

**1. Identification**

|  |   |
|--|---|
| <b>Name of the product</b>               | UR 200 Hardener   |
| <b>Product identifier</b>                | Sigma UR 200 Hardener   |
| <b>Recommended uses and Restrictions</b> | Hardener for Pad Printing ink.  |
| <b>Manufacturer data</b>                 | Sigma Inks (US) 12800 Brookprinter Place, Poway, CA 92064 USA<br>Phone: (888) 424-9300<br>Website <a href="http://www.sigmainks.com">www.sigmainks.com</a><br>Contact the Distributor: <a href="http://www.printexusa.com">www.printexusa.com</a> |
| <b>Emergency number</b>                  | Chemtrec (USA): (800) 424-9300<br>Chemtrec (Outside USA): (703) 527-3887 (Collect Calls Accepted)   |

**2. Hazard identification**

**Classification of the substance or mixture**

- Physical hazards
- Health hazards

Acute Toxicity-Category 4  
 Eye Irritation – Category 2a  
 Skin Sensitivity-Category 1

**Signaling elements**

- Identification of the substance or mixture
- Caution pictogram

Sigma UR 200



- Word of warning
- Identification code H

Danger

- Identification code Q

H317 May cause an allergic reaction to the skin.  
 H318: Cause serious eye irritation.  
 H332: Harmful if inhaled.  
 H334 May cause allergy or asthma symptoms or shortness of breath if inhaled.  
 H335: May cause Respiratory irritation.

P284 Use Respiratory Protection.  
 P261 Avoid breathing dust/gases/gas/spray/vapors  
 P271: Use outdoors or in well ventilated areas  
 P280: Wear Gloves/Goggles/Face protection.  
 Contaminated clothing should not be allowed outside of the workplace.  
 P305 + P351 + P338: In case of contact with eyes: Rinse carefully with water for several minutes. Remove contact lenses, if there is and it is easy to do so. Continue rinsing.  
 Specific treatment (see supplementary first-aid instructions in this safety sheet).  
 If You experience respiratory symptoms: Call The poison Center/doctor.  
 If inhaled: Take the victim to fresh air and keep her resting in a comfortable breathing position.  
 Call the Poison Center/doctor if you are not feeling well.  
 Wash contaminated clothing before reuse.  
 If inhaled: if breathing is difficult, take the person to fresh air and keep it comfortable for breathing.  
 If skin irritation or rash occurs: Get care/medical advice.

If eye irritation persists: get care/medical advice.  
 If on the skin: wash with abundant water.  
 Store under lock and key.  
 Store in a well-ventilated place. Keep the container tightly closed.  
 Dispose of the contents/container in accordance with local/regional/national regulations/internationals.

**Other Dangers**

None Knows

### 3. Composition/Information on components

| Chemical identity of the substance | Common name or synonyms | CAS number | Impurities and Additives | Percentage |
|------------------------------------|-------------------------|------------|--------------------------|------------|
| 1, 6 – Hexamethylene Diisocyanate  |                         | 28182-81-2 | –                        | 70 – 90    |
| Dicyclopentylsiloxane              |                         |            |                          |            |
| n-butylacetate                     |                         | 123-86-4   | –                        | 15 – 35    |
|                                    |                         |            | –                        |            |

### 4. First Aid

**In case of contact with the skin**

Wash the affected area with plenty of water, remove the clothes if they are impregnated with the product. Take the victim immediately to the hospital.

**In case of contact with eyes**

Immediately wash the eye (s) with plenty of water. Remove contact lenses If possible, protect the unaffected eye. Keep the eye (s) wide open while rinsing. If eye irritation persists, consult a specialist.

**In Case of ingestion**

Keep the respiratory tract clear. Do not induce vomiting, do not drink milk or drink alcohol.  
 Never Give anything by mouth to an unconscious person. If symptoms persist, consult a doctor.

**Acute and chronic symptoms and important effects**

Poisoning symptoms may appear several hours later.

**Indications For immediate medical care and special treatment**

Information Not available.

### 5. Fire measures

**Appropriate extinguishing media**

Chemical Dry  
 Carbon Dioxide (CO<sub>2</sub>)  
 Foam Alcohol-Resistant

**Inadequate extinguishing Media**

High volume water jet.

**Specific Hazards of the substance**

Do not allow extinguishing water to enter sewers or waterways.

**Special measures for combat groups Of Fire**

If necessary, use self-contained breathing equipment for fire-fighting.

Use a water spray to completely cool closed containers.

