


1. Product and Company Identification

Name of the product	Thinner MP-104
Identifier of the product	Thinner MP-104
Uses recommended and restrictions	Thinner for Pad Printing Ink
Data of the manufacturer	Sigma Inks (US) 12800 Brookprinter place, Poway, CA 92064 USA Telephone: (888) 424-9300 Website: www.sigmainks.com Contact to the distributor: www.printexusa.com
Number of emergency	Chemtrec (And.Or.): (800) 424-9300 Chemtrec (Out of And.Or.): (703) 527-3887

2. Hazard Identification

Classification of the substance or mix	
- Physical Hazards	Category 3, flammable liquid
- Health Hazards	No relevant data available
Label Elements	
- Identification of the substance or mix	Thinner MP-104
- Pictogram of caution	
- Word of warning	Danger
- Code of identification H	H226 Flammable Liquid and vapor. H315 Causes skin irritation. H336 May Causes drowsiness o Dizziness H412 Harmful to aquatic life whit long lasting effects
- Code of identification P	P210: Keep moved away of sources of heat, sparks, open flame or hot surfaces. Not smoking. P233: Keep the container hermetic enclosed. P240: Ground/Bond container and receiving equipment. P241: Use an electrical material, of ventilation or of illumination. P242: Use only tools that do not produce sparks. P243: Take precautionary measured of caution against electrostatic downloads. P280: Carry gloves/glasses/chewed of protection. P303 + P361+ P353: IN CASE OF CONTACT WITH THE SKIN (or the peel), remove immediately the pieces contaminated. Clear the skin with water.. P305 + P351 + P338: IN CAS OF CONTACT WITH THE EYES clear carefully with water during several minutes. Remove the lens of contact, if it carries and results easy. Keep Clearing. P370 + P378: In case of fire use CO ₂ , sand, dust extinguisher to turn off it. Not using water. P403 + P235: Store in a much ventilated place. Keep in a cool place. P501: Delete the contained/container in a plant of elimination of waste approved.

3. Composition/information on Ingredients

Chemical identity of the substance	Common or synonymous name	CAS Number	Impurities and additives	Percentage
Ethyl 3-etoxypropionato	Propionic acid, 3-ethoxy-, ethyl ester	763-69-9	-	25 – 50 %
1-Methoxy-2-propanol		107-98-9	-	25 – 50 %
1,2,4,-Trimethylbenzene		95-63-6		5-15%
Cyclohexanone		108—94-1	-	5-10%
Ethylene Glycol monopropyl ether		2807-30-9		1-7%

4. First-aid Measures

In case of contact with the skin	If skin irritation persist, call a physician If on skin, rinse well with water If on clothed, remove clothes.
In case of contact with the eyes	Immediately wash affected eyes for at least 15 minutes under running water with eyelids held open, If the ocular irritation persists consult to a specialist.
In case of ingestion	Do not induce vomiting. Keep person warm and at rest. If the symptoms persist consult to a doctor.
Symptoms and important effects treble and chronic	There is not information notable available.
Indications pay attention medical immediate and special treatment	There is not information notable available.

5. Fire-Fighting Measures

Means of appropriate extinction	Dust extinguisher Carbon dioxide (CO ₂) Sand
Means of unsuitable extinction	High volume water jet.
Specific dangers of the substance	The steams can travel to a source of ignition and return, can occur explosive mixes to equal or upper temperatures ready of ignition.
Special measures for the groups of fight of fires	If necessary, use team of autonomous breath of pressure-demand (approved by the corresponding authorities) and team of complete protection to avoid the contact with the skin and eyes.

6. Accidental release Measures

Personal precautions, protective equipment and Emergency procedures:

Use team of individual protection.
Ensure an appropriate ventilation.
Withdraw all the sources of ignition.
Evacuate the personnel to safe zones.
Have care with the steams that accumulate forming like this ex concentrations explosives.

Environmental precautions

It avoids that the product penetrate in the sewerage.
Prevent new leakages or spill if it can do without risks.
If the product contaminated rivers, lakes or sewerages, inform to the respective authorities.

Methods and materials for the containment and cleaning of spill or escapes

Contain of the spill and collect it with material agglutinated of liquids (e.g. sand, earth of diatomeas, agglutinated of acids, agglutinated universal, saw dust) and deposit it in a container for his elimination in accordance with the local and national legislation (see section 13).
No wash with water or agents of aqueous cleaning..

7. Handling and storage

Advice on safe handling

Prevent formation to aerosol.
Not smoking, not eating neither drink during the work.
Avoid the accumulation of loads electrostatics.
Have of the sufficient renewal of the air and/or of extraction in the places of work.

Conditions for the safe storage and incompatibilities

Conserve the container hermetic closed in a dry and much ventilated place. The containers that open have to go back to close carefully and keep in vertical position to avoid losses.
The electrical installations and the materials of work have to be according to the norms of security.
Protect of the heat.
Protect against electrostatic charge.

8. Exposure controls/ Personal protection

Parameters of control

Component	No. CAS	Value	Parameter of control	Base
1-methoxy-2-propanol	107-98-2	TWA	20 ppm	Value limit (TLV) of the ACGIH, USES
		STEL	100 ppm	Value limit (TLV) of the ACGIH, USES
		TWA	50 ppm 200 mg/m ³	Limits of occupational exhibition (OSHA), USA – table Z-1, limits for the contaminants of the air
		TWA	25 ppm 100 mg/m ³	Limits of exhibition recommended of NIOSH, EE. UU.

