYETHANE	111-15-9	32.30 - 37.40
Acetone	67-64-1	25.96 - 30.06
Butyl Acetate	123-86-4	36.74 - 42.54

## 4. FIRST AID MEASURES

dical 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 Dizziness. Drowsiness. Headache. Nausea. Vomitting. Weakness. Unconsciousness. Skin and eye

delayed 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, Keep unnecessary personnel away. Prevent further leakage or spillage if safe to do so. Use personal



and emergency procedures 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 <u>1-ACETOXY-2-ETHOXYETHANE</u>

osha

PEL-TWA 100<sup>9</sup> Skin notification Y<sup>9</sup>

NIOSH

REL-TWA 0.59

Skin notification Y9

**ACGIH** 

TLV-TWA 59

Skin notification Y9

CAL/OSHA PEL-TWA 5<sup>9</sup>

Skin notification Y<sup>9</sup>

Safe Work Australia (Australia, 4/2024)

TWA: 2 ppm 8 hours. 12

TWA:  $10.9 \text{ mg/m}^3 8 \text{ hours.}$  <sup>12</sup>

Acetone

OSHA

PEL-TWA 1000<sup>10</sup>

Skin notification N<sup>10</sup>

NIOSH

REL-TWA 250<sup>10</sup>

Skin notification N<sup>10</sup>

ACGIH

TLV-TWA 2500<sup>10</sup>

TLV-STEL 500<sup>10</sup>

Skin notification N<sup>10</sup>

CAL/OSHA

PEL-TWA 500<sup>10</sup>

PEL-STEL 750<sup>10</sup>

PEL-C 3000<sup>10</sup>

Skin notification  $N^{10}$ 

Safe Work Australia (Australia, 4/2024)

TWA: 250 ppm 8 hours. 12

TWA:  $594 \text{ mg/m}^3 8 \text{ hours.}^{12}$ 

STEL: 500 ppm 15 minutes. 12

STEL: 1187 mg/m<sup>3</sup> 15 minutes. 12

Butyl Acetate

OSHA

PEL-TWA 150<sup>11</sup>

Skin notification N<sup>11</sup>

NIOSH

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### SAFETY DATA SHEET

REL-TWA 150<sup>11</sup>
REL-STEL 200<sup>11</sup>
Skin notification N<sup>11</sup>

**ACGIH** 

TLV-TWA 50<sup>11</sup>
TLV-STEL 150<sup>11</sup>
Skin notification N

CAL/OSHA
PEL-TWA 150<sup>11</sup>
PEL-STEL 200<sup>11</sup>
Skin notification N<sup>11</sup>

Safe Work Australia (Australia, 4/2024)

TWA: 50 ppm 8 hours. <sup>12</sup>
TWA: 270 mg/m<sup>3</sup> 8 hours. <sup>12</sup>
STEL: 100 ppm 15 minutes. <sup>12</sup>
STEL: 541 mg/m<sup>3</sup> 15 minutes. <sup>12</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 PROPERTIES

Physical state Liquid

Colour Transparent

Odour Organic solvent

pH Not available

Melting point/freezing point Not Available

Boiling point or initial boiling point and

boiling range

56.0 °C (132.9 °F) (Acetone)

Flash point -20.0 °C (-4.0 °F) (Acetone)

Flammability Flammable
Lower and upper explosion limit/flammability Not available

limit

Vapour pressure 24 hPa at 20 °C (Acetone)

Density and/or relative density 0.8 - 0.9 g/cm<sup>3</sup>
Relative vapour density Not available

Solubility Soluble in Organic solvent

Partition coefficient n-octanol/water (log

value)

Not applicable

Auto-ignition temperature 465.0 °C (869.0 °F) (Acetone)

Decomposition temperature Not applicable
Viscosity Not available
Particle characteristics Not applicable

## 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 = 4990.49 mg/kg (Category 5)

1-ACETOXY-2-ETHOXYETHANE LD50 (rat) oral = 2900.00 mg/kg1

Acetone LD50 (rat) oral = 5800.00 mg/kg<sup>2</sup> Butyl Acetate LD50 (rat) oral = 10736.00 mg/kg<sup>3</sup>

Acute toxicity (dermal) ATEmix = 41.26 mg/kg (Category 1)

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 (inhalation) Not available Skin corrosion and skin irritation Not classified

Serious eye damage or eye irritation Causes serious eye irritation (Acetone)

Respirator and skin sensitzation Not classified Skin sentization Not classified Not classified Germ cell mutagenicity Not classified Carcinogenicity Not classified Reproductive toxicity

Specific target organ toxicity following single

exposure

May cause respiratory irritation (Acetone, Butyl Acetate)

Specific target organ toxicity following

repeated exposure

Not classified

Aspiration hazard Not classified

12. ECOLOGICAL INFORMATION

Acute aquatic hazard Harmful to aquatic life

1-ACETOXY-2-ETHOXYETHANE LC50 (fish) 96 hr = 40 mg/L<sup>5</sup>

Acetone

LC50 (fish) 96 hr = 4740 mg/L<sup>2</sup>

Butyl Acetate LC50 (fish) 96 hr =  $18 \text{ mg/L}^3$ EC48 (shrimp) 48 hr =  $32 \text{ mg/L}^3$ 

Long term aquatic hazard No information

Persistance and degradability Rapidly degradable (Acetone, Butyl Acetate)

Bioaccumulative potential Bioaccumulative potential

1-ACETOXY-2-ETHOXYETHANE

 $\log KOW = 0.24^{6}$ BCE = 36

 $\frac{\text{Acetone}}{\text{log KOW}} = -0.24^{7}$ 

 $BCF = 0.69^{7}$ 

Butyl Acetate  $\log KOW = 1.78^8$ 

 $BCF = 7.00^{8}$ 

Mobility in soil The product is insoluable in water. If released to water, some of the components will have tendency

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

wasta callactor in vour country



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: 28 June 2025

References

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- 3. https://echa.europa.eu/brief-profile/-/briefprofile/100.004.236#ScientificProperties (17-12-19)
- 4. https://echa.europa.eu/brief-profile/-/briefprofile/100.004.236 (04-05-19)
- 5. https://toxnet.nlm.nih.gov/cgi-bin/sis/search2/f?./temp/~7TG1XJ:1 (03-05-19)
- 6. https://pubchem.ncbi.nlm.nih.gov/compound/8095#section=Environmental-Fate-Exposure-Summary (03-05-19)
- 7. https://pubchem.ncbi.nlm.nih.gov/compound/180 (23-12-19)
- 8. https://pubchem.ncbi.nlm.nih.gov/compound/31272#section=Environmental-Abiotic-Degradation (04-05-19)
- 9. https://www.osha.gov/chemicaldata/chemResult.html?recNo=122 (3-5-19)
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- 11. https://www.osha.gov/chemicaldata/chemResult.html?recNo=178 (17-12-19)
- 12. Safe Work Australia Workplace exposure limits for airborne contaminants April 2024 (20-8-2024)