Sigma Ink Inc.
12800 Brookprinter Place
Poway Ca, 92064

SAFETY DATA SHEET

1. Product and Company Identification

Name of the product	Thinner PP-103
Identifier of the product	Thinner PP-103
Uses recommended and restrictions	Thinner
Data of the manufacturer	Sigma Inks (USA) 12800 Brookprinter place, Poway, CA 92064 USA Telephone: (888) 424-9300 Website: www.sigmainks.com Contact to the distributor: www.printexusa.com
Number of emergencies	Chemtrec (And.Or.): (800) 424-9300 Chemtrec (Out of And.Or.): (703) 527-3887

2. Hazard Identification

Classification of the substance or mixture

Classification (GHS-US)

Flammable liquids Category 3
Skin corrosion/irritation Category 2
Serious eye damage/eye irritation Category 2A
Carcinogenicity Category 2
Specific target organ toxicity (single exposure) Category 3 - Narcotic effects
Specific target organ toxicity (single exposure) Category 3 - Respiratory irritation
Specific target organ toxicity (single exposure) Category 1
Specific target organ toxicity (repeated exposure) Category 1
Aspiration hazard Category 1

Label elements GHS-US labeling Hazard pictograms (GHS-US)

Identification of the substance or mix	Thinner PP-103
Pictogram	
Signal word	Danger
Hazard statements	Flammable liquid and vapor May be fatal if swallowed and enters airways Causes skin irritation Causes serious eye irritation May cause respiratory irritation May cause drowsiness or dizziness Suspected of causing cancer Causes damage to organs (lung) Causes damage to organs (nervous system) through prolonged or repeated exposure
Precautionary statements	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

Keep away from heat, hot surfaces, open flames, sparks. - No smoking.
Keep container tightly closed.
Ground/bond container and receiving equipment.
Use explosion-proof electrical, lighting, ventilating equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Do not breathe vapors, spray, and mist.
Wash hands, forearms, and face thoroughly after handling.
Do not eat, drink, or smoke when using this product.
Use only outdoors or in a well-ventilated area.
Wear impermeable protective gloves, eye protection, flame retardant protective clothing.
If swallowed: Immediately call doctor, poison center.
Do NOT induce vomiting.
If on skin: Wash with plenty of water.
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
If skin irritation occurs: Get medical advice/attention.
If inhaled: Remove person to fresh air and keep comfortable for breathing.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.
Specific treatment (see Section 4.1 of SDS or information on this label).
If exposed or concerned: Get medical advice/attention.
Get medical advice/attention if you feel unwell.
Take off contaminated clothing and wash before reuse.
In case of fire: Use Water spray, foam, carbon dioxide (CO2), dry chemical to extinguish.
Store in a well-ventilated place. Keep cool.
Store locked up.
Dispose of contents and container in accordance with all local, regional, national, and international regulations.

Hazards not otherwise classified

Other hazards not contributing to the classification

Product can accumulate electrostatic charges that may cause fire by electrical discharges.

3. Composition/information on Ingredients

Chemical identity of the substance	Common or synonymous name	CAS Number	Impurities and additives	Percentage
n-butyl acetate	Butyl ethanoate, butyl ester	123-86-4	-	55-75 %
Aromatic 100	Naphtha aromatic Type 1	64742-95-6	-	27-40 %
Xylene		1330-20-7	-	0.2-.7 %
Ethyl benzene		100-41-4	-	<=0.05 %
Cumene		90-82-8	-	,=0.02-0.07%

4. First-aid Measures

Description of first aid measures

First-aid measures general:	Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible). Suspected of causing cancer.
First-aid measures after inhalation:	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison center/doctor/physician if you feel unwell.
First-aid measures after skin contact:	Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention. Specific treatment (see ... on this label).
First-aid measures after eye contact:	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion:	Rinse mouth. Do NOT induce vomiting. Immediately call a poison center or doctor/physician.

Most important symptoms and effects, both acute and delayed

Symptoms/injuries:	Causes damage to organs.
Symptoms/injuries after inhalation:	Danger of serious damage to health by prolonged exposure through inhalation. Harmful if inhaled. May cause drowsiness or dizziness.
Symptoms/injuries after skin contact:	Causes skin irritation.
Symptoms/injuries after eye contact:	Causes serious eye irritation.
Symptoms/injuries after ingestion:	May be fatal if swallowed and enters airways

Indication of any immediate medical attention and special treatment needed

No additional information available

5. Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media:	Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media:	Do not use a high water Jet.

Special hazards arising from the chemical

Fire hazard:	Flammable liquid and vapor.
Explosion hazard:	May form flammable/explosive vapor-air mixture.

Advice for firefighters

Firefighting instructions:	Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.

Protection during firefighting:	Do not enter fire area without proper protective equipment, including respiratory protection.

6. Accidental release Measures

Personal precautions, protective equipment, and emergency procedures

Use personal protective equipment. Avoid breathing vapors, mist, or gas. Ensure adequate ventilation. Remove all sources of ignition. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Discharge into the environment must be avoided.

Methods and materials for containment and cleaning up

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulation.

7. Handling and storage

Precautions for safe handling

Additional hazards when processed:	Handle empty containers with care because residual vapors are flammable.
Precautions for safe handling:	Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. No bare lights. No smoking. Take precautionary measures against static discharge. Use only non-sparking tools. Use only outdoors or in a well-ventilated area. Avoid breathing dust/fume/gas/mist/vapors/spray. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.
Hygiene measures:	Wash ... thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Technical measures:	Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/…equipment.
Storage conditions:	Keep only in the original container in a cool, well ventilated place away from: Keep container tightly closed.
Incompatible products:	Strong bases. Strong acids.

