

Complies with OSHA Hazard Communication Standard 29 CFR 1910.1200

# 1. IDENTIFICATION

Product Name	:	Thinner 050 (BMA-THI050)
Colors	:	Clear
Material Uses	:	Solvent for Solvent Based Paints
Manufacturer	:	BMA Commercial and Industrial s.a.l
		Industrial Valley, Ain Saade
		Nahr El Mot 55091, North Metn
		Lebanon
Telephone Number	:	+961. 1. 885385 / 485
<b>Emergency Phone</b>	:	+961. 1. 885385 / 485
Number		
Fax Number	:	+961. 1. 885685
E-mail	:	info@bmapaints.com
Website	:	www.bmapaints.com

# 2. HAZARDS IDENTIFICATION

# Classification of the substance or mixture

	The second	
Physical State	Liquid	
Odor	Characteristic of solvent	
Flammability	Flammable liquid – Category 2	
Carcinogenicity	Category 2	
Reproductive Toxicity	Category 2	
Specific Target Organ	Category 1	
Toxicity – Single Exposure	· ,	
Specific Target Organ	Category 2	
Toxicity – Repeated		
Exposure		
Eyes	Eye irritation – Category 2	
Skin	Skin irritation – Category 2	
	Acute toxicity – Category 4	
Ingestion	Acute toxicity – Category 4	
	Aspiration hazard – Category 1	
Inhalation	Acute toxicity – category 4	
Hazardous to the Aquatic	Chronic Toxicity – Category 3	
Environment		



#### **Label Elements**

<u>Hazard Pictograms</u>



Signal Word: DANGER

#### **Hazard Statements**

H225	:	Highly flammable liquid and vapour.
H302 + H312 + H332	••	Harmful if swallowed, in contact with skin or if
		inhaled.
H304	:	May be fatal if swallowed and enters airways.
H315		Causes skin irritation.
H319		Causes serious eye irritation.
H335	••	May cause respiratory irritation.
H336	••	May cause drowsiness or dizziness.
H351	••	Suspected of causing cancer.
H361d	:	Suspected of damaging the unborn child.
H370	••	Causes damage to organs.
H373	••	May cause damage to organs through prolonged or
		repeated exposure.
H412		Harmful to aquatic life with long lasting effects.

## <u>Precautionary Statements</u>

P210	:	Keep away from heat, hot surfaces, sparks, open
		flames and other ignition sources. No smoking.
P261		Avoid breathing dust / fume / gas / mist / vapours /
		spray.
P280	:	Wear protective gloves / clothing and eye / face
		protection.
P331	:	Do not induce vomiting.
P370 + P378	:	In case of fire: use CO <sub>2</sub> , foam, chemical powder to
		extinguish.





# 3. COMOSITION/INFORMATION ON INGREDIENTS

<u>Chemical Name</u>	<b>CAS Number</b>	% by weight
Xylene	1330-20-7	*
Toluene	108-88-3	*
Methanol	67-56-1	*
n-Butyl acetate	123-86-4	*
Ethyl Acetate	141-78-6	*
Methyl Acetate	79-20-9	*
Methyl Ethyl Ketone	78-93-3	*
Dichloromethane	75-09-2	*
Acetone	67-64-1	*
Hydrocarbons, C9,	64742-95-6	*
Aromatics		
Propan-2-ol	67-63-0	*
Tetrahydrofuran	109-99-9	*
Butanol	71-36-3	*

<sup>\* %</sup> by weight is not specified due to trade secret.

Components not listed are not physical or health hazards as defined in 29 CFR 1910.1200 Hazard Communication Standard

## 4. FIRST-AID MEASURES

Eye Contact	: Remove contact lenses, if present. Wash
	immediately with plenty of water for at least 30-60 minutes, opening the eyelids fully without rubbing eyes. Consult a physician if irritation persists.
Skin Contact	: Remove contaminated clothing. Wash affected areas thoroughly with soap and water. Consult a physician in case of a lasting irritation.
Inhalation	: Get medical advice immediately. Remove to fresh air, away from the accident scene and keep at rest
	in a position comfortable for breathing. If the subject stops breathing, administer artificial respiration.
Ingestion	: Have the subject drink as much water as possible. Get medical advice immediately and show this SDS. Do not induce vomiting without medical advice.



