

Trade name: **PROMAPAIN[®] APT 2-PACK SOLVENTBORNE
ACRYLIC / POLYURETHANE**

1. Identification of the product and of the company

Product name: PROMAPAIN[®] APT 2-Pack Solventborne Acrylic / polyurethane (semi-gloss finish hardener)
Intended Product use: Industrial spraying, general industrial coatings, water based intumescent paint.
Company
Comp : Promat International (Asia Pacific) Ltd.
Address : Unit 19-02-01, Level 2, PNB Damansara,
No. 19, Lorong Dungun, Damansara Heights,
50490 Kuala Lumpur, Malaysia.
Tel # : +60(3)-2095 5111
Fax# : +60(3)-2095 6111
E-mail address: info@promat-ap.com

2. Composition / Information on ingredients

Component	CAS No.	Symbol	R-phrases
Xylene	1330-20-7	Xn	R10, R20/21, R38
Ethylene glycol monoethyl ether acetate	110-80-5	Xi	R10, R36
Hexamethylene diisocyanate	882-06-0	T	R23, R36/37/38, R42/43
Aliphatic polyisocyanate (HDI)	28182-81-2	Xi	R43

3. Hazard Identification

Hazardous components Xylene.

R-phrases Flammable.
Harmful by inhalation and in contact with skin.
May cause sensitisation by skin contact.

S-phrases Do not breathe spray.
Wear suitable respiratory equipment.
In case of insufficient ventilation, wear suitable respiratory equipment.

P-phrases Contains isocyanates.

4. First aid measures

General When symptoms persist or in all cases of doubt seek medical advice.
Never give anything by mouth to an unconscious person.

Inhalation: Remove to fresh air.
If breathing is irregular or stopped, administer artificial respiration.
If unconscious place in recovery position and seek medical advice.

Trade name: **PROMAPAIN[®] APT 2-PACK SOLVENTBORNE
ACRYLIC / POLYURETHANE**

Ingestion:	If swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.
Skin contact:	Remove contaminated clothing immediately. Rinse the skin thoroughly with soap and water. Do NOT use solvents or thinners.
Eye contact:	Do not rub the eye, flush copiously for at least 15 minutes. If eye irritation or inflammation persists, seek medical advice.

5. Fire fighting measures

Special hazards during fire fighting	As the product contains combustible organic components, fire will produce dense black smoke containing hazardous products of combustion (see section 10). Exposure to decomposition products may be a hazard to health. Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses.
Special protective equipment for fire fighters	In the event of fire, wear self-contained breathing apparatus.
Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Keep containers and surroundings cool with water spray.
Extinguishing media which must not be used for safety reasons	Do NOT use water jet.

6. Accidental spill / release measures

Personal precautions	Use personal protective equipment. Ventilate the area. Refer to protective measures listed in sections 7 and 8. Wear respiratory protection. Beware of vapours accumulation to form explosive concentrations. Vapours can accumulate in low areas. Remove all sources of ignition.
Environmental precautions	Try to prevent the material from entering drains or water courses. If the product contaminates rivers and lakes or drains, inform respective authorities.
Methods for cleaning up	Clean with detergents. Avoid solvents. Contain and collect spillage with non-combustible absorbent material, and place in container for disposal according to local or national regulations (see section 13).
Additional advice	Refer to section 15 for specific national regulation.

Trade name: **PROMAPAIN[®] APT 2-PACK SOLVENTBORNE
ACRYLIC / POLYURETHANE**

7. Handling and storage

Handling:	Avoid exceeding of the given occupational exposure limits (see section 8). Use only in area provided with appropriate exhaust ventilation. Avoid contact with skin, eyes and clothing. Smoking, eating and drinking should be prohibited in the application area. Avoid inhalation of vapour or mist. For personal protection see section 8.
Advice on protection against fire and explosion	Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentration higher than the occupational exposure limits. When transferring from one container to another apply earthing measures and use conductive hose material. No sparking tools should be used. The product should only be used in areas from which all naked lights and other sources of ignition have been excluded. No smoking. The accumulation of contaminated rags and dry overspray, particularly in spray booth filters, may result in spontaneous combustion. Good housekeeping standards, regular safe removal of waste materials and regular maintenance of spray booth filters will minimise the risks of spontaneous combustion and other fire hazards.
Requirements for storage areas and containers	Observe the label precautions. Prevent unauthorised access. Containers which are opened must be carefully re-sealed and kept upright to prevent leakage. Store between 5°C and 25°C in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. Solvent vapours are heavy air and may spread along floors. Vapours may form explosive mixtures with air. Electrical installations / materials must comply with the technological safety standards. Keep away from sources of ignition. No smoking. Store in accordance with the particular national regulations (see section 15).
Advice on common storage	Keep away from oxidising agents and strongly acid or alkaline materials.

8. Exposure controls / Personal protection

Personal protective equipment:

Respiratory protection	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.
Hand protection	For prolonged or repeated contact use protective gloves. Barrier creams may help to protect the exposed areas of

Trade name: **PROMAPAIN[®] APT 2-PACK SOLVENTBORNE
ACRYLIC / POLYURETHANE**

	skin, they should however not be applied once exposure has occurred. Skin should be washed after contact.
Eye protection	Chemical resistant goggles must be worn.
Skin and body protection	Wear protective clothing. Working clothes must not consist of textiles, which show a dangerous melting behaviour in case of fire. Workers should wear anti-static footwear.
Personal protection	Enclosing glasses, safety gloves and P2A2 half-face combo mask.

