www.toagroup.com

MATERIAL SAFETY DATA SHEET

Revised 1

Date 05/2012 replaces 01/2010

THINNER 51

1. Identification of the substance or mixture and of the supplier

Product name and/or code : THINNER 51
Product use : Thinner
Supplier/Manufacturer : TOA PAINT (THAILAND) PUBLIC COMPANY LIMITED
104 Moo1 Soi Pukmitr, Thang Rodfai Sai Kao Road, Samrong Tai,
Phrapradang, Samuthprakarn 10130
Tel : 0-2380-6544-6
Fax : 0-2384-0763
Emergency telephone number : Factory Tel. 02-335-5555 ต่อ 1260

2. Hazards identification

Flammable.
Irritating to eyes and skin.
May cause sensitisation by skin contact.
Risk of serious damage to eyes
Harmful to aquatic organisms, may cause long-erm adverse effects in the aquatic environment.

Harmful

3. Composition/information on ingredients

Chemical name	CAS no.	EC Number	%	Classification
XYLENE	1330-20-7	215-535-7	58-62	R10-20/21-38
METHYL ISOBUTYL KETONE	108-10-1	660-004-00-4	38-42	R11

4. First aid measures.

General : In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.
Inhalation : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Give nothing by mouth. If unconscious place in recovery position and seek medical advice.
Skin contact : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.
Eye Contact : Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open.
Ingestion : If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do not induce vomiting.

5. Fire-fighting measures

Extinguishing Media : Recommended: alcohol resistant foam, CO2, powders, water spray.
Not to be used : waterjet.
Recommendations : Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard. Appropriate breathing apparatus may be required. Cool closed containers exposed to fire with water. Do not release runoff from fire to sewers or waterways.

6. Accidental release measures

Personal Precautions : Exclude sources of ignition and ventilate the area. Avoid breathing vapour or mist. Refer to protective measures listed in sections 7 and 8.
Spill : Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in container for disposal according to local regulations (see section 13). Do not allow to enter drains or watercourses. Clean preferably with a detergent; avoid use of solvents. If the product contaminates lakes, rivers or sewage, inform appropriate authorities in accordance with local regulations.

7. Handling and storage

Handling : Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air. Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentration higher than the occupational exposure limits.
In addition, the product should only be used in areas from which all naked lights and other sources of gnition have been excluded. Electrical equipment should be protected to the appropriate standard.
To dissipate static electricity during transfer, earth drum and connect to receiving container with bonding strap. Operators should wear anti-static footwear and clothing and floors should be of the conducting type.
Keep container tightly closed. Keep away from heat, sparks and flame. No sparking tools should be used.
Avoid contact with skin and eyes. Avoid the inhalation of dust, particulates and spray mist arising from the application of this preparation. Avoid inhalation of dust from sanding.
Eating, drinking and smoking should be prohibited in area where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking.
Put on appropriate personal protective equipment (see Section 8).
Never use pressure to empty : container is not a pressure vessel. Always keep in containers of same material as the original one.
Comply with the health and safety at work laws.
When operators, whether spraying or not, have to work inside the spray booth, ventilation is unlikely to be sufficient to control particulates and solvent vapour in all cases. In such circumstances they should wear a compressed air-fed respirator during the spraying process and until such time as the particulates and solvent vapour concentration has fallen below the exposure limits.

Storage : Store in accordance with local regulations. Observe label precautions. Store in a cool, well-ventilated area away from incompatible materials and ignition sources.
Keep away from: oxidising agents, strong alkalis, strong acids.
No smoking. Prevent unauthorised access. Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Do not empty into drains..

8. Exposure controls/personal protection

Engineering measures : Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL, suitable respiratory protection must be worn.

Ingredient name

Reaction product		
: Xylene	LD 50	4000 mg/kg
	TLV-TWA	100 ppm (435 mg/m3)
	TLV-STEL	150 ppm (655 mg/m3)
: Methyl Isobutyl Ketone	LD 50	2,080 mg/kg
	TLV-TWA	50 ppm (205 mg/m3)
	TLV-STEL	75 ppm (300 mg/m3)

Personal protective equipment

Respiratory system : If workers are exposed to concentrations above the exposure limit they must use appropriate, certified respirators. Use respiratory mask with charcoal and dust filter when spraying this product(as filter combination A2-P2).In confined spaces use compressed air or fresh air respiratory equipment.When use of roller or brush, consider use of charcoalfilter (A2).

