

SECTION 1: Identification of the substance/mixture and of the company/undertaking**Product identifier**

Product name: UR 102 Thinner

Identifier of the product Sigma UR 102 Thinner

Relevant identified uses of the substance or mixture and uses advised against

Identified uses: Solvent

Uses advised against: None known.

Details of the supplier of the safety data sheet**Manufacturer / Supplier**

Sigma Inks (USA) 12800 Brookprinter Place, Poway, Ca 92064 USA

Telephone: (888) 242 9300

Visit our website at www.sigmainks.com

Contact to the distributor: www.printexusa.com

Emergency telephone number:

For emergency health, safety Chemtrec(and.or):800 424-9300

Chemtrec (outside US): (703) 527 3887 (Collect Calls Accepted)

SECTION 2: Hazards identification**Hazard Classification:****Physical Hazards**

Flammable liquids Category 3

Health Hazards

Specific Target Organ Toxicity -
Single Exposure Category 3



Sigma Ink Corp.
12800 Brookprinter Place
Poway, Ca 92064 USA

OSHA Specified Hazards: not applicable

Warning label items including precautionary statement:

Pictogram:



Signal Words: WARNING!

Hazard Statement(s): H226: Flammable liquid and vapor.
H336: May cause drowsiness or dizziness.

Precautionary Statement:

Prevention: P210: Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P233: Keep container tightly closed.
P240: Ground/bond container and receiving equipment.
P241: Use explosion-proof electrical/ventilating/lighting/equipment.
P242: Use only non-sparking tools.
P243: Take precautionary measures against static discharge.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P261: Avoid breathing dust/fume/gas/mist/vapors/spray.
P271: Use only outdoors or in a well-ventilated area.

Response: P370 + 378: In case of fire: Use water spray, carbon dioxide, dry chemical or foam for extinction.
P303+P361+P353: IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P311: Call a POISON CENTER or doctor/physician.

Storage: P403+P233: Store in a well-ventilated place. Keep container tightly closed.
P235: Keep cool.
P405: Store locked up.

Disposal: P501: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Hazard(s) not otherwise classified (HNOC):

Prolonged or repeated skin contact may cause drying, cracking, or irritation.

SECTION 3: Composition/information on ingredients

Substances / Mixtures

General information:

Chemical name	Concentration	Additional identification	Notes
butyl acetate	98%	CAS-No.: 123-86-4	#

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

This substance has workplace exposure limit(s).

SECTION 4: First aid measure

Description of first aid measures

Inhalation: Move to fresh air. Treat symptomatically. Get medical attention if symptoms persist.

Eye contact: Any material that contacts the eye should be washed out immediately with water. If easy to do, remove contact lenses. In case of irritation from airborne exposure, move to fresh air. Get medical attention if symptoms persist.

Skin contact: Remove contaminated clothing and shoes. Wash with soap and water. Get medical attention if symptoms occur. Wash contaminated clothing before reuse. Destroy or thoroughly clean contaminated shoes.

Ingestion: Seek medical advice.

Most important symptoms and effects, both acute and delayed: Narcotic effect.

Indication of any immediate medical attention and special treatment needed

Hazards: Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea.

Treatment: Treat symptomatically.

SECTION 5: Firefighting measures

General Fire Hazards: Flammable liquid and vapor. USE WATER WITH CAUTION. Material will float and may ignite on surface of water.

Extinguishing media

Suitable extinguishing media: Water spray. Dry chemical. Carbon Dioxide. Foam.

Unsuitable extinguishing media: None known.

Special hazards arising from the substance or mixture: Vapors may cause a flash fire or ignite explosively. Vapors may travel considerable distance to a source of ignition and flash back. Prevent buildup of vapors or gases to explosive concentrations.

Advice for firefighters

Special fire fighting procedures:

**SIGMA**

Sigma Ink Corp.
12800 Brookspointer Place
Poway, Ca 92064 USA

Water may be ineffective in fighting the fire. Use water spray to keep fire- exposed containers cool.

Special protective equipment for fire-fighters: Self-contained breathing apparatus and full protective clothing must be worn in case of fire.



Sigma Ink Corp.
12800 Brookprinter Place
Poway, Ca 92064 USA

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Wear appropriate personal protective equipment.