9. Physical and chemical properties

Appearance: Liquid
Colour: Clear
Odour: Mild aromatic

Important safety parameters:

Boiling point / boiling range:	N.A.
Melting point / melting range:	N.A.
Flash point:	30.1°C
Flammability (solid, gaz):	N.A.
Flammability temperature:	N.A.
Auto-flammability:	> 280°C
Explosive properties (danger and limits):	1.2% (V)
Oxidizing properties:	N.A.
Vapour pressure:	N.A.
Relative density:	ca. 1070kg/m ³
Solubility:	
- water solubility:	N.A.
- fat solubility:	N.A.
pH value:	N.A.
Partition coefficient (n-octanol/water):	N.A.
Viscosity:	N.A.

10. Stability and reactivity

Conditions to avoid	Avoid temperature above 60°C, direct sunlight and contact with sources of heat.
Hazardous reactions	Keep away from oxidising agents, strongly alkaline or acid materials in order to avoid exothermic reactions. Avoid moisture. Amines and alcohols cause exothermic reactions. Preparation reacts slowly with water resulting in evolution of CO ₂ . Evolution of CO ₂ in closed container causes overpressure and produces a risk of bursting.
Hazardous decomposition products	In case of fire hazardous decomposition products may be produced such as carbon dioxide, carbon monoxide, oxides of nitrogen dense black smoke.

Trade name: **PROMAPAIN[®] APT 2-PACK SOLVENTBORNE
ACRYLIC / POLYURETHANE**

11. Toxicological information

Acute oral toxicity	May cause nausea, abdominal spasms and irritation of the mucous membranes.
Acute inhalation toxicity	Exposure to component solvent vapours concentration in excess of the stated occupational exposure limit may result in adverse health effects. Such as mucous membrane irritation, respiratory system irritation, adverse effects on kidney, liver and central nervous system. Symptoms and signs such as headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases loss of consciousness.
Skin irritation	Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in desiccation of the skin. The product may be absorbed through the skin.
Eye contact	The liquid splashed in the eyes may cause irritation and reversible damaged.

12. Ecological information

The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45EC and is classified for ecotoxicological properties accordingly. See sections 2 and 15 for details.

13. Disposal considerations

The product should not be allowed to enter drains, water courses or the soil. Disposal together with normal waste is not allowed. Special disposal required according to local regulations.

14. Transport information

Transport to be in accordance with ADR for road, IMDG for sea and IATA for air transport:

UN No	1263
Proper shipping name	Paint.
Class	3
Packing group	III
Label	3
Marine pollutant (IMDG) (P,PP,-)	P
Marine pollutant component (IMDG)	Solvent naphtha (petroleum, light aromatic)
Ems (IMDG)	3-05
Limited quantity (ADR)	Maximum per inner pack = 5 litre Maximum per outer pack = 45 litre
Limited quantity (IMDG)	Maximum per inner pack = 5 litre Maximum per outer pack = 30 kg

NOTE: If pack sizes less than 450 litres, under the terms of 2.2.3.1.5, this product is not subject to the provisions of ADR.

Trade name: **PROMAPAIN[®] APT 2-PACK SOLVENTBORNE
ACRYLIC / POLYURETHANE**

15. Regulatory information

Hazardous components which must be listed on the label		Xylene
Symbol	Xn	Harmful
R-phrases	R10 R20/21 R43	Flammable. Harmful by inhalation and in contact with skin. May cause sensitisation by skin contact.
S-phrases	S23 S36/37 S38	Do NOT breather spray. Wear suitable protective clothing and gloves. In case of insufficient ventilation, wear suitable respiratory equipment.
P-phrases	P99	Contains isocyanates.
VOC	267.5g/litre Method = Calculated	
National legislation vlarem	Vlarem 2A	
CPR classification	K2 Xn	
NER classification	NER Class 0.1: 0.0% (m) NER Class 0.2: 25% (m) NER Class 0.3: 0.0% (m)	

16. Other information

Explanation of R-phrases mentioned in section 2.

Xylene	R10 R20/21 R38	Flammable. Harmful by inhalation and in contact with skin. Irritating to skin.
Ethylene glycol monoethyl / Ether acetate hexa- Methylene diisocyanate	R23 R36/37/38 R42/43	Toxic by inhalation. Irritation to eyes, respiratory system and skin. May cause sensitisation by inhalation and skin contact.
Aliphatic polyisocyanate	R43	May cause sensitisation by skin contact.

The recommendations for use and installation of PROMAPAIN[®] APT 2-Pack Solventborne Acrylic/polyurethane (semi-gloss finish hardener) have to be followed as indicated in the Promat Handbook.

SAFETY DATA SHEET

Promat

Issued: 25/07/2007

**Trade name: PROMAPAIN[®] APT 2-PACK SOLVENTBORNE
ACRYLIC / POLYURETHANE**

The health and safety information contained herein is believed to be accurate and correct based on our current knowledge at the date of issue and no liability can be accepted for any loss, injury or damage resulting from its use. It is intended as a guide for the safe handling, storage and use under normal conditions, but does not necessarily refer to the particular requirements of a customer when further advice should be obtained.

This data sheet and the information it contains is not intended to supersede any terms or conditions of sale and does not constitute a specification. Nothing contained herein is to be construed as a recommendation for use in violation of any patent or applicable laws or regulations.