

ACCORDING TO THE OCCUPATIONAL SAFETY AND HEALTH (CLASSIFICATION, LABELLING AND SAFETY DATA SHEET OF HAZARDOUS CHEMICALS) REGULATIONS 2013 (CLASS REGULATIONS)

1. SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product Name 2K ACTIVATOR FOR TP1040
 Product code TA 1041
 CAS No. Not applicable.

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified Use(s) Hardener for professional use.
 Uses Advised Against Not known.

1.3 Details of the supplier of the safety data sheet

Company Identification TOA PAINT (M) SDN BHD
 Address of Manufacturer LOT 37625, JALAN 2/37A,
 TAMAN BUKIT MALURI,
 OFF JALAN KEPONG,
 52100 KUALA LUMPUR,
 MALAYSIA.
 Telephone +603-62721346 (Office hours)
 6016-3375428 (After office hours)
 E-mail admin@toapaint.com.my
 Website http://www.toapaint.com.my

1.4 Emergency telephone number

Company +603-62721346 (Office hours)
 6016-3375428 (After office hours)

2. SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Occupational Safety and Health Flam. Liq. 2; Highly flammable liquid and vapour.
 (Classification, Labelling and Safety Data Skin Irrit. 2; Causes skin irritation.
 Sheet of Hazardous Chemicals) Skin Sens. 1; May cause an allergic skin reaction.
 Regulations 2013 (CLASS Regulations)

2.2 Label elements

Product Name 2K ACTIVATOR FOR TP1040
 Product code TA 1041

Hazard Pictogram(s)



Signal Word(s) Danger.

Hazard Statement(s)
 H225: Highly flammable liquid and vapour.
 H315: Causes skin irritation.
 H317: May cause an allergic skin reaction.

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Precautionary Statement(s) P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 P261: Avoid breathing vapours/spray.
 P280: Wear protective gloves/protective clothing/eye protection/face protection.
 P302+P352: IF ON SKIN: Wash with plenty of water/soap.
 P370+P378: In case of fire: Use polar resistant foam, CO2 or dry powder to extinguish.
 P333+P313: If skin irritation or rash occurs: Get medical advice/attention.

2.3 Other hazards

None known.

2.4 Additional Information

For full text of H/P Statements see section 16.

3. SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Not applicable.

3.2 Mixtures

HAZARDOUS INGREDIENT(S)	CAS No.	%W/W	Hazard Statement(s)
Hexamethylene diisocyanate, oligomers	28182-81-2	40 - 48	Skin Sens. 1 H317
Xylene	1330-20-7	52 - 60	Flam. Liq. 3 H226 Acute Tox. 4 H312 Skin Irrit. 2 H315 Acute Tox. 4 H332

4. SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation Remove person to fresh air and keep comfortable for breathing.
 Skin Contact Wash with plenty of water/soap. Take off immediately all contaminated clothing and wash it before reuse. Do not use solvents or diluting agents for skin cleaning.
 If skin irritation or rash occurs: Get medical advice/attention.
 Eye Contact Flush eyes with water for at least 15 minutes while holding eyelids open. If symptoms persist, obtain medical attention.
 Ingestion Do not induce vomiting. Seek medical treatment.

4.2 Most important symptoms/effects, acute and delayed

May cause an allergic skin reaction. Will cause skin irritation.

4.3 Indication of immediate medical attention and special treatment needed, if necessary

Treat symptomatically.

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5. SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable Extinguishing media Extinguish with carbon dioxide, dry chemical, foam or waterspray.
 Unsuitable extinguishing media Water jet spray.

5.2 Special hazards arising from the substance or mixture

Highly flammable liquid and vapour. Decomposes in a fire giving off toxic fumes:
 Carbon monoxide, Carbon dioxide.

5.3 Special protective equipment and precautions for fire fighters

Fire fighters should wear complete protective clothing including self-contained breathing apparatus. Dike fire control water for later disposal.

6. SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Provide adequate ventilation. Avoid breathing vapours. Use non-sparking ventilation systems, approved explosion-proof equipment, and intrinsically safe electrical systems. Ensure full personal protection (including respiratory protection) during removal of spillages.

6.2 Environmental precautions

Avoid release to the environment. Spillages or uncontrolled discharges into watercourses must be alerted to the appropriate regulatory body.

6.3 Methods and material for containment and cleaning up

Adsorb spillages onto sand, earth or any suitable adsorbent material. Transfer to a container for disposal. Earth may be shovelled to contain spillage and to avoid contamination of sewers and watercourses.

6.4 Reference to other sections

See Also Section 8, 13.

7. SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wear protective gloves/protective clothing/eye protection/face protection. Avoid breathing vapours/spray. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of the workplace. Wash hands and exposed skin thoroughly after handling.

7.2 Conditions for safe storage, including any incompatibilities

Store in a well-ventilated place. Keep cool. Keep container tightly closed.

Storage temperature 5 – 35 °C
 Storage life Stable under normal conditions.
 Incompatible materials Strong oxidising agents, Alkaline, Acids, Amines.