		PEL	25 ppm 100 mg/m ³	Limits of exhibition of contaminants chemical allowed in California (title 8, articulate 107)
2-metoxi-1-acetate of methyl ethyl	108-65-6	TWA	50 ppm	US WEEL

Appropriate technical controls

Measures of individual protection

- **Respiratory protection**
I case of brief exposure or low pollution use respiratory filter device or longer exposure, use respiratory protective device that is independent of circular air.
- **Protection of the hands**
Protective gloves
- **Protection of the eyes**
Tightly sealed goggles.
- **Corporal protection**
Use waterproof clothes. Choose a protection for the body according to the quantity and the concentration of the substance in the place of work.

9. Physical and chemical properties

Physical state and appearance	Liquid
Color	See specification of the product.
Odor	Characteristic
Odor Threshold	Value no determinate
Potential of hydrogenate, pH	Value no determinate
Melting-point / freezing point	Value no determinate
Initial point and interval of ebullition	146 °C (295 °F)
Flashpoint	45°C (113 °F)
Evaporation Rate	Value no determinate
flammability	It does not apply.
You limit upper/inferior of inflammable or explosive	1.1 % Vol. Inferior 9.8 % Vol. Upper
Vapor Pressure	5 hPa (4 mmHg) @ 20°C (68 °F)
Vapor Density	Value no determinate
Relative density	0.90
Density	0.90 g/cm ³ @ 20.0 °C
Solubility	No miscible. Difficult to mix.
Partition Coefficient	Without available data

Auto-ignition Temperature	N/A
Thermal decomposition	Value no determinate
Viscosity	Value no determinate
Molecular weight	Value no determinate
VOC	100 %
Other data	NO additional information.

10. Stability and Reactivity

Reactivity	It does not know dangerous reactions under normal instructions for use.
Chemical stability	Stable in normal conditions.
Possibility of dangerous reactions	Without dangers to mention especially.
Conditions that have to avoid	Heat, flames, sparks and other sources of ignition.
Incompatible materials	Without available data.
Products of dangerous decomposition	Without available data.

11. Toxicological Information

Information on the likely roads of entry

Symptoms related with the physical characteristics, chemical and toxicological Information not available.

Immediate effects, late and chronic (by exhibition to short and long term) Information not available.

Numerical measures of toxicity

- **Acute Oral toxicity** **763-69-9** Ethyl 3-etoxipropionato:
LD50 – (rat) – 5000 mg/kg
- **Acute Dermal toxicity** **763-69-9** Ethyl 3-etoxipropionato:
LD50 – (rabbit) – 4080 mg/kg
- **Acute Inhalation toxicity** **763-69-9** Ethyl 3-etoxipropionato:
LC50/ 4 h – (rat) – > 998 mg/L
LC50/ 96 h – (trout) – 67.26 mg/L

Interactive effects

Information not available.

Another information	Information not available.
Corrosion/cutaneous irritation:	Without effect of irritation.
Grave ocular injuries/ocular irritation	Without effect of irritation.
Respiratory or cutaneous sensitization	Information not available.
Mutagenic In germinal cells	Information No available.
Carcinogenic	Group 3 – No classifiable regarding his cancerogenic to humans. <i>IARC (International agency for the Investigation of the Cancer).</i>
Toxicity for the reproduction	Information not available.
Systematic toxicity specifies – only exhibition	Information not available.
Systematic toxicity specifies – exhibitions repeated	Information not available.
Danger by aspiration	Information not available.

12. Ecological Information

Toxicity	
Persistence and degradability	There is not available notable information.
Potential of bioaccumulation	There is not available notable information.
Mobility of the floor	There is not available notable information.
Other adverse effects	There is not available notable information.

13. Disposal Considerations

Description of the waste	Information no available.
Information on manipulation without danger	Review section 7.
Methods of elimination	Dispose in accordance with all the local regulations, state and federal pertinent.
Elimination of the containers contaminated	The dispose has to be in accordance with all the local regulations, state and federal pertinent.

14. Transport Information

No. UN	1263
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Sigma Ink Inc.
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Poway Ca, 92064

Safety Data Sheet

Official definition of transport of the UN	Material Relative to Printing Ink
Class	3
Group of container/packaging	III
Environmental risks	No applicable.
Special cautions for the user	Caution: Flammables Liquid .
Transport in bulk	No applicable .

15. Regulatory information

Disposals specify

SARA 355 (substances extremely dangerous)

None of the ingredients are listed

SARA 313

None of the ingredients are listed

TSCA (Law of Control of Toxic Substances)

Proposition 65.

Chemists that knows that they cause cancer

None of the ingredients are listed

Chemists that knows that they cause reproductive toxicity in women

None of the ingredients are listed.

Chemists that knows that cause reproductive toxicity in humans

None of the ingredients are Listed.

Chemists that knows that causing developing toxicity

None of the ingredients are listed

Categories cancerogenic

EPA (Agency of environmental Protection)

Any of the ingredients this enlisted.

TLV (Value Limit of Threshold Established by ACGIH)

NIOSH-Ca (National institute for the Health and Labor Security)

Any of the ingredients this enlisted.

16. Another information

Additional information

The information and recommendations in this safety sheet with, to our best know and understand, precise to the date of his expedition. At all of the here included



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Safety Data Sheet

will have to be considered to create guarantee, expresses or implicit and will not establish contractual relation legally validates. It is responsibility of the user determine the applicability of this information and the suitability of the material or product for any purpose in particular.