

Manufacturers and Distributors of Top Quality Paints and Solvents

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**ENAMEL THINNERS
 LOCAL SALES SPECIFICATION
 AND SAFETY DATA SHEET**

DESCRIPTION AND GENERAL USE

ENAMEL THINNERS is a medium aromatic solvent, which has a typical aromatic content of 70% by volume.

PACKAGING

ENAMEL THINNERS is available in 200 litre steel drums

OTHER PHYSICAL PROPERTIES

PHYSICAL CHARACTERISTICS	TYPICAL	TEST METHOD
Density @ 20°C, kg/l	0.814	ASTM D1298
Colour, Saybolt	+30	ASTM D156
Flash point °C (T C C)	<0	ASTM D56
Melting Point (Pour pt)	<-40°C	
Distillation Range °C		ASTM D1078
I.B.P.	96	
10%	104	
50%	111	
90%	127	
D.P.	135	
Aromatics, % v/v	70	ASTM D875
Vapour pressure (at 40°C)	36 mm	
Vapour Density (Air = 1)	3,3	
Sulphur, % m/m	0,005	ASTM D1266
Solubility in H ₂ O (% by WT)	Floats on water	
Appearance and Odour	Colourless liquid with characteristic odour	

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HAZARDOUS INGREDIENTS

MATERIAL	%	HAZARD DATA
Aliphatics	20	TLV = 100 ppm
Aromatics	80	
Benzine	<1	

FIRE AND EXPLOSION DATA

Flash point (test method)	9 degrees C (closed cup)
Auto ignition	500 degrees C
Flammable limits in air & by volume	Lower: 1,2% Upper: 7%
Extinguishing media	Foam, CO2, dry chemical, water fog.
Special fire fighting procedures	None
Unusual fire and explosion hazards	Slight, when exposed to heat or flame
Material must be labeled as:	Flammable

SPILL OR LEAK PROCEDURES

Steps to be taken if material is released or spilled	Absorb on fire retardant treated sawdust, diatomaceous earth, etc. Shovel up and dispose of at an appropriate waste disposal facility in accordance with current applicable laws and regulations, and product characteristics at time of disposal
Neutralizing chemicals waste disposal method	Mop up with plenty of water and run to waste, diluting greatly with running water. Ventilate area well to evaporate remaining liquid and dispel vapour

HEALTH HAZARD INFORMATION

US OSHA HAZARD COMMUNICATION STANDARD: Product assessed in accordance with OSHA 29 CFR 1910.1200 and determined to be hazardous.

Causes	Symptoms	Emergency and first aid procedures
Inhalation (Breathing)	Respiratory irritation, dizziness, nausea, loss of consciousness. Use with adequate ventilation. Repeated inhalation may cause lung damage.	Remove patient from further exposure. If respiratory irritation, dizziness, nausea or unconsciousness occurs, seek immediate medical assistance. If breathing has stopped, administer artificial respiration (mouth to mouth resuscitation).
Skin Contact / Absorption	May cause moderate skin irritation. Prolonged repeated skin contact with low viscosity material may defat the skin resulting in possible irritation and dermatitis.	Remove and isolate contaminated clothing and shoes, launder before re-use. Avoid spreading material on unaffected skin. Wash well with soap and water.
Eye Contact	Moderate eye irritation. Contact can cause irritation and/or burns.	Flush thoroughly with water for at least 15 minutes, within 1 minute of contact. Hold eyelids open while washing. In severe cases, obtain medical attention.
Ingestion (Swallow)	May cause pulmonary damage or chemical pneumonitis, if aspirated into the lungs. Toxic if swallowed.	Do not induce vomiting. Administer vegetable oil. Get medical assistance.
Effects of Overexposure	Eye irritation. Skin irritation. Respiratory irritation, dizziness, nausea, loss of consciousness. Prolonged repeated skin contact with low viscosity materials may defat the skin resulting in possible irritation and dermatitis.	

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Trade / Commercial Name Synonyms Chemical Name UN Number Dot ERG No	Enamel Thinners Fluidar 70/914 / Solvent S Petroleum Hydrocarbons UN1268 27
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Composition and Information on Ingredients
Ingredients considered hazardous to health:

Substance Name	CAS #	% by weight
1) Toluene	108-88-3	45
2) Xylene	1330-20-7	25
3) Light Aliphatic Petroleum Solvent	64742-89-8	30
4) Benzene	71-43-2	<1

FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Carbon dioxide, foam, dry chemical and water fog.

