

Producer

SIGMA INK

674 Via de la Valle #100
Solana, Beach CA 92075
Ph. (888) 223-5137

Responsible for distribution

PRINTEX

12113 Kirkham Rd
Poway, CA 92064
(858) 513-2418

Date: December 4, 2012

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING

Identification of the product:

Trade name:

Type of product:

Use:

Producer/Manufacturer:

Liquid.

MP 101 RETARDER

Solvent.

Industrial.

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	Symbol(s)	R-Phrase(s)
Gamma-butyrolactone:	20 to 30 %	96-48-0 / 202-509-5	Xn	22-41
Ethyl-3-ethoxypropionate:	20 to 30 %	763-69-9 / 212-112-9		52/53
3,5,5-trimethylcyclohex-2-enone:	15 to 24 %	78-59-1 / 201-126-0	Xn	21/22-36/37-40
VOC(w%): 100				

3. HAZARDS IDENTIFICATION

Main hazards:

Irritating to respiratory system.
Limited evidence of a carcinogenic effect.
Harmful in contact with skin and if swallowed.
Risk of serious damage to eyes.

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.

- Ingestion:

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

Protection against fire:

When heated to decomposition, emits dangerous fumes.

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:

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:

Gamma-butyrolacton: MAC [ppm]: unknown

Ethyl-3-ethoxypropionate: MAC [ppm]: 50

3,5,5-trimethylcyclohex-2-enone: MAC [mg/m³]: 25

3,5,5-trimethylcyclohex-2-enone: MAC [ppm]: 5

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:

Liquid.

Color:

Clear.

Odor:

Characteristic.

Initial boiling point [°C]:

170

Final boiling point [°C]:

225

Density:

1.0

Vapor pressure [hPa]:

2

Flash point [°C]:

62

Auto-ignition temperature [°C]:

377

Explosion limits - lower [%]:

0.9

Explosion limits - upper [%]:

8.0

10. STABILITY AND REACTIVITY

Hazardous decomposition products:
Materials to avoid:

On exposure to high temperature, may decompose, releasing toxic/flammable vapors.
Strong acids.
Strong alkalis.
Strong oxidizers.

11. TOXICOLOGICAL INFORMATION

Rat oral LD50 [mg/kg]: >1500

Rabbit dermal LD50 [mg/kg]: >1500

Rat inhalation LC50 [mg/l/4h]: >10

On ingredients:

Gamma-butyrolacton: Rat oral LD50 [mg/kg]: 1580

Gamma-butyrolacton: Rat inhalation LC50 [mg/l/4h]: 5.1

Gamma-butyrolacton: Mutagenicity: No known effects from this product.

Gamma-butyrolacton: Reproductive toxicity: No effects on laboratory animals.

Gamma-butyrolacton: Acute effects general: Irritation to eyes, skin and respiratory tract.

Gamma-butyrolacton: Acute effects at high concentrations: Dizziness, drowsiness, confusion, headache, feeling of drunkenness and conscience impairment,

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 deflating.

3,5,5-trimethylcyclohex-2-enone: - Dermal: Absorbed through the skin.

3,5,5-trimethylcyclohex-2-enone: Rabbit oral LD50 [mg/kg]: 1500

3,5,5-trimethylcyclohex-2-enone: Rabbit dermal LD50 [mg/kg]: 1500

3,5,5-trimethylcyclohex-2-enone: Carcinogenicity: Cancer suspected agent.

3,5,5-trimethylcyclohex-2-enone: Acute effects general: Irritation to eyes, skin and respiratory tract.

3,5,5-trimethylcyclohex-2-enone: Acute effects at high concentrations: Dizziness, drowsiness, confusion, headache, feeling of drunkenness and conscience impairment,

3,5,5-trimethylcyclohex-2-enone: Chronic effects: Long term or repeated exposure can result in: redness, dryness, irritation, rash and inflammation of the skin and damage of kidney and liver.

12. ECOLOGICAL INFORMATION

ABM(The Netherlands):

{8} Harmful to aquatic organisms.

Contains substances dangerous to the aquatic environment.

Cleansing effort A

LC50-96 Hour - fish [mg/l]:

18-24

48 Hour-EC50 - Daphnia magna [mg/l]:

112-150

IC50 72h Algae [mg/l]:

No data available.

COD-value [mg/l]:

No data available.

BOD5-value [mg/l]:

No data available.

On ingredients:

Gamma-butyrolacton: Biodegradation [%]: 62 to 90

Gamma-butyrolacton: 48 H-LC50 - Daphnia magna [mg/l]: > 500

Gamma-butyrolacton: L.idus LC50 (mg/l): > 220

Gamma-butyrolacton: IC50 72h Algae [mg/l]: 360

Gamma-butyrolacton: WGK class (Germany): 1

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

3,5,5-trimethylcyclohex-2-enone: Surface water polluting.: Yes.
3,5,5-trimethylcyclohex-2-enone: Risk of drinking water pollution (ground water):. Yes.
3,5,5-trimethylcyclohex-2-enone: LC50-96 Hour - fish [mg/l]: 185
3,5,5-trimethylcyclohex-2-enone: WGK class (Germany): 2

13. DISPOSAL CONSIDERATIONS

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

14. TRANSPORT INFORMATION

General information: "Not dangerous" according to directive 2001/60/EC.

15. REGULATORY INFORMATION

Symbol(s): Harmful.
R Phrase(s): R21/22: Harmful in contact with skin and if swallowed.
R37: Irritating to respiratory system.
R40: Limited evidence of a carcinogenic effect.
R41: Risk of serious damage to eyes.
S Phrase(s): S24: Avoid contact with skin.
S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S35: This material and its container must be disposed of in a safe way.
S36/37/39: Wear suitable protective clothing, gloves and eye/face protection.
S51: Use only in well-ventilated areas.
S59: Refer to manufacturer/supplier for information on recovery/recycling.
P Phrase(s): P201-For professional use only.
Labeling: Contains: Butyrolactone.

16. OTHER INFORMATION

Text of R-Phrases in § 2:
R21/22: Harmful in contact with skin and if swallowed.
R22: Harmful if swallowed.
R36/37: Irritating to eyes and respiratory system.
R40: Limited evidence of a carcinogenic effect.
R41: Risk of serious damage to eyes.
R52/53: Harmful to aquatic organisms; may cause long-term adverse effects in the aquatic environment.

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

DISCLAIMER OF LIABILITY The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling,

storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable.

End of document