The extinguishing water must be collected separately, not It must penetrate into the sewer.

The remains of the fire and contaminated extinguishing water must be dispose of according to the local regulations in force.

For safety reasons in case of fire, the containers will be stored separately in enclosed compartment.

**6. Measures in case of accidental spill or leakage**

**Personal precautions/Personal Protection Equipment and PEmergency Rovedimiento**

be used individually protective equipment.

Ensure proper ventilation.

Remove all sources of ignition.

It was a very safe area.

Be careful with the vapors that accumulate forming Like this

Explosive concentration. Vapors can accumulate in the lower areas.

**Environmental precautions**

Prevent the product from penetrating the sewer.

Prevent new leaks or spills if it can be done without risk.

If the product pollutes rivers, lakes or sewers, inform the respective authorities.

**Methods and materials for the containment and cleaning of spills or leaks**

Contain the spill and collect it with non-combustible absorbent material (e.g. sand, diatomaceous earth, vermiculite) and deposit it in a container for disposal in accordance with local and national legislation (see Section 13).

**7. Handling and Storage**

**Safe Handling Precautions**

Avoid the formation of aerosol.

Do not breathe vapors/dust.

Avoid Contact with skin and eyes.

Personal protective Equipment, see Section 8.

No smoking, no eating or drinking during work.

Avoid the accumulation of electrostatic charges.

have sufficient air and/or extraction renewal in the workplace.

Open the drum with caution as theHad may be pressurized.

Eliminate rinsing water in accordance with national and local regulations.

**Conditions for secure storage and incompatibilities**

No smoking. Prevent unauthorized access.

Keep the container hermetically sealed in a dry, well-ventilated place. Open containers must be carefully closed and kept upright to avoid leakage.

Observe the indications on the label.

Electrical installations and work materials must conform to safety standards.

**8. Explosion/Personal Protection controls**

**Control parameters**

| Component       | No. CAS  | Value                  | Parameter Control   | Base |
|-----------------|----------|------------------------|---|------|
| n-butyl acetate | 123-86-4 | 8-hour TWA:<br>150 ppm | 500 ppm<br>2,000 mg/m <sup>3</sup><br>200 mg/m <sup>3</sup> (Total Vapor of hydrocarbons)<br>400 ppm<br>1,600 mg/m <sup>3</sup> |      |
|                 |          |                        |   |      |

**Appropriate technical controls**

No data available.

**Individual protection measures**

- **Respiratory Protection**

It does not normally require the use of an individual respiratory protective equipment. In case of steam formation, use a respirator with an appropriate filter.

- **Hand Protection**

The suitability for a specific workplace should be treated with the protective glove producers.

- **Eye Protection**

Eye wash bottle with pure waterGSafety Afass adjusted to face contour. Use facial screen and protective suit in case they arise Anomalies in the process.

- **Body Protection**

Waterproof cloths. Choose a body protection based on the amount and concentration of the hazardous substance in the workplace.

**9. Physical and Chemical properties**

**Physical Fitness and appearance**

Viscose

**Color**

Transparent

**Smell**

Characteristic

**Odor threshold**

Undetermined value

**Hydrogen potential, PH**

Undetermined value

**Melting Point/freezing point**

Undetermined value

**Starting point and boiling range**

146 °C (295 °F)

**Flash Point**

43 °c (109 °F)

**Evaporation Rate**

Undetermined value

**Flammability**

does not apply

**Upper/lower limits of flammability or explosiveness**

Undetermined value

**Steam pressure**

Undetermined value

**Steam density**

> 1 (air = 1)

**Relative density**

Undetermined value

**Density**

0.9 g/cm<sup>3</sup> @ 20 °C (68 °F)

**Solubility**

It is not miscible in water or difficult to mix

|   |                    |
|---|--------------------|
| <b>Partition coefficient</b>            | No data available  |
| <b>Spontaneous Ignition Temperature</b> | No data available  |
| <b>Decay temperature</b>                | No data available  |
| <b>Viscosity</b>                        | Undetermined value |
| <b>Molecular weight</b>                 | Undetermined value |
| <b>Other data</b>                       | No data available  |

### 10. Stability and reactivity

|   |   |
|---|---|
| <b>Reactivity</b>                         | No dangerous reactions are known under normal use conditions. |
| <b>Chemical stability</b>                 | Stable under normal conditions.                               |
| <b>Possibility of dangerous reactions</b> | Without dangers to mention especially.                        |
| <b>Conditions to avoid</b>                | Heat, Flames, sparks and other sources of ignition.           |
| <b>Incompatible materials</b>             | Agents Oxidizers, peroxides.                                  |
| <b>Hazardous Decomposition Products</b>   | No data available.  |