SPECIAL FIRE FIGHTING PROCEDURES: Use water to keep fire exposed containers cool. If a leak or spill has not ignited, use water spray to disperse the vapours and to protect personnel attempting to stop leak. Water spray may be used to flush spills away from exposures. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply.

SPECIAL PROTECTIVE EQUIPMENT: For fires in enclosed areas, fire fighters must use self-contained breathing apparatus.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Flammable. Vapour accumulation could flash and/or explode if ignited. Flash Point C: <0 (ASTM D-56).
Flammable limits – LEL: 1.0%, UEL: 7.5%.

NFPA HAZARD ID: Health: 0, Flammability: 3, Reactivity: 0.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide.

ACCIDENTAL RELEASE MEASURES

NOTIFICATION PROCEDURES: Report spills as required to appropriate authorities.

PROCEDURES IF MATERIAL IS RELEASED OR SPILLED: Absorb on fire retardant treated sawdust, diatomaceous earth, etc. Shovel up and dispose of at an appropriate waste disposal facility in accordance with current applicable laws and regulations, and product characteristics at time of disposal. Eliminate all ignition sources. Remove leaking containers to detached area.

ENVIRONMENTAL PRECAUTIONS: Prevent spills from entering storm sewers or drains and contact with soil.

PERSONAL PRECAUTIONS: See Section on Exposure Controls/Personal Protection.

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HANDLING AND STORAGE

HANDLING: Avoid contact with eyes. Avoid contact with skin. Use in well ventilated area away from all ignition sources. Avoid sparking conditions. Ground and bond all transfer equipment.

STORAGE: Drums must be grounded and bonded and equipped with self-closing valves, pressure vacuum bungs and flame arresters. Outside or detached storage preferred. Storage containers should be grounded and bonded. Store in a cool area away from all ignition sources.

EXPOSURE CONTROLS / PERSONAL PROTECTION:

VENTILATION: Use in well ventilated area with local exhaust ventilation. Ventilation required and equipment must be explosion proof. Use away from all ignition sources.

RESPIRATORY PROTECTION: Approved respiratory protective equipment must be used when vapour or mists concentrations exceed applicable standards.

EYE PROTECTION: Chemical type goggles should be worn.

SKIN PROTECTION: Impervious gloves should be worn.

OCCUPATIONAL EXPOSURE LIMITS:

Substance Name (CAS-No.)	Source	-----LTEL-----		-----STEL-----	
		ppm	mg/m3	ppm	mg/m3
TOLUENE (108-88-3)	OSHA	100	375	150	560
	ACGIH	50	188		
XYLENE (1330-20-7)	OSHA	100	434	150	651
	ACGIH	100	434		
LIGHT ALIPHATIC PETROLEUM SOLVENT (64742-89-8)	ACGIH	100	525		
BENZENE (71-43-2)	OSHA	1		5	
	ACGIH	10	32		

NOTE: Limits shown for guidance only. Follow applicable regulations.

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PHYSICAL & CHEMICAL PROPERTIES

Typical physical properties are given below. Consult Product Data Sheet for specific details.

APPEARANCE:	Water-white liquid
COLOUR:	Clear
ODOUR:	Solvent
ODOUR THRESHOLD:	NA
pH:	NA
BOILING POINT C:	> 90
MELTING POINT C:	NA
FLASH POINT C:	< 0 (ASTM D-56)
FLAMMABILITY:	NA
AUTO FLAMMABILITY:	NE
EXPLOSIVE PROPERTIES:	NA
OXIDIZING PROPERTIES:	NA
VAPOUR PRESSURE-mmHg 20 C:	30.0
VAPOUR DENSITY:	NA
EVAPORATION RATE:	NA
DENSITY, 20 C, kg/l:	0.840
SOLUBILITY IN WATER:	Negligible
PARTITION COEFFICIENT:	NE
VISCOSITY AT 40 C, cSt:	< 2.0
VISCOSITY AT 100C, cSt:	NA
POUR POINT C:	NE
FREEZING POINT C:	NE
VOLATILE ORGANIC COMPOUND:	NE

NA=NOT APPLICABLE NE=NOT ESTABLISHED D=DECOMPOSES

For further technical information, contact your marketing representative.