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8. SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.1.1 Occupational Exposure Limits

Occupational Exposure Limits						
SUBSTANCE	CAS No.	LTEL (8 hr TWA ppm)	LTEL (8 hr TWA mg/m ³)	STEL (ppm)	STEL (mg/m ³)	Note
Xylene (isomer o-,m-, p) (Dimethylbenzene)	1330-20-7	100	434	-	-	

Source: Occupational Safety and Health (Use and Standards of Exposure of Chemicals Hazardous to Health) Regulations

8.2 Exposure controls

8.2.1. Appropriate engineering controls Use with ventilation, local exhaust ventilation or breathing protection. A washing facility/water for eye and skin cleaning purposes should be present.

8.2.2. Individual protection measures, such as personal protective equipment (PPE)



Eye Protection

Wear protective eye glasses for protection against liquid splashes.



Skin protection

Wear protective clothing and gloves: Impervious gloves.



Respiratory protection

During spraying wear suitable respiratory equipment: Always wear a self-contained breathing apparatus or full-face airline respirator when using this chemical. For operations other than spraying: A suitable mask with filter type A may be appropriate.



Thermal hazards

Not applicable.

9. SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Clear.
Odour	Solvent odour.
Odour threshold	Not established.
pH	Not applicable.
Melting point/freezing point	Not applicable.
Initial boiling point and boiling range	70 °C

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Flash Point	13 °C (DIN 53213/ISO 1523)
Evaporation rate	Slower than Ether.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	1.2 – 11.4 Vol-%
Vapour pressure	14.5 hPa
Vapour density	Not available.
Density	0.95 – 1.00 g/cm ³ @ 20°C (DIN 53217/ISO 2811)
Relative density	Not available.
Solubility(ies)	Solubility (Water) : Very slightly soluble. Solubility (Other) : Miscible with most organic solvents.
Partition coefficient: n-octanol/water	Not available.
Auto-ignition temperature	268°C (DIN 51794 based on organic solvent content)
Decomposition Temperature (°C)	Not available.
Viscosity	10 – 12 s @ 23°C (ASTM D1200)
Explosive properties	Not explosive.
Oxidising properties	Not oxidising.
9.2 Other information	
Solvent separation test	<3 %
Volatile Organic Compound Content	55 % (Basis vapour pressure ≥ 0.01 kPa)
Organic solvent content	55 % (Basis vapour pressure ≥ 0.01 kPa)

10. SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

None anticipated. Mixture reacts slowly with water resulting evolution of carbon dioxide. Evolution of carbon dioxide in closed containers causes overpressure and produces a risk of bursting. Reacts with amines or alcohols which cause exothermic reactions.

10.2 Chemical Stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

No hazardous reactions known if used for its intended purpose.

10.4 Conditions to avoid

Humidity.

10.5 Incompatible materials

Strong oxidising agents, Alkaline, Acids, Amines.

10.6 Hazardous decomposition products

No hazardous decomposition products known.

11. SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity - Ingestion	Low oral toxicity.
Acute toxicity - Skin Contact	Low acute toxicity.
Acute toxicity - Inhalation	Low acute toxicity.
Skin corrosion/irritation	Causes skin irritation. No data.

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Serious eye damage/irritation	Not classified.
Skin sensitization data	May cause an allergic skin reaction. No data.
Respiratory sensitization data	Not classified.
Germ cell mutagenicity	There is no evidence of mutagenic potential.
Carcinogenicity	No evidence of carcinogenicity.
Reproductive toxicity	None anticipated.
Lactation	Not classified.
STOT - single exposure	Not classified.
STOT - repeated exposure	Not classified.
Aspiration hazard	None anticipated.

11.2 Other information

Not known.

12. SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Low toxicity to aquatic organisms.

Toxicity - Aquatic invertebrates	Not known.
Toxicity - Fish	Not known.
Toxicity - Algae	Not known.
Toxicity - Sediment Compartment	Not classified.
Toxicity - Terrestrial Compartment	Not classified.

12.2 Persistence and Degradation

Part of the components are biodegradable.

12.3 Bioaccumulative potential

The product has low potential for bioaccumulation.

12.4 Mobility in soil

Very slightly soluble. The product is predicted to have low mobility in soil.

12.5 Other adverse effects

Not known.

13. SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Disposal methods

Dispose of contents/container to: Suitable incineration plant.

Recycle only completely emptied packaging.

13.2 Additional Information

Disposal should be in accordance with local, state or national legislation.