Incompatible materials: Sources of ignition. Direct sunlight. Heat sources.

8. Exposure controls/ Personal protection

Parameters of control

Component	No. CAS	Value	Parameter of control	Base
n-butyl acetate	123-86-4	TWA	120 ppm	Value limit (TLV) of the ACGIH, USES
		STEL	200 ppm	Value limit (TLV) of the ACGIH, USES
		TWA	50 ppm 200 mg/m³	Limits of occupational exhibition (OSHA), USA – table Z-1, limits for the contaminants of the air
		TWA	25 ppm 100 mg/m³	Limits of exhibition recommended of NIOSH, EE. UU.
		PEL	25 ppm 100 mg/m³	Limits of exhibition of contaminants chemical allowed in California (title 8, articulate 107)
Xylene	1330-20-7	TWA STEL PEL	100 ppm 150 ppm 435 mg/m3	US WEEL ACGIH
Cumene	98-82-8	TWA	50 ppm	ACGIH
Ethylbenzene	100-41-4	TWA PEL	20 ppm 150 pp/m3	ACGIH OSHA

Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection

Impervious clothing, Flame retardant antistatic protective clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

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	153 °C (307 °F)
Flashpoint	Value no determinate
Evaporation Rate	Value no determinate
Inflammable	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	0.945-0.965
Density	0.9535 g/cm3 @ 20.0 °C
Solubility	No miscible. Difficult to mix.
Partition Coefficient	Without available data
Auto-ignition Temperature	377 °C (711 °F)
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 reaction under normal instructions for use

Chemical stability Stable in normal Conditions

Possibility of hazardous reactions
Under normal conditions of storage and use, hazardous polymerization will not occur.

Conditions to avoid
Direct sunlight. Extremely high or low temperatures. Open flame. Overheating. Heat. Sparks.

Incompatible materials
Strong acids. Strong bases. Strong oxidizing agents. Strong reducing agents.

Hazardous decomposition products
Hazardous decomposition products formed under fire conditions: carbon monoxide, carbon dioxide, toxic fumes.

11. Toxicological Information

Information on toxicological effects

Likely routes of exposure: Eye contact. Skin contact. Ingestion. Inhalation.

Acute toxicity: Not classified

n-butyl acetate
LD50 Oral - Rat - female - 10,760 mg/kg
(OECD Test Guideline 423)
Inhalation: No data available
LD50 Dermal - Rabbit - male and female - 14,112 mg/kg
(OECD Test Guideline 402)
No data available

Aromatic 100
LD50 oral rat 8400 mg/kg
LD50 dermal rabbit > 2000 mg/kg
LC50 inhalation rat (ppm) 3400 ppm/4h
ATE US (oral) 8400.000 mg/kg body weight
ATE US (gases) 3400.000 ppmV/4h

Cumene
LD50 oral rat 1400 mg/kg
LD50 dermal rat 10600 mg/kg
LC50 inhalation rat 39 mg/l/4h

Xylenes
LD50 oral rat 4300 mg/kg
LD50 dermal rabbit > 4200 mg/kg
LC50 inhalation rat 21.7 mg/l/4h

Ethylbenzene

LD50 oral rat 3500 mg/kg
LD50 dermal rabbit 15354 mg/kg
LC50 inhalation rat 17.2 mg/l/4h

Skin corrosion/irritation: Causes skin irritation.

Serious eye damage/irritation: Causes serious eye irritation.

Respiratory or skin sensitization: Not classified

Germ cell mutagenicity: Not classified

Carcinogenicity: Suspected of causing cancer.

Cumene
IARC group 2B - Possibly carcinogenic to humans

Xylenes
IARC group 3 - Not classifiable

Ethylbenzene
IARC group 2B - Possibly carcinogenic to humans

Reproductive toxicity: Not classified

Specific target organ toxicity (single exposure): May cause drowsiness or dizziness. May cause respiratory irritation. Causes damage to organs (lung).

Specific target organ toxicity (repeated exposure): Causes damage to organs (nervous system) through prolonged or repeated exposure.

Aspiration hazard: May be fatal if swallowed and enters airways.

Potential Adverse human health effects and symptoms: Based on available data, the classification criteria are not met. Harmful if inhaled.

12. Ecological Information

Toxicity	**123-86-4 n-butyl acetate** EC50 – (daphnia) – 785 mg/L EC50/ 96 h – (algae green – 75.95 mg/L **64742-95-6 Aromatic 100** EC50/ 96 h – (algae green) – 137.349 mg/L **1330-20-7 Xylene** EC50/ 96 h – (algae green) – 170.43 mg/L
Persistence and degradability	No Data available
Potential of bioaccumulation	No Data available

Mobility of the floor	No Data available
Other adverse effects	NO Data available

13. Disposal Considerations

Waste treatment methods

Waste disposal recommendations: Dispose in a safe manner in accordance with local/national regulations. Dispose of contents and container in accordance with all local, regional, national, and international regulations.

Additional information: Handle empty containers with care because residual vapors are flammable.

Ecology - waste materials: Avoid release to the environment. Hazardous waste due to toxicity.

14. Transport Information

No. UN	1263
Official definition of transport of the UN	Paint related material
Class	3
Group of container/packaging	III
Environmental risks	No applicable.
Special cautions for the user	Caution:
Transport to gravel	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)
123-86-4 n-butyl acetate
64742-95-6 Aromatic 100
1330-20-7 Xylene

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)
1330-20-7 Xylene

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 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.