STABILITY AND REACTIVITY

STABILITY (THERMAL, LIGHT, ETC.) : Stable

CONDITIONS TO AVOID: Heat, sparks, flame and build up of static electricity

INCOMPATIBILITY (MATERIALS TO AVOID): Strong oxidizers

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide

HAZARDOUS POLYMERISATION: Will not occur

ECOLOGICAL INFORMATION

ENVIRONMENTAL FATE AND EFFECTS:

This material is toxic to fish and wildlife.

Do not discharge into lakes, streams, ponds, etc.

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TOXICOLOGICAL INFORMATION

-----ACUTE TOXICOLOGY-----

ORAL TOXICITY (RATS): Practically non-toxic (LD50: greater than 2000 mg/kg).

--- Based on testing of similar products and/or the components.

DERMAL TOXICITY (RABBITS): Practically non-toxic (LD50: greater than 2000 mg/kg).

--- Based on testing of similar products and/or the components.

INHALATION TOXICITY (RATS): Harmful (LC50: greater than 2 but 5 mg/l or less).

--- Based on testing of similar products and/or the components.

EYE IRRITATION (RABBITS): Irritant. Eye irritation scores: 32.0 at 24 hours, 29.0 at 48 hours, 23.0 at 72 hours, 15.0 at 4 days, 9.0 at 7 days.

SKIN IRRITATION (RABBITS): Practically non-irritating. (Primary Irritation Index: greater than 0.5 but less than 3). --- Based on testing of similar products and/or the components.

OTHER ACUTE TOXICITY DATA: Inhalation of vapours/mists may cause respiratory system irritation. Expected to be severely irritating to gastrointestinal tract.

DISPOSAL CONSIDERATIONS

WASTE DISPOSAL: Mix with a compatible chemical which is less combustible and incinerate in compliance with applicable laws and regulations.

RCRA INFORMATION: Disposal of unused product may be subject to RCRA regulations (40 CFR 261) due to the characteristic(s) / chemical(s) listed below. Disposal of the used product may also be regulated due to ignitability, corrosivity, reactivity, or toxicity as determined by the Toxicity Characteristic Leaching Procedure (TCLP).

BENZENE: .5000 PCT (TCLP)

FLASH: < 0 C

TRANSPORT INFORMATION

USA DOT:

SHIPPING NAME:	Flammable Liquids, n.o.s. (contains TOLUENE, XYLENE and BENZENE)
HAZARD CLASS & DIV:	3
ID NUMBER:	UN1268
ERG NUMBER:	27
PACKING GROUP:	PG II
STCC:	NE
DANGEROUS WHEN WET:	No
POISON:	No
LABEL (s):	Flammable Liquid
PLACARD (s):	Flammable
PRODUCT RQ:	2000 lbs (contains BENZENE)
MARPOL III STATUS:	NA

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TRANSPORT INFORMATION CONTINUED

IMO:

HAZARD CLASS & DIV: 3.2
UN NUMBER: 1268
PACKING GROUP: PG II
SHIPPING NAME: Flammable Liquids, n.o.s. (contains TOLUENE,
XYLENE and BENZENE)
LABEL (s): Flammable Liquid
MARPOL III STATUS: NA

ICAO/IATA:

HAZARD CLASS & DIV: 3
ID/UN NUMBER: 1268
PACKING GROUP: PG II
SHIPPING NAME: Flammable Liquids, n.o.s. (contains TOLUENE,
XYLENE and BENZENE)
SUBSIDIARY RISK: NA
LABEL (s): Flammable Liquid

REGULATORY INFORMATION

Governmental Inventory Status: All components comply with TSCA, EINECS/ELINCS and AICS.

U.S. Superfund Amendments and Reauthorization Act (SARA) Title III: This product contains no "EXTREMELY HAZARDOUS SUBSTANCES".

EU Labelling:

Symbol: F Xn Highly flammable, Harmful.

Risk Phrase (s): R11-10-22-38.

Highly flammable. Harmful by inhalation and if swallowed. Irritating to skin.

Safety Phrase(s): S9-16-23-24/25-62.