14. SECTION 14: TRANSPORT INFORMATION

14.1 UN number

UN No. 1263

14.2 UN proper shipping name

UN proper shipping name PAINT RELATED MATERIAL

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14.3 Transport hazard class(es)

ADR/RID

ADR/RID Class	3
ADR Classification Code	F1
Special Provisions	163 640D 650
Limited Quantities	5 L
Excepted Quantities	E2
Emergency Action Code	•3YE
Mixed Packing Instructions for Packages	P001 IBC02 R001
Special Packing Provisions for Packages	PP1
Mixed Packing Instructions for Packages	MP19
Packing Instructions for Portable Tanks	T4
Special Provisions for Portable Tanks	TP1 TP8 TP28
Tank Code for Tanks	LGBF
Special Provisions for Tanks	Not applicable
Vehicle for Tank Carriage	FL
ADR Transport Category	2
Tunnel Restriction Code	D/E
Special Provisions for Carriage - Packages	Not applicable
Special Provisions for Carriage - Bulk	Not applicable
Special Provisions for Carriage - Loading, Unloading and Handling	Not applicable
Special Provisions for Carriage - Operation	S2 S20
ADR HIN	33
IMDG	
IMDG Class	3
Special Provisions	163 640D 650
Limited Quantities	5 L
Excepted Quantities	E2
Mixed Packing Instructions for Packages	P001 IBC02 R001
Special Packing Provisions for Packages	PP1
Packing Instructions for Portable Tanks	T4
Special Provisions for Portable Tanks	TP1 TP8 TP28
IMDG EMS	F-E,
Stowage and Handling	A
Segregation	Not determined
ICAO/IATA	
Excepted Quantities	E2
Passenger and Cargo Aircraft Limited Quantities Packing Instructions	Y341
Passenger and Cargo Aircraft Limited Quantities Max net Qty	1L
Passenger and Cargo Aircraft Packing Instructions	353

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Passenger and Cargo Aircraft Max net Qty 5L
 Cargo Aircraft Packing Instructions 364
 Cargo Aircraft Max net Qty 60L
 Special Provisions A72
 Emergency Response Guidebook (ERG) 3L
 Code
 Labels
 Labels 3



14.4 Packing group, if applicable

Packing group II

14.5 Environmental hazards

Environmental hazards Not classified as a Marine Pollutant.

14.6 Special precautions for user

Special precautions for user Confirm there is no breakage, corrosion, or leakage from the container before shipping. Be sure to prevent damage to cargo by loading so as to avoid falling, dropping, or collapse.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

No information available

14.8 Hazchem or Emergency Action Code

No information available

15. SECTION 15: REGULATORY INFORMATION

This SDS has been prepared in accordance to The Industry Code of Practice on Chemical Classification and Hazard Communication 2014 (ICOP) and The Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013 (CLASS Regulations).

15.1 Safety, health, and environmental regulations specific for the hazardous chemical in question

Part 1 List of Classified Chemical, ICOP Xylene (1330-20-7)

15.2 National regulations

Not known.

16. SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: 1-16

LEGEND

Hazard Pictogram(s)



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Hazard classification	<p>Acute Tox. 4 : Acute toxicity, Category 4</p> <p>Flam. Liq. 3 : Flammable liquid, Category 3</p> <p>Skin Irrit. 2 : Skin corrosion/irritation, Category 2</p> <p>Skin Sens. 1 : Skin sensitization, Category 1</p>
Hazard Statement(s)	<p>H225: Highly flammable liquid and vapour.</p> <p>H226: Flammable liquid and vapour.</p> <p>H312: Harmful in contact with skin.</p> <p>H315: Causes skin irritation.</p> <p>H317: May cause an allergic skin reaction.</p> <p>H332: Harmful if inhaled.</p>
Precautionary Statement(s)	<p>P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</p> <p>P233: Keep container tightly closed.</p> <p>P240: Ground/bond container and receiving equipment.</p> <p>P241: Use explosion-proof electrical/ventilating/lighting/equipment.</p> <p>P242: Use only non-sparking tools.</p> <p>P243: Take precautionary measures against static discharge.</p> <p>P261: Avoid breathing vapours/spray.</p> <p>P264: Wash hands and exposed skin thoroughly after handling.</p> <p>P272: Contaminated work clothing should not be allowed out of the workplace.</p> <p>P280: Wear protective gloves/protective clothing/eye protection/face protection.</p> <p>P302+P352: IF ON SKIN: Wash with plenty of water/soap.</p> <p>P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.</p> <p>P321: Specific treatment (see on this label).</p> <p>P332+P313: If skin irritation occurs: Get medical advice/attention.</p> <p>P333+P313: If skin irritation or rash occurs: Get medical advice/attention.</p> <p>P362+P364: Take off contaminated clothing and wash it before reuse.</p> <p>P370+P378: In case of fire: Use polar resistant foam, CO₂ or dry powder to extinguish.</p> <p>P403+P235: Store in a well-ventilated place. Keep cool.</p> <p>P501: Dispose of contents in accordance with local, state or national legislation.</p>
Acronyms	<p>ADN : European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways</p> <p>ADR : European Agreement concerning the International Carriage of Dangerous Goods by Road</p> <p>CAS : Chemical Abstracts Service</p> <p>IATA : International Air Transport Association</p> <p>IBC : Intermediate Bulk Container</p> <p>ICAO : International Civil Aviation Organisation</p> <p>IMDG : International Maritime Dangerous Goods</p> <p>LTEL : Long term exposure limit</p>

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RID : Regulations concerning the International Carriage of Dangerous Goods by Rail

STEL : Short term exposure limit

STOT : Specific Target Organ Toxicity

UN : United Nations

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