Environmental Precautions:	Avoid release to the environment.
Methods and material for containment and cleaning up:	Eliminate sources of ignition. Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Large Spillages: Use water spray to disperse vapors and dilute spill to a nonflammable mixture. Flush spill area with water spray. Prevent runoff from entering drains, sewers, or streams.
Notification Procedures:	In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

SECTION 7: Handling and storage:

Precautions for safe handling:	Avoid breathing high vapor concentrations. Avoid prolonged or repeated contact with skin. Use only with adequate ventilation. Wash thoroughly after handling.
Conditions for safe storage, including any incompatibilities:	Keep container tightly closed and in a well-ventilated place.
Specific end use(s):	Solvent

SECTION 8: Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Country specific exposure limits have not been established or are not applicable unless listed below.

Chemical name	type	Exposure Limit Values	Source
n-butyl acetate	TWA	150 ppm	US. ACGIH Threshold Limit Values (01 2010)
	STEL	200 ppm	US. ACGIH Threshold Limit Values (01 2010)
	PEL	150 ppm 710 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)

Exposure controls

Appropriate engineering controls:	Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.
--	---

Individual protection measures, such as personal protective equipment

General information:	No data available.
Eye/face protection:	Wear safety glasses with side shields (or goggles). Wear a full-face respirator, if needed.

Skin protection**Hand Protection:**

It is a good industrial hygiene practice to minimize skin contact. For operations where prolonged or repeated skin contact may occur, chemical-resistant gloves should be worn. Contact health and safety professional or manufacturer for specific information.

Other:

No data available.

Respiratory Protection:

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. In the United States of America, if respirators are used, a program should be instituted to assure compliance with OSHA Standard 63 FR 1152, January 8, 1998. Respirator type: Air-purifying respirator with an appropriate, government approved (where applicable), air-purifying filter, cartridge or canister. Contact health and safety professional or manufacturer for specific information.

Hygiene measures:

Observe good industrial hygiene practices.

Environmental Controls:

No data available.

SECTION 9: Physical and chemical properties
--

Information on basic physical and chemical properties**Appearance**

Physical state:	liquid
Form:	liquid
Color:	Colorless
Odor:	Sweet, ester
Odor Threshold:	Not determined.
pH:	No data available.
Melting Point	-74 °C
Boiling Point:	125 °C
Flash Point:	27 °C (Tag closed cup)
Evaporation Rate:	Not determined.
Flammability (solid, gas):	No data available.
Flammability Limit - Upper (%)-:	No data available.
Flammability Limit - Lower (%)-:	No data available.
Vapor pressure:	15 hPa (20 °C)
Vapor density (air=1):	4
Specific Gravity:	0.8812 (20 °C)
Solubility(ies)	
Solubility in Water:	5.3 g/l (20 °C)
Solubility (other):	No data available. Partition
coefficient (n-octanol/water):	No data available. Autoignition
Temperature:	No data available. Decomposition
Temperature:	(DSC) No exotherm to 400°C Dynamic
viscosity:	No data available.
Kinematic viscosity:	0.83 mm ² /s (20 °C)

Explosive properties: No data available.

Oxidizing properties: No data available.

Other information

Minimum ignition temperature: 407 °C (ASTM D2155)

SECTION 10: Stability and reactivity

Reactivity: None known.

Chemical Stability: Stable

Possibility of Hazardous Reactions: None known.

Conditions to Avoid: Heat, sparks, flames.

Incompatible Materials: Strong oxidizing agents.

Hazardous Decomposition Products: Carbon Dioxide. Carbon Monoxide.

SECTION 11: Toxicological information

Information on likely routes of exposure

Inhalation: May cause drowsiness or dizziness.

Ingestion: None known.

Skin contact: Prolonged or repeated skin contact may cause drying, cracking, or irritation.

Eye contact: None known.

Information on toxicological effects

Oral

Product: No data available.

Specified substance(s):
n-butyl acetate Oral LD-50: (Rat): 14,130 mg/kg

Dermal

Product: No data available.

Specified substance(s):
n-butyl acetate Dermal LD-50: (Rabbit): > 16ml/kg

Inhalation

Product: No data available.

Repeated dose toxicity

Product: No data available.

Skin Corrosion/Irritation

Product: No data available.

Specified substance(s):
n-butyl acetate (Rabbit, 24 h): none

Serious Eye Damage/Eye Irritation

Product: No data available.

Specified substance(s):
n-butyl acetate (Rabbit, 24 h): none

Respiratory or Skin Sensitization

Product: No data available.

Specified substance(s):
n-butyl acetate Skin Sensitization: (Guinea Pig): non-sensitizing

Carcinogenicity

Product: No data available.