Keep container in a well-ventilated place. Keep away from sources of ignition – No smoking. Do not breathe vapour. Avoid contact with skin and eyes. If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

Contains: Petroleum distillate.

SARA (31/312) REPORTABLE HAZARD CATEGORIES: FIRE ACUTE

This product contains the following SARA (313) Toxic Release Chemicals:

CHEMICAL NAME	CAS NUMBER	CONC.
TOLUENE	108-88-3	45%
XYLENE	1330-20-7	25%
BENZENE	71-43-2	0.5%

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REGULATORY INFORMATION CONTINUED

The following product ingredients are cited on the lists below:

CHEMICAL NAME	CAS NUMBER	LIST CITATIONS
BENZENE (0.50%)	71-43-2	1, 3, 4, 6, 9, 17, 22, 24, 25
TOLUENE (45.00%)	108-88-3	1, 10, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26
XYLENES (25.00%)	1330-20-7	1, 10, 18, 19, 20, 21, 22, 23, 24, 25
LIGHT ALIPHATIC PETROLEUM SOLVENT	64742-89-8	1, 18, 19, 20, 21, 23, 25

-----REGULATORY LISTS SEARCHED-----

1 = ACGIH ALL	8 = IARC 2B	15 = TSCA 12b	23 = MN RTK
2 = ACGIH A1	9 = OSHA CARC	17 = CA P65	24 = NJ RTK
3 = ACGIH A2	10 = OSHA Z	18 = CA RTK	25 = PA RTK
4 = NTP CARC	11 = TSCA 4	19 = FL RTK	26 = RI RTK
5 = NTP SUS	12 = TSCA 5a2	20 = IL RTK	
6 = IARC 1	13 = TSCA 5e	21 = LA RTK	
7 = IARC 2A	14 = TSCA 6	22 = MI 293	

Code key: CARC = Carcinogen; SUS = Suspected Carcinogen

OTHER INFORMATION

OSHA Precautionary Label Text:

CONTAINS XYLENE.

DANGER!

HARMFUL OR FATAL IF SWALLOWED.
FLAMMABLE.
VAPOUR HARMFUL.
MAY CAUSE SKIN IRRITATION ON PROLONGED,
REPEATED CONTACT.

KEEP AWAY FROM HEAT, SPARKS, AND FLAME.
KEEP CONTAINER CLOSED.
USE WITH ADEQUATE VENTILATION.
AVOID BREATHING VAPOUR OR MIST.
AVOID PROLONGED, REPEATED SKIN CONTACT.

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OTHER INFORMATION CONTINUED

FIRST AID: IF SWALLOWED, CALL A DOCTOR IMMEDIATELY. ONLY INDUCE VOMITING AT THE INSTRUCTION OF A DOCTOR. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. IF INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION, PREFERABLY MOUTH-TO-MOUTH. CALL A DOCTOR. IN CASE OF CONTACT, IMMEDIATELY WASH SKIN WITH SOAP AND PLENTY OF WATER. REMOVE CONTAMINATED CLOTHING. CALL A DOCTOR IF SYMPTOMS OCCUR. WASH CLOTHING BEFORE REUSE.

FOR INDUSTRIAL USE ONLY.
NOT INTENDED OR SUITABLE FOR USE IN OR AROUND A HOUSEHOLD OR DWELLING.

ATTENTION!

EMPTY CONTAINERS MAY CONTAIN PRODUCT RESIDUE INCLUDING FLAMMABLE OR EXPLOSIVE VAPOURS. DO NOT CUT, PUNCTURE OR WELD ON OR NEAR CONTAINER. ALL LABEL WARNINGS AND PRECAUTIONS MUST BE OBSERVED UNTIL THE CONTAINER HAS BEEN THOROUGHLY CLEANED OR DESTROYED.

REFER TO PRODUCT MATERIAL SAFETY DATA SHEETS OR FURTHER SAFETY AND HEALTH INFORMATION.

MPL-197 (10-92)

USE: SOLVENT

INGREDIENT	PERCENT	CAS NUMBER
BENZENE	0.50	71-43-2
TOLUENE	45.00	108-88-3
XYLENE	25.00	1330-20-7
LIGHT ALIPHATIC PETROLEUM SOLVENT	30.00	64742-89-8

Manufacturers Note:

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