Skin and body : Personnel should wear anti-static clothing made of natural fibre or of high temperature resistant synthetic fibre.

Hands : For prolonged or repeated handling, use gloves: polyvinyl alcohol or nitrile.
: Barrier creams may help to protect the exposed areas of the skin, they should however not be applied once exposure has occurred.
For right choice of glove materials, with focus on chemical resistance and time of penetration, seek advice by the supplier of chemical resistant gloves.

Eyes : Use safety eyewear designed to protect against splash of liquids.

9. Physical and chemical properties

Physical state	: Liquid.
Odour	: Hydrocarbon
Colour	: Clear
Flash point	: Closed cup: 25°C
Density	: 0.8 g/cm3
Solubility in water	: Insoluble

10. Stability and reactivity

Stability	: Stable under recommended storage and handling conditions (see section 7).
Hazardous Decomposition Products	: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.
strong exothermic reactions	: oxidising agents, strong alkalis, strong acids.

11. Toxicological information

General : There are no data available on the preparation itself. The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and classified for toxicological hazards accordingly. See Chapters 2 and 15 for details.

: Based on the properties of the epoxy constituent(s) and considering toxicological data on similar preparations, this preparation may be a skin sensitiser and an irritant. It contains low molecular epoxy constituents which are irritating to eyes, mucous membrane and skin. Repeated skin contact may lead to irritation and to sensitisation, possible with cross-sensitisation to other epoxies. Skin contact with the preparation and exposure to spray mist and vapour should be avoided.

Skin Contact : Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin.

Eye Contact : The liquid splashed in the eyes may cause irritation and reversible damage.

Ingestion : Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

12. Ecological information

Ecotoxicity data

	Species	Period	Result
Xylene	Rat (LC50)	4 hour(s)	2.17 mg/l
Methyl Isobutyl Ketone	Rat (LC50)	4 hour(s)	2.33 mg/l

13. Disposal considerations

Method of disposal

The generation of waste should be avoided or minimised wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

Material and/or container must be disposed of as hazardous waste European waste catalogue (EWC)

08 01 11	Waste paint and varnish containing organic solvents or other dangerous substances
08 01 17	Wastes from paint or varnish removal containing organic solvents or other dangerous substances
20 01 27	Paint, inks, adhesives and resins containing dangerous substances

14. Transport information

Proper shipping name	Paint	Packing group	III	Label
UN. Number	1263	Class	3	

Transport in accordance with ADR/RID, IMDG/IMO and ICAO/IATA and national regulation.
ADR/RID: Viscous substance. Not restricted, ref. chapter 2.2.3.1.5 (applicable to receptacles < 450 litre capacity)
IMDG: Viscous substance. Transport in accordance with paragraph 2.3.2.5 (applicable to receptacles <30 litre capacity).

15. Regulatory information

EU Regulations : The product is labelled as follows, in accordance with local regulations:

Hazard symbol(s) :

Harmful

Contains : Xylene, Methyl Isobutyl Ketone

Indication of Danger : Harmful

Risk Phrases
R10- Flammable.
R20/21/22- Harmful by inhalation and in contact with skin and if swallowed.
R36/38- Irritating to eyes and skin.
R41 - Risk of serious damage to eyes.
R43- May cause sensitisation by skin contact.
R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R66- Repeated exposure may cause skin dryness or cracking.
R67- Vapours may cause drowsiness and dizziness.

Safety Phrases
S23- Do not breathe vapour / spray.
S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36/37/39 - Wear suitable protective clothing and gloves and eye/face protection
S51- Use only in well-ventilated areas.

Additional warning phrases : Contains epoxy constituents. See information supplied by the manufacturer. This information is provided by the present Safety Data Sheet.

16. Other information

The information in this SDS is based on the present state of our knowledge and on current laws. The product is not to be used for purposes other than those specified under section 1 without first obtaining written handling instructions. It is always the responsibility of the user to take all necessary steps to fulf il the demands set out in the local rules and legislation. The information in this SDS is meant to be a description of the safe ty requirements for our product. It is not to be considered a guarantee of the product's properties.