

1. Product and Company Identification

Name of the product	MP-205
Identifier of the product	MP-205
Uses recommended and restrictions	Hardener 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 USA.): (703) 527-3887

2. Hazard Identification

Classification of the substance or mix

- Physical Hazards
- Health Hazards

Category 2A ,Eye Irritation
Category 4, Acute Toxicity
Category 1, Skin sensitivity

Label elements:

- Identification of the substance or mix
- Pictogram of caution

Sigma MP-205



- Word of warning

Danger

- Code of identification H

H317 May causes allergic skin reaction
H332 Harmful if inhaled
H335 May cause respiratory irritation

- Code of identification P

P284: Wear respiratory protection.
P261: Avoid breathing dust /fumes/gas/mist/vapors/spray.
P271: Use only outdoors or well-ventilated area.
P280: Carry gloves/glasses/chewed of protection.
P272: Contaminated work clothing should not be allowed out of the work place.
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.
P342+P311: If experiencing respiratory symptoms: Call a poison center/Doctor
P304+340+P311: If inhaled. Remove the person to fresh air and keep comfortable for breathing. Call poison center /Doctor
P363: Wash contaminated clothing before reuse.
P303 + P352: IN CASE OF CONTACT WITH THE SKIN (or hair). Wash with plenty of water and soap.

P403 + P235+P233: Store in a ventilated place. Keep in a cool place. Keep container tightly closed.
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	number CAS	Impurities and additives	Percentage
1,6 Hexametileno Diisocianato homopolimero	Propanoic acid, 3-ethoxy-, ethyl ester	28182-81-2	-	70– 90 %
2-metoxi-1-acetate of methyl ethyl	2-Propanol, 1-metoxi-, acetate	108-65-6	-	15– 35 %
Clyclohexanone		108-94-1		5-10%

4. First-aid Measures

In case of contact with the skin

Wash the affected areas thoroughly with soap and water. Remove the contaminated cloth, get medical attention.

In case of contact with the eyes

Rinse the eyes for at least 15 minutes under running water with eyelids held open, Remove contact lenses is present. If the ocular irritation persists consult to a specialist.

In case of ingestion

Do not induce vomiting. Or give anything by mouth if the person is unconscious. If the symptoms persist consult to a doctor.

Symptoms and important effects acute and delayed.

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

Dry power
Carbon dioxide (CO₂)
Foam

Means of unsuitable extinction

High volume water Jet

Specific dangers of the substance

The vapors can travel to a source of ignition and return, can occur explosive mixes to equal or upper temperatures ready of ignition.

Special measures for fire-fighters

If necessary, the firefighters should be equipped with self-contained breathing apparatus.

6. Accidental release Measures

Personal precautions, protective equipment and Emergency procedures:

Use equipment 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

Precautions for safe handling

Avoid aerosol formation.
Do not breathe vapor Not smoking, not eating neither drink during the work.
Avoid contact with skin and eyes.
Personal protection see section 8.
Avoid the electrostatic changes.
Have of the sufficient fresh air and/or of extraction in the places of work.
Open the container with caution may be pressurized.

Conditions for the safe storage and incompatibilities

Conserve the container hermetic closed in a dry and very 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 of the electrostatic discharge.

8. Exposure controls/ Personal protection

Parameters of control

Component	No. CAS	Value	Parameter of control	Base
1,6 hexametileno de isocianato homopolimero	28182-81-2	TWA	0.0050 ppm	Value limit (TLV) of the ACGIH, USES
2-metoxi-1-acetate of methyl ethyl	108-65-6	TWA	100 ml/m3 50 ppm	US WEEL
Clyclohexanone	108-94-1	TWA	100 mg/m3 25 ppm	

Appropriate technical controls

Measures of individual protection

- Respiratory protection
- Protection of the hands
- Protection of the eyes
- Corporal protection

Have to follow the measures of caution for the handle of chemists.
Keep moved away of foods, drunk and food.
Wash the hands before the rests and before the end of the work.

