

**Producer****SIGMA INK**

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Solana Beach, CA 92075  
Ph. (888) 223-5137

**Responsible for distribution****PRINTEX**

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Poway, CA 92064  
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**Date: October 30, 2012****1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING**

Identification of the product:

Liquid.

Trade name:

PP 102 THINNER

Type of product:

Solvent.

Use:

Industrial.

Producer/Manufacturer:

See address above.

**For Hazardous Materials [or Dangerous Goods] Incident  
Spill, Leak, Fire, Exposure, or Accident**

**Call CHEMTREC Day or Night**

**Within USA and Canada: 1-800-424-9300**

**Outside USA and Canada: +1 703-527-3887 (collect calls accepted)**

**2. COMPOSITION / INFORMATION ON INGREDIENTS**

This product is considered to be hazardous and contains hazardous components.

Substance name	Value(s)	CAS No / EC No / EC Index	Symbol(s)	R-Phrase(s)
Cyclohexanone:	14 to 24 %	108-94-1 / 203-631-1 / 606-010-00-7	Xn	10-20
Benzene:	< 0.02 %	71-43-2 / 200-753-7 / 601-020-00-8	F T	45-11-48/23/24/25
Cumene:	<= 2 %	98-82-8 / 202-704-5 / 601-024-00	-X Xn N	10-37-51/53-65
Xylene:	< 3 %	1330-20-7 / 215-535-7 / 601-022-00-9	Xn	10-20/21-38
Mesitylene:	< 3 %	108-67-8 / 203-604-4 / 601-025-00-5	Xi N	10-37-51/53
Isopropyl Glycolacetate:	20 to 30 %	19234-20-9 / ----- / -----		
1,2,4-trimethylbenzene:	5 to 10 %	95-63-6 / 202-436-9 / 601-043-00-3	Xn N Xi	10-20-36/37/38
Ethyl-3-ethoxypropionate:	20 to 30 %	763-69-9 / 212-112-9 / -----		52/53
VOC(w%): 100				

**3. HAZARDS IDENTIFICATION**

Main hazards:

Harmful by inhalation.

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Flammable.

**4. FIRST AID MEASURES**

- Inhalation:

If not breathing, give artificial respiration.

Remove victim to fresh air.

- Skin contact:

Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.

- Eye contact:

Seek medical advice.

In case of eye contact, immediately rinse with clean water for 10-15 minutes.

- Ingestion:

If swallowed seek medical advice immediately and show this container or label.

**DO NOT INDUCE VOMITING.**

Depending on condition of the victim:

Obtain medical attention.

## 5. FIRE-FIGHTING MEASURES

Extinguishing media:	Dry chemical. Carbon dioxide. Alcohol resistant foam.
- Not to be used:	Water.
Special exposure hazards:	Heavier than air, vapors may travel long distances along ground, ignite and flash back to source. When heated to decomposition, emits dangerous fumes.
Protection against fire:	Wear self-contained breathing apparatus, rubber boots and thick rubber gloves.

## 6. ACCIDENTAL RELEASE MEASURES

Personal precautions:	Wear suitable protective clothing and gloves.
Environmental precautions:	Prevent entry to sewers and public waters.
After spillage and/or leakage: collect it.	Clean up any spills as soon as possible, using a non-flammable, absorbent material to collect it.

## 7. HANDLING AND STORAGE

General:	Avoid all unnecessary exposure. Store according to PGS 15.
Precautions in handling and storage:	Both local exhaust and good general room ventilation must be provided not only to control exposure but also to prevent formation of flammable mixtures. Take precautionary measures against static discharges. Use only non-sparking tools.
Storage:	Close cover tightly after use. Keep away from food, drink and animal feeding stuffs.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

- Respiratory protection:	In case of insufficient ventilation, wear suitable respiratory equipment.
- Hand protection:	Nitrilrubber Gloves.
- Skin protection:	Wear suitable protective clothing.
- Eye protection:	Eye protection, including both chemical splash goggles and face shield, must be worn when possibility exists for eye contact due to spraying liquid or airborne particles.

### Occupational Exposure Limits:

Ethyl-3-ethoxypropionate: MAC [ppm]: 50  
Cyclohexanone: TLV-TWA [ppm]: 25  
Cyclohexanone: TLV-STEL [ppm]: 50  
Cyclohexanone: MAC [mg/m3]: 50 H; 15 min  
Cyclohexanone: MAC [ppm]: 12.5 H; 15 min  
1,2,4-trimethylbenzene: MAC [mg/m3]: 100 MAC TGG-15 min: 200  
1,2,4-trimethylbenzene: MAC [ppm]: 20 MAC TGG-15 min: 40  
Xylene: TLV-TWA [mg/m3]: 435  
Xylene: MAC [mg/m3]: 210 H  
Xylene: MAC [ppm]: 50 H  
Mesitylene: TLV-TWA [mg/m3]: 125  
Mesitylene: TLV-TWA [ppm]: 25  
Mesitylene: MAC [mg/m3]: 100 MAC TGG-15 min: 200  
Mesitylene: MAC [ppm]: 20 MAC TGG-15 min: 40  
Cumene: TLV-TWA [mg/m3]: 246  
Cumene: TLV-TWA [ppm]: 50  
Cumene: MAC [mg/m3]: 245  
Cumene: MAC [mg/m3]: 100  
Cyclohexanene: MAC-TWA:[mg/m3]:50