Specified substance(s):
n-butyl acetate OSHA Not Listed. IARC Not Listed. NTP Not Listed.

Toxicity to reproduction

Product: No data available.

Developmental toxicity

Product: No data available.

Germ Cell Mutagenicity

In vitro
Product: No data available.

In vivo
Product: No data available.

Specific Target Organ Toxicity - Single Exposure

Product: No data available.

Specified substance(s):
n-butyl acetate Narcotic effect.

Specific Target Organ Toxicity - Repeated Exposure

Product: No data available.

Aspiration Hazard

Product: No data available.

Other effects: No data available.

SECTION 12: Ecological information

Ecotoxicity:**Acute hazards to the aquatic environment:****Fish**

Product: No data available.

Specified substance(s):

n-butyl acetate LC-50 (Fathead Minnow, 96 h): 18 mg/l

Aquatic Invertebrates

Product: No data available.

Specified substance(s):

n-butyl acetate LC-50 (Water Flea, 48 h): 44 mg/l

Chronic hazards to the aquatic environment:**Fish**

Product: No data available.

Aquatic Invertebrates

Product: No data available.

Toxicity to Aquatic Plants

Product: No data available.

Specified substance(s):

n-butyl acetate EC-50 (Alga, 72 h): 648 mg/l

Persistence and Degradability**Biodegradation**

Product: No data available.

Specified substance(s):

n-butyl acetate 83 % (28 d)

BOD/COD Ratio

Product: No data available.

Specified substance(s):

n-butyl acetate 72 %

Bioaccumulative Potential**Bioconcentration Factor (BCF)**

Product: No data available.

Partition Coefficient n-octanol / water (log Kow)

Product: No data available.

Mobility in Soil: No data available.

Other Adverse Effects: No data available.

SECTION 13: Disposal considerations**Waste treatment methods**

General information: No data available.

Disposal methods: Dispose of waste and residues in accordance with local authority requirements. Mix with compatible chemical which is less flammable and incinerate. Since emptied containers retain product residue, follow label warnings even after container is emptied. Residual vapors may explode on ignition; do not cut, drill, grind, or weld on or near this container.

SECTION 14: Transport information

Important Note: Shipping descriptions may vary based on mode of transport, quantities, package size, and/or origin and destination. Consult your company's Hazardous Materials/Dangerous Goods expert for information specific to your situation.

DOT

Reportable Quantity: 2,270 kg (butyl acetates)
Possible Shipping Description(s):

UN 1123 Butyl acetates 3 III

IMDG - International Maritime Dangerous Goods Code

Possible Shipping Description(s):

UN 1123 BUTYL ACETATES 3 III

IATA

Possible Shipping Description(s):

UN 1123 Butyl acetates 3 III

SECTION 15: Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture.:

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.
WHMIS (Canada) Status: controlled



WHMIS (Canada) Hazard Classification: B/2, D/2/B

SARA 311-312 Hazard Classification(s):

immediate (acute) health hazard
fire hazard

US EPCRA (SARA Title III) Section 313 - Toxic Chemical List

NONE

OSHA: hazardous

TSCA (US Toxic Substances Control Act): This product is listed on the TSCA inventory. Any impurities present in this product are exempt from listing.

DSL (Canadian Domestic Substances List) and CEPA (Canadian Environmental Protection Act): This product is listed on the DSL. Any impurities present in this product are exempt from listing.

AICS / NICNAS (Australian Inventory of Chemical Substances and National Industrial Chemicals Notification and Assessment Scheme): This product is listed on AICS or otherwise complies with NICNAS.

MITI (Japanese Handbook of Existing and New Chemical Substances): This product is listed in the Handbook or has been approved in Japan by new substance notification.

ECL (Korean Toxic Substances Control Act): This product is listed on the Korean inventory or otherwise complies with the Korean Toxic Substances Control Act. KE-04179

SECTION 16: Other information

HMIS® Hazard Ratings: Health - 2, Flammability - 3, Chemical Reactivity - 0

HMIS® rating involves data interpretations that may vary from company to company. They are intended only for rapid, general identification of the magnitude of the specific hazard. To deal adequately with the safe handling of this material, all the information contained in this MSDS must be considered.

Revision Information: Not relevant.
Key literature references and sources for data: No data available.

Training information: No data available.

Issue Date: 05/16/2018

SDS No.:

Disclaimer: This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.