



Material Safety Data Sheet MP-202 Adhesion Promoter

Date: April 4, 2012

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

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



Trade name:

MP 202 ADHESION PROMOTER

Type of product:

Ink additive

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 /	Symbol(s)	R-Phrase(s)
Cyclohexanone:	5 to 15 %	108-94-1 / 203-631-1	Xn	10-20
Ethyl-3-ethoxypropionate:	45 to 55 %	763-69-9 / 212-112-9		
VOC(w%): 60				

3. HAZARDS IDENTIFICATION

Main hazards:

Flammable.

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

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

General precautions:	Eliminate every possible source of ignition.
Personal precautions:	Wear suitable protective clothing and gloves.
Environmental precautions:	Prevent entry to sewers and public waters.
After spillage and/or leakage:	Dike for recovery or absorb with appropriate (non-flammable) material.

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

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Viscous liquid.
Colour:	Transparent- White.
Odour:	Characteristic.
Initial boiling point [°C]:	156
Final boiling point [°C]:	165
Density:	1.0
Vapour pressure [hPa]:	4.5
Viscosity:	>60S 6mm ISO-cup
Flash point [°C]:	45
Auto-ignition temperature [°C]:	377
Explosion limits - lower [%]:	1.0

10. STABILITY AND REACTIVITY

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

11. TOXICOLOGICAL INFORMATION

Rat oral LD50 [mg/kg]: >5000

Rabbit dermal LD50 [mg/kg]: >2000

Rat inhalation LC50 [mg/l/4h]: >20

On ingredients:

2-methoxy-1-methylethyl acetate: Rat oral LD50 [mg/kg]: 8532

2-methoxy-1-methylethyl acetate: Rabbit dermal LD50 [mg/kg]: > 5000

2-methoxy-1-methylethyl acetate: Mutagenicity: No effects on laboratory animals.

2-methoxy-1-methylethyl acetate: Acute effects general: Irritating to eyes.

2-methoxy-1-methylethyl acetate: Acute effects at high concentrations: This material or its emissions may cause damage to kidney and liver and/or aggravate existing disorders.

2-methoxy-1-methylethyl acetate: 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.

Hexamethylene-di-isocyanate: Sensitization: May cause sensitization by inhalation and skin contact.

Hexamethylene-di-isocyanate: Acute effects general: Irritating to eyes and respiratory system.

Hexamethylene-di-isocyanate: Acute effects at high concentrations: Dizziness, drowsiness, confusion, headache, feeling of drunkenness and conscience impairment,

Hexamethylene-di-isocyanate: Chronic effects: Long exposure to low concentrations may lead to dermatitis, bronchitis and conjunctivitis.

12. ECOLOGICAL INFORMATION

ABM(The Netherlands): {9} Harmful to aquatic organisms.

Cleaving effort B

LC50-96 Hour - fish [mg/l]: >100

48 Hour-EC50 - Daphnia magna [mg/l]: >100

IC50 72h Algae [mg/l]: >100

COD-value [mg/l]: No data available.

BOD5-value [mg/l]: No data available.

WGK class (Germany): 1

On ingredients:

2-methoxy-1-methylethyl acetate: Log P octanol / water at 20°C: .43

2-methoxy-1-methylethyl acetate: Surface water polluting.: Weakly.

2-methoxy-1-methylethyl acetate: Aquatic organisms.: Little harmful to fish and aquatic organisms.

2-methoxy-1-methylethyl acetate: Biodegradation [%]: 83

2-methoxy-1-methylethyl acetate: 96 Hour-LC50 - Minnow [mg/l]: 161

2-methoxy-1-methylethyl acetate: 48 H-CE50 - Daphnia magna [mg/l]: 408

2-methoxy-1-methylethyl acetate: Bioaccumulative potential: Not expected.

2-methoxy-1-methylethyl acetate: WGK class (Germany): 1

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

- H.I. nr.: 30

- ADR/RID: Class: 3

Transport in accordance with 2.2.3.1.5 ADR (not regulated for containers <450l.)

Group: III

- IMO-IMDG: Packaging group: III

Class 3

Transport in accordance with 2.3.2.5 IMDG (not regulated for containers <30 l.)

15. REGULATORY INFORMATION

Symbol(s):	None.
R Phrase(s):	R10: Flammable. 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.

16. OTHER INFORMATION

Text of R-Phrases in § 2 :	R10: Flammable. R20: Harmful by inhalation. R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
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The contents and format of this SDS are in accordance with EEC Commission Directive 2001/58/EC.

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