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Liquid.
Odor:	Characteristic.
Initial boiling point [°C]:	156
Final boiling point [°C]:	180
Density:	0.9
Flash point [°C]:	44
Auto-ignition temperature [°C]:	420
Explosion limits - lower [%]:	0.7
Explosion limits - upper [%]:	9.4
Log P octanol / water at 20°C:	4

## 10. STABILITY AND REACTIVITY

Hazardous decomposition products:	On exposure to high temperature, may decompose, releasing toxic/flammable vapors.
Materials to avoid:	Strong acids. Strong alkalis. Strong oxidizers.

## 11. TOXICOLOGICAL INFORMATION

Rat oral LD50 [mg/kg]: >2000

Rabbit dermal LD50 [mg/kg]: >2000

Rat inhalation LC50 [mg/l/4h]: >5

### On ingredients:

Ethyl-3-ethoxypropionate: Rat oral LD50 [mg/kg]: 4300

Ethyl-3-ethoxypropionate: Rabbit dermal LD50 [mg/kg]: > 20

Ethyl-3-ethoxypropionate: Rat inhalation LC50 [mg/l/4h]: > 1000

Ethyl-3-ethoxypropionate: Sensitization: No known effects from this product.

Ethyl-3-ethoxypropionate: Acute effects general: Irritation to eyes.

Ethyl-3-ethoxypropionate: Acute effects at high concentrations: Dizziness, drowsiness, confusion, headache, feeling of drunkenness and conscience impairment,

Ethyl-3-ethoxypropionate: Chronic effects: Repeated or prolonged skin contact may cause dermatitis and defatting.

Cyclohexanone: - Dermal: Absorbed through the skin.

Cyclohexanone: Rat oral LD50 [mg/kg]: 1620

Cyclohexanone: Rabbit dermal LD50 [mg/kg]: 948

Cyclohexanone: Rat inhalation LC50 [mg/l/4h]: 11

Cyclohexanone: Acute effects general: Irritation to eyes, skin and respiratory tract.

Cyclohexanone: Chronic effects: There are potential chronic health effects to consider.

Cyclohexanone: symptoms on intake of large quantities.: Dizziness, giddiness, headache, vomiting, heart rhythm disorder, distress of the central nervous system and consciousness disorder.

1,2,4-trimethylbenzene: Acute effects general: Nausea, vomiting, abdominal problems, irritation of the respiratory tract, risk of respiration pneumonia, risk of lung edema, irritation of the eye fabric.

1,2,4-trimethylbenzene: Acute effects at high concentrations: Dizziness, giddiness, headache, vomiting, heart rhythm disorder, distress of the central nervous system and consciousness disorder.

1,2,4-trimethylbenzene: Chronic effects: Longterm or repeated exposure may cause kidney and liver damage or failure and change of blood composition

Xylene: - Dermal: Absorbed through the skin.

Xylene: Rat oral LD50 [mg/kg]: > 2000

Xylene: Rabbit dermal LD50 [mg/kg]: > 2000

Xylene: Rat inhalation LC50 [mg/l/4h]: > 5

Xylene: Mutagenicity: No effects on laboratory animals.

Xylene: Reproductive toxicity: Possible risk of harm to the unborn child.

Xylene: Acute effects general: Irritation to eyes, skin and respiratory tract.

Xylene: Acute effects at high concentrations: Dizziness, drowsiness, confusion, headache, feeling of drunkenness and conscience impairment.

Xylene: Chronic effects: Longterm or repeated exposure can result in: redness, dryness, irritation, rash and inflammation of the skin and damage of kidney and liver.

Xylene: Symptoms on intake of large quantities.: Aspiration of this material may cause chemical pneumonia.  
 Mesitylene: Acute effects general: Symptoms of exposure to vapors include drowsiness, weakness, headache, dizziness, nausea, vomiting, dimming of vision, abdominal pain, irritation of mucous membranes of nose, eyes and abdomen.  
 Mesitylene: Chronic effects: Longterm or repeated exposure can result in: redness, dryness, irritation, rash and inflammation of the skin and damage of kidney and liver.  
 Cumene: - Dermal: Absorbed through the skin.  
 Cumene: Acute effects general: Irritation to eyes, skin and respiratory tract.  
 Cumene: Acute effects at high concentrations: Symptoms of exposure to vapors include drowsiness, weakness, headache, dizziness, nausea, vomiting, dimming of vision, abdominal pain, irritation of mucous membranes of nose, eyes and abdomen.