# 5. FIRE-FIGHTING MEASURES

Flammability of the Product	: Highly flammable liquid and vapour.
Products of Combustion	: Decomposition products may include the following materials: Carbon dioxide
	Carbon monoxide Dioxins Phosgenes Hydrochloric acid Ketenes
Suitable	: Dry powder and CO <sub>2</sub> . For product loss or leakage that has not caught fire, water spray can be used to disperse flammable vapours and protect those
	trying to stem the leak.
Not Suitable	: Do not use jets of water.  Water is not effective for putting out fires but can be used to cool containers exposed to flames to prevent explosions.
Special Protective Equipment and precautions for fire- fighters	: Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

# 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, : Protective Equipment and Emergency Procedures	Block the leakage if there is no hazard. Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. Send away individuals who are not suitably equipped. Eliminate all sources of ignition (cigarettes, flames, sparks, etc.) from the leakage site.
Environmental : Precautions	The product must not penetrate into the sewer system or come into contact with surface water or ground water.

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Methods and materials for : containment and cleaning up

Collect the leaked product into a suitable container. If the product is flammable, use explosion-proof equipment. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material. Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

### 7. HANDLING AND STORAGE

### Precautions for Safe Handling

Ensure that there is an adequate earthling system for the equipment and personnel. Avoid contact with eyes and skin. Do not breathe powders, vapours or mists. Do not eat, drink or smoke during use. Wash hands after use. Avoid leakage of the product into the environment.

Keep away from heat, sparks and naked flames; do not smoke or use matches or lighters. Without adequate ventilation, vapours may accumulate at ground level and, if ignited, catch fire even at a distance, with the danger of backfire. Avoid bunching of electrostatic charges. In order to avoid the risk of fires and explosions, never use compressed air when handling. Open containers with caution as they may be pressurised.

### Conditions for Safe Storage

Store only in the original container. Store in a ventilated and dry place, far away from sources of ignition. Keep containers well sealed. Keep the product in clearly labelled containers. Avoid overheating. Avoid violent blows. Keep containers away from any incompatible materials, see section 10 for details.

Store in a well-ventilated place, keep far away from sources of heat, naked flames and sparks and other sources of ignition.



# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

# **Components with Workplace Control Parameters**

<u>Product name</u>	Exposure Limit
Xylene :	ACGIH: 100 ppm TWA; 150 ppm STEL
	SG OEL: 100 ppm – 434 mg/m³ TWA; 150 ppm – 651
	mg/m³ STEL
Toluene :	ACGIH: 20 ppm TWA
Methanol :	ACGIH: 200 ppm; 250 ppm STEL
n-Butyl acetate :	ACGIH: 150 ppm TWA; 200 ppm STEL
	NIOSH: 150 ppm TWA; 710 mg/m³ TWA; 1700 ppm
	IDLH
	OSHA – Final PELs: 150 ppm TWA; 710 mg/m³ TWA
Ethyl Acetate :	NIOSH REL: TWA 400 ppm (1400 mg/m³)
	OSHA PEL: TWA 400 ppm (1400 mg/m³)
	ACGIH 1997: TLV: 400 ppm (1400 mg/m³)
	IDLH: 2000 ppm
	OEL – AUSTRALIA: TWA 400 ppm (1400 mg/m³)
2-butoxyethanol:	PEL (USA): 240 mg/m³, 50 ppm; Skin
	REL (USA): 240 mg/m³, 5 ppm; Skin
	TLV (USA): 97 mg/m³, 20 ppm
	TLV (EU):
	- Short-term value : 246 mg/m3, 50 ppm
	- Long-term value: 98 mg/m³, 20 ppm; Skin
	WEL (Great Britain):
	- Short-term value: 50 ppm
A de able a de capacitación de la capacitación de l	- Long-term value: 25 ppm
Methyl acetate :	TWA: 200 ppm, 616 mg/m <sup>3</sup>
Acatono	STEL: 250 ppm, 770 mg/m <sup>3</sup>
Acetone : Dichloromethane :	ACCILL 50 ppm TWA
	ACCILL 200 ppm TWA: 400 ppm STEL
Propan-2-ol:	ACCIH: 100 mg/m³ TWA
Hydrocarbons, C9, : Aromatics	ACGIH: 100 mg/m³ TWA
	ACCIH: 50 ppm TWA: 100 ppm STEI
Tetrahydrofuran :	ACCILL: 20 ppm TWA
Butanol :	ACCILL 200 ppm TWA
Methyl Ethyl Ketone :	ACGIH: 200 ppm TWA; 300 ppm STEL