It does not require .

Protective gloves

Tightly sealed goggles.

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	Viscous
Color	Transparent
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	43 °C (109 °F)
Evaporation rate	Value no determinate
flammability	It does not apply.
Explosion Limits	
Lower:	1.5 Vol %
Upper:	10.8 Vol %
Vapor Pressure @ 20°C	3.4 hPa
Relative vapor Density	>1(air=1)
Relative density	Value no determinate
Density	1.097 g/cm ³ @ 20 °C (68 °F)
Solubility	No miscible. Difficult to mix.
Partition Coefficient	Without available data
Auto-ignition Temperature	Product is not explosion hazard,
Thermal decomposition	Value no determinate
Viscosity	Value no determinate
Molecular weight	Value no determinate

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	Oxidizing agent, peroxides
Products of dangerous decomposition	No dangerous decomposition products known.

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

- Oral acute toxicity **108-65-6** 2-metoxo-1-acetate of methyl ethyl
LD50 – (rat) – 5000 mg/kg

- Acute toxicity dermic **28182-81-2** Aliphatic Polyisocyanate
>5,000 mg/kg
108-65-6 2-metoxo-1-acetate of methyl ethyl
Information not available.

- Acute toxicity inhalator **108-65-6** 2-metoxo-1-acetate of methyl ethyl
LC50/ 4 h – (rat) – 35.7 mg/L
LC50/ 96 h – (trout) – 129.92 mg/L
LC50/ 48 h – (daphnia) – 316.57 mg/L



Interactive effects	Information no 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	Irritating to respiratory system..
Mutagenic In germinal cells	- Genotoxicity in vitro Ames test. Species: Salmonella typhimurium. With and without metabolic activation. Result: Negative In vitro chromosomal aberration test. Species: Chinese hamster ovary (CHO). With and without metabolic activation. Result: Negative
Carcinogenic	OSHA No component of this product present in levels greater than or equal to 0.1% is identified as a carcinogen o potential carcinogen. NTP No component of this product present in levels greater than or equal to 0.1% is identified as a carcinogen o potential carcinogen.
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	ACUTE AQUATIC TOXICITY: Toxic for water organisms CHRONIC AQUATIC TOXICITY Toxic.
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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	An environmental hazard cannot be excluded in case of manipulation or disposal unprofessional. Toxic to aquatic life with lasting effect.

13. Disposal Considerations

Description of the waste	Information not available.
Information on manipulation without danger	Review section 7.
Methods of elimination	The disposal has to be in accordance with all the local regulations, state and federal pertinent.
Elimination of the containers contaminated	Empty the remaining content. Disposal those as product without use. Do not burn the empty drum.

14. Transport Information

No. UN	
DOT, ADR, AND, IMDG, IATA	Non-Regulated Material
UN proper shipping name DOT, ADR, AND, IMDG, IATA Transport hazard Class (es)	Non-Regulated Material
DOT, ADR, AND, IMDG, IATA Class	Non-Regulated Material
Packaging Group DOT, ADR, AND, IMDG, IATA	Non-Regulated Material
Environmental Hazard	Not applicable.
Special cautions for the user	Not applicable
Transport in bulk according to Annex II And the IBC code	Not applicable.

15. Regulatory information

Specific regulation/legislation on safety, health and environment for substance or mixture.

SARA 355 (substances extremely dangerous)



Sigma Ink Inc.
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Safety Data Sheet

None of the ingredients are listed

SARA 313

None of the ingredients are listed

TSCA (Law of Control of Toxic Substances)

108-65-2 2-methoxy-1-acetate of methyl ethyl

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.

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

Any of the ingredients this enlisted.

National Regulation

The product is subject to being classified according to the latest version of regulation on hazardous substances

State right to know

All ingredients are listed.

Chemical safety assessment:

A chemical safety assessment has not yet been do it.

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 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.



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Safety Data Sheet