## 12. ECOLOGICAL INFORMATION

ABM(The Netherlands): {8} Harmful to aquatic organisms.  
 Contains substances dangerous to the aquatic environment.

Cleansing effort A	
Biodegradation [%]:	78
LC50-96 Hour - fish [mg/l]:	18
48 Hour-EC50 - Daphnia magna [mg/l]:	21
IC50 72h Algae [mg/l]:	No data available.
COD(gO2/g):	2.6g O2/g
BOD 5 (gO2/g):	1.2
WGK class (Germany):	1

### On ingredients:

Ethyl-3-ethoxypropionate: Surface water polluting.: Weakly.  
 Ethyl-3-ethoxypropionate: Risk of drinking water pollution (ground water):. Yes.  
 Ethyl-3-ethoxypropionate: LC50-96 Hour - fish [mg/l]: 65  
 Ethyl-3-ethoxypropionate: 48 H-LC50 - Daphnia magna [mg/l]: > 480  
 Ethyl-3-ethoxypropionate: IC50 72h Algae [mg/l]: > 115  
 Ethyl-3-ethoxypropionate: WGK class (Germany): 1  
 Cyclohexanone: Log P octanol / water at 20°C: .81  
 Cyclohexanone: Surface water polluting.: Weakly.  
 Cyclohexanone: Biodegradation [%]: 87  
 Cyclohexanone: LC50-96 Hour - fish [mg/l]: > 500  
 Cyclohexanone: 48 H-LC50 - Daphnia magna [mg/l]: > 400  
 Cyclohexanone: IC50 72h Algae [mg/l]: 32.9 mg/l.  
 Cyclohexanone: ThOD (gO2/g): 2.605  
 Cyclohexanone: BOD 5 (gO2/g): 1.232  
 Cyclohexanone: WGK class (Germany): 1  
 1,2,4-trimethylbenzene.: Danger of accumulation in the food chain.  
 1,2,4-trimethylbenzene.: Toxic to aquatic organisms.  
 Xylene: Log P octanol / water at 20°C: 3.1  
 Xylene: LC50-96 Hour - fish [mg/l]: > 1  
 Xylene: 48 H-LC50 - Daphnia magna [mg/l]: > 1  
 Xylene: IC50 72h Algae [mg/l]: > 10  
 Xylene.: Toxic to aquatic life.  
 Xylene: WGK class (Germany): 2  
 Mesitylene.: Toxic to aquatic organisms.  
 Mesitylene.: Danger of accumulation in the food chain.  
 Cumene.: Toxic to aquatic organisms.

## 13. DISPOSAL CONSIDERATIONS

Disposal:	Dispose in a safe manner in accordance with local/national regulations.
Industrial waste number:	Eural:200127.

## 14. TRANSPORT INFORMATION

Hazard Label(s)	
Shipping name:	UN 1210 PRINTING INK / PRINTING INK RELATED MATERIAL, 3, III

- UN No.: 1210  
- H.I. nr.: 30  
- ADR/RID: Class: 3  
Group: III  
- IMO-IMDG: Packaging group: III  
Class 3  
- ICAO/IATA: 1210

## 15. REGULATORY INFORMATION

Symbol(s): Harmful.  
R Phrase(s): R10: Flammable.  
R20: Harmful by inhalation.  
R52/53: Harmful to aquatic organisms may cause long-term adverse effects in the aquatic environment.  
S Phrase(s): S3: Keep in a cool place.  
S16: Keep away from sources of ignition - No smoking.  
S35: This material and its container must be disposed of in a safe way.  
S51: Use only in well-ventilated areas.  
S57: Use appropriate container to avoid environmental contamination.  
S59: Refer to manufacturer/supplier for information on recovery/recycling.  
S61: Avoid release to the environment. Refer to special instructions/Safety data sheets.  
P Phrase(s): P201-For professional use only.  
Labeling: Contains: Cyclohexanone

## 16. OTHER INFORMATION

Text of R-Phrases in § 2:

R10: Flammable.  
R11: Highly flammable.  
R20: Harmful by inhalation.  
R20/21: Harmful by inhalation and in contact with skin.  
R36/37/38: Irritating to eyes, respiratory system and skin.  
R37: Irritating to respiratory system.  
R38: Irritating to skin.  
R45: May cause cancer.  
R48/23/24/25: Toxic: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.  
R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
R52/53: Harmful to aquatic organisms may cause long-term adverse effects in the aquatic environment.  
R65: Harmful: may cause lung damage if swallowed.

The contents and format of this SDS are in accordance with EEC Commission Directive 2001/58/EC.

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