# **Exposure Controls**

Respiratory Protection	:	Use only with adequate ventilation under engineered air control systems designed to prevent exceeding appropriate threshold value. For occasional use, where engineered air control is not feasible, use properly maintained and properly fitted approved respirator for organic solvent vapours. A
		dust mask does not provide protection against vapours.
Eye Protection	:	Use Tightly fitting safety goggles to avoid exposure to liquid splashes.
Hand Protection	:	Protective hands with category III work gloves.
Body Protection	:	Wear suitable coveralls to prevent exposure to the skin.
Hygiene Measures	:	Wash hands, forearms and face thoroughly after
		handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid
Color	Colourless
Odor	Characteristic of solvent
Odor Threshold	Not available
рН	: Not available
Melting Point / Freezing	Not available
Point	
Initial Boiling Point	:   > 35 °C
Boiling Range	Not available
Flash Point	:   < 23 °C
Evaporation Rate	Not available
Flammability of Solids and	Not available
Gases	
Lower Inflammability Limit	Not available
Upper Inflammability Limit	Not available
Lower Explosive Limit	Not available
Upper Explosive Limit	Not available
Vapour Pressure	Not available
Relative Density (g/cm³)	: 0.88
Solubility	Not available
Partition Coefficient: n-	Not available
octanol/water	



<b>Auto-ignition Temperature</b>	:	Not available
Decomposition	:	Not available
Temperature		
Viscosity	:	Not available
Explosive Properties	:	Not available
Oxidising Properties	:	Not available
VOC Content	:	> 98 %
Water Solubility	:	Insoluble

# 10. STABILITY AND REACTIVITY

Stability and Reactivity	:	The product can decompose and/or react violently. The product is stable in normal conditions of use and storage.
Conditions to avoid	:	As the product decomposes even at ambient
		temperature, it must be stored and used at a controlled temperature. Avoid violent blows.
Hazardous Decomposition Products	:	May develop: carbon dioxide, carbon monoxide, dioxins, phosgenes, hydrochloric acid, and ketenes.

# 11. TOXICOLOGICAL INFORMATION

Specific information about the product itself are not available.

Component: n-Butyl acetate

Component it Borgi acorai		
Acute Oral Toxicity	:	LD50 (Mouse) = 6 mg/Kg
		LD50 (Rabbit) = 3,200 mg/Kg
		LD50 (Rat) = 10,768 mg/Kg
Acute Dermal Toxicity		LD50 (Rat): > 17,600 mg/Kg
Acute Inhalation Toxicity	7	LC50 (Rat) = 390 ppm/4H
		LC50 (Mouse) = 6 mg/m <sup>3</sup> /2H
Draize Test	:	Rabbit, eye: 100 mg; Moderate
		Rabbit, skin: 500 ma/24H; Moderate

Component: Xylene

Acute Oral Toxicity	:	LD50 (Rat) > 2,000 mg/Kg – Low toxicity
Acute Dermal Toxicity	:	LD50 (Rabbit) > 2,000 mg/Kg – Low toxicity
Acute Inhalation	:	LC50 (Rat) > 20 mg/L/4H
Skin	:	Irritating to Skin
Respiratory Irritation	:	Inhalation of vapours or mists may cause irritation to
		the respiratory system.





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Component: <u>Toluene</u>

**Acute Oral Toxicity** : LD50 (Rat) = 5,000 mg/Kg

**Acute Dermal Toxicity** : LD50 (Rabbit) = 12,667 mg/Kg

Acute Inhalation : LC50 (Rat) = 25.7 mg/L/4H

Component: Ethyl Acetate

**Acute Oral Toxicity** : LD50 (Rat) = 5,620 mg/Kg

Acute Dermal Toxicity : LD50 (Rabbit): > 20 g/Kg

Acute Inhalation :  $LC50 = 200,000 \text{ mg/m}^3$ 

Component: Methyl Acetate

Acute Oral Toxicity : LD50 (Rat) = 6,482 mg/Kg

Acute Dermal Toxicity : LD50 (Rat): > 2,000 mg/Kg

Acute Inhalation : LC50: > 49.2 mg/L/4H

Carcinogenicity: IARC 2B: possibly carcinogenic to humans

Component: Acetone

Acute Oral Toxicity : LD50 (Rat) = 5,800 mg/Kg

Acute Dermal Toxicity : LD50 (Rabbit) = 7,400 mg/Kg

**Acute Inhalation** : LC50 (Rat) = 76 mg/L/4H

Component: Methyl Ethyl Ketone

Acute Oral Toxicity : LD50 (Rat) = 2,193 mg/Kg

Acute Dermal Toxicity : LD50 (Rabbit): > 8,050 mg/Kg

Acute Inhalation : LC50 (Rat): > 5,000 ppm

Component: Methanol

Acute Oral Toxicity : LD50 (Rat): > 1,187 mg/Kg

Acute Dermal Toxicity : LD50 (Rabbit) = 17,000 mg/Kg

Acute Inhalation : LC50 (Rat) = 128.2 mg/L/4H

Component: <u>Butanol</u>

**Acute Oral Toxicity** : LD50 (Female Rat) = 2,292 mg/Kg

Acute Dermal Toxicity : LD50 (Rabbit) = 3,430 mg/Kg

**Acute Inhalation** : LC50 (Rat) > 17.76 mg/L/4H

Component: <u>Dichloromethane</u>

**Acute Oral Toxicity** : LD50 (Rat) = 1,600 mg/Kg

Acute Dermal Toxicity : LD50 (Rat): > 2,000 mg/Kg

Acute Inhalation : LC50 (Rat) = 79 mg/L/2H

Component: Propan-2-ol

Acute Oral Toxicity : LD50 (Rat) = 4,710 mg/Kg

**Acute Dermal Toxicity** : LD50 (Rat) = 12,800 mg/Kg





Acute Inhalation : LC50 (Rat) = 72.6 mg/L/4H

Component: <u>Hydrocarbons, C9, Aromatics</u>

**Acute Oral Toxicity** : LD50 (Rat) = 3,492 mg/Kg

Acute Dermal Toxicity : LD50 (Rabbit) = 3,160 mg/Kg

**Acute Inhalation Toxicity** : LC50 (Rat): > 6,193 mg/m³/4h

### 12. ECOLOGICAL INFORMATION

This product is dangerous for the environment and the aquatic organisms. In the long term, it has negative effects on aquatic environment.

## **Toxicity**

Component: Xylene

LC50 - For Fish : 13.5 mg/L/96H - Oncorhynchus mykiss

**EC50 – For Crustacea** : | 8.5 mg/L/48H – Palaemonetes pugio

Chronic NOEC for Fish : 1.3 mg/L – Oncorhynchus mykiss

Component: Toluene

LC50 – For Fish : 5.5 mg/L/96H – Oncorhynchus kisutch

**EC50 – For Crustacea** : 3.78 mg/L/48H – Ceriodaphnia dubia

**EC50 – For Algae** : 12.5 mg/L/72H – Pseudokirchneriella subcapitata

Chronic NOEC for Fish : 1.39 mg/L – Oncorhynchus kisutch – 40 days

Chronic NOEC for : 0.74 mg/L Daphnia magna – 7 days

Crustacea

Chronic NOEC for Algae : 10 mg/L Skeletonema costatum

Component: <u>Dichloromethane</u>

LC50 - For Fish : 193 mg/L/96H - Pimephales promelas

**EC50 – For Crustacea** : 480 mg/L/48H – Daphnia magna

Chronic NOEC for Algae : 550 mg/L – Scenedesmus sp

Component: Methanol

LC50 - For Fish : | > 15,400 mg/L/96H - Pimephales promelas

**EC50 – For Crustacea** : | > 10,000 mg/L/48H – Daphnia

**EC50 – For Algae** : 22,000 mg/L/72H – Selenastrum capricomutum

Component: Butanol

LC50 - For Fish : 1,376 mg/L/96H - Pimephales promelas

EC50 - For Crustacea : 18 mg/L/48H - Daphnia magna





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Component: Propan-2-ol

EC50 – For Crustacea :	>	100	mg/L/48H	_	Daphnia	_	Leuciscus	idus
	m	elanc	otus					

**EC50 – For Algae** : | > 100 mg/L/72H – Scenedesmus subspicatus

Component: Acetone

LC50 – For Fish	: 5,540 mg/L/96H – Oncorhynchus mykiss	5,540 mg/L/96H – Oncorhynchus mykiss				
EC50 – For Crustacea	: 8,800 mg/L/48H – Daphnia magna					
Chronic NOEC for	: 530 mg/L – Microcystis aeruginosa					
Crustacea						

Component: Methyl Ethyl Ketone

LC50 – For Fish	: 2,993 mg/L – Pimephales promelas
EC50 – For Crustacea	: > 308 mg/L/48H – Daphnia – Leuciscus Doratus
EC50 – For Algae	: > 100 mg/L/72H – Desmodesmus subspicatus

Component: Methyl Acetate

LC50 – For Fish	: > 250 mg/L/96H – Brachidanio renio	
EC50 – For Crustacea	: > 1,000 mg/L/48H - Daphnia magna	
EC50 - For Algae	: > 120 mg/L/72H – Desmodesmus subspicatus	

Component: Ethyl Acetate

LC50 – For Fish	:	230 mg/L/96H – Pimephales promelas
EC50 – For Algae	:	> 100 mg/L/72H – Desmodesmus subspicatus
Chronic NOEC for	:	2.4 mg/L – Daphnia magna – 21 days
Crustacea		
Chronic NOEC for Algae	:	> 100 mg/L – Desmodesmus subspicatus

Component: N-Butyl Acetate

LC50 – For Fish :	18 mg/L/96H – Pimephales promelas
EC50 – For Crustacea :	44 mg/L/48H – Daphnia magna
EC50 – For Algae :	647 mg/L/72H – Desmodesmus subspicatus
Chronic NOEC for Algae :	200 mg/L – Desmodesmus + mus subspicatus

Component: Hydrocarbons, C9, Aromatics

LC50 – For Fish	•	9.2 mg/L/96H	
EC50 – For Crustacea	:	3.2 mg/L/48H – Daphnia	

# Persistence and Degradability

Petroleum distillates, charcoal, vegetable extracts: they are mixtures of paraffinic, naphthenic, diterpenic and aromatic hydrocarbons. Their behaviour on the environment depends on the concentration. In each case use, according to good





working practices, avoiding disposal in the environment. As a rule, the product is poorly biodegradable.

Product	Description
Hydrocarbons, C9, Aromatics	: Rapidly biodegradable
Xylene	: Solubility in water: 100 – 1,000 mg/L Rapidly biodegradable
Toluene	: Rapidly biodegradable
Dichloromethane	: Solubility in water: 13,200 mg/L Not rapidly biodegradable
Methanol	: Solubility in water: 1,000 – 10,000 mg/L Rapidly biodegradable
Butanol	: Solubility in water: 1,000 – 10,000 mg/L Rapidly biodegradable
Tetrahydrofuran	: Solubility in water: 1,000 – 10,000 mg/L Not rapidly biodegradable
Propan-2-ol	: Rapidly biodegradable
Acetone	: Rapidly biodegradable
Methyl Ethyl Ketone	: Solubility in water: > 10,000 mg/L Rapidly biodegradable
Methyl Acetate	: Solubility in water: 243,500 mg/L Rapidly biodegradable
Ethyl Acetate	: Solubility in water: > 10,000 mg/L Rapidly biodegradable
N-Butyl Acetate	: Solubility in water: 1,000 – 10,000 mg/L Rapidly biodegradable

## **Bio accumulative Potential**

Product		Partition Coefficient noctanol/water	BCF
Xylene	:	3.6	25.9
Toluene	:	2.73	90
Dichloromethane	:	1.25	2
Methanol	:	-0.77	0.2
Butanol	:	1	3.16
Tetrahydrofuran	:	0.45	
Propan-2-ol	:	0.05	<4
Acetone	:	-0.23	3
Methyl Ethyl Ketone	:	0.3	
Methyl Acetate	:	0.18	
Ethyl Acetate	:	0.68	30
N-Butyl Acetate	:	2.3	15.3



#### **Mobility in Soil**

Product		Partition Coefficient soil/water
Xylene	:	2.73
Butanol	:	0.388
Tetrahydrofuran	:	1.26
Methyl Acetate	:	0.18
N-Butyl Acetate	:	< 3

### 13. DISPOSAL CONSIDERATIONS

#### **Waste Treatment Methods**

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

Waste transportation may be subject to ADR restrictions.

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

# 14. TRANSPORT INFORMATION

	ADR/RID	IMDG	ICAO/IATA			
TRANSPORTATION	Road	Marine	Airways			
PROPER SHIPPING	Desiret Delevte el Martevial					
NAME	Paint Related Material					
UN/ID No.	1263					
SYMBOL		3				
CLASS		3				
PACKING GROUP		II				
LABELLING NO		3				
Environmental						
Hazards (MARINE		No				
Polluant)						
HAZARD NO (HIN NO)	HIN – Kemler: 33					

EmS	F-E, <u>S-E</u>	
HS CODE	38140010	
Transport in bulk		
(according to Annex II	Information not relevant	
of MARPOL 73/78 and		
the IBC Code)		

### 15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

Seveso Category – Directive 2012/18/EC: P5c-H3

Restrictions related to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006

PRODUCT					
Point			3 – 40		
POINI		•			
			CONTAINED SUBSTANCE		
Point		//	48		
			Toluene Reg. no: 01-2119471310-51		
Point		///:	59		
			Dichloromethane Reg. no: 01-2119480404-41		
SUBSTANCES IN CANDIDATE LIST (Art. 59 REACH)					
On the basis of available data, the product does not contain any SVHC in					
	percentage greater than 0.1%.				
SU	IBSTAI	NCES SUBJE	ECT TO AUTHORIZATION (ANNEX XIV REACH)		
			None		
SUBSTAN	ICES S	UBJECT TO	EXPORTATION REPORTING PURSUANT TO (EC) Reg.		
			689/2008		
			None		
	SUBS	TANCES SU	IBJECT TO THE ROTTERDAM CONVENTION		
			None		
	SUBSTANCES SUBJECT TO THE STOCKHOLM CONVENTION				
			None		
HEALTHCARE CONTROLS					
	•		chemical agent must not undergo health checks,		
provided that available risk-assessment data prove that the risks related to the					
workers' health and safety are modest and that the 98/24/EC directive is					
respected.					



# 16. OTHER INFORMATION

**Date of Issue** : 18-01-2019

The information contained herein is based on the present state of our knowledge. It characterises the product with regard to the appropriate safety precautions. It does not represent a guarantee of any properties of the product.