### 11. Toxicological Information

#### Information on probable ways of entry

|   |  |
|---|--|
| <b>Symptoms related to physical, chemical and toxicological characteristics</b>   | Information unavailable.   |
| <b>Immediate, delayed, and chronic effects (short-term and long-run exposure)</b> | Information unavailable.   |
| <b>Numerical toxicity measures</b>  |  |
| - <b>Acute Oral toxicity</b>  | Information unavailable  |
| - <b>Acute Dermal Toxicity</b>  | > 5,000 mg/Kg  |
| - <b>Acute Inhalation toxicity</b>  | Information unavailable  |
| <b>Interactive effects</b>  | Information Not available.   |
| <b>Other Information</b>  | Information unavailable.   |
| <b>Corrosion/Skin irritation:</b>   | Naphtha solvent (petroleum), light aromatic IRitaNte for The Skin – Rabbit – Exhibition 4 H. |
| <b>Serious Eye injury/eye irritation</b>  | Information unavailable.   |
| <b>Respiratory or cutaneous sensitization</b>                                     | Information unavailable.   |

**Mutagenicity in germ cells**

- Genotoxicity in vitro  
 Ames tests.  
 Species: Salmonella Typhimurium.  
 With and without metabolic activation.  
 Result: Negative

Vitro Chromosomal aberration test.  
 Species: Chinese hamster ovary (CHO).  
 With and without metabolic activation.  
 Result: Negative

**Carcinogenicity**

Osha  
 No component of this product present at levels greater than or equal to 0.1% is identified as a potential carcinogen or carcinogen by OSHA.

No component of this product present at levels higher than or equal to 0.1% is identified as a carcinogen or potential carcinogen by NTP.

**Reproductive toxicity**

Information unavailable.

**Specific Systematic toxicity – single exposure**

It attacks the central nervous system. QInvisio cause drowsiness or dizziness. The substance or mixture is classified as specific toxic of the white organ, single exposure, Category 3 with narcotic effects.

**Specific Systematic toxicity – repeated exposures**

Information unavailable.

**Aspiration Hazard**

Can be deadly in case of ingestion and penetration in the airways.

**12. Information Ecotoxicological**

**Toxicity**

Acute Aquatic Toxicity:  
 Toxic to aquatic organisms.

Chronic Aquatic Toxicity:  
 Toxic to aquatic organisms, with lasting harmful effects.

**Persistence and Degradability  
 Bioaccumulation potential  
 Ground Mobility**

Information unavailable.  
 Will not bio-accumulate.  
 No data available.

**Other Adverse effects**

Not an environmental hazard may be excluded in the event of non-professional handling or disposal.  
 Toxic to aquatic life with lasting effects.

**13. Information on product deletion**

|  |   |
|--|---|
| <b>Description of waste</b>                | Information unavailable.  |
| <b>Information on safe handling</b>        | Check Section 7.  |
| <b>Methods of elimination</b>              | Dispose of in accordance with all applicable local, state and federal regulations.  |
| <b>Disposal of contaminated containers</b> | Empty the remaining content. Discard as unused products. Do not reuse empty containers. Do not burn the empty drum or use cutting torches with I. |

#### **14. Information on transportation**

|  |   |
|--|---|
| <b>No. A</b>                               | 1210  |
| <b>An official definition of transport</b> | Printing Ink Relative   |
| <b>Class</b>                               | 3   |
| <b>Packaging Group</b>                     | lii   |
| <b>Environmental hazards</b>               | No data available.  |
| <b>Special Precautions for the user</b>    | No data available.  |
| <b>Bulk Transport</b>                      | Not applicable as provided.<br><br>The Flash Point for this material is greater than 100 °F (38 ° C), therefore, according to The Cfr 49 173,150 (f), non-bulk containers of this material may be shipped as unregulated when transported by land only, provided that the material is not a hazardous waste, a marine pollutant, or listed specifically as a dangerous substance. |

#### **15. Regulatory information**

**Specific regulations/legislation in safety, health and environment for substance or mixture.**

**Sara**

**Section 335 (Extremely dangerous substances):**

None of the ingredients are listed.

**SEcción 313 (List of Specific toxic chemicals):**

None of the ingredients are listed.

**TSCA (Law on the control of toxic substances):**

None of the ingredients are listed.

**California Proposition 65**

**Chemicals known to cause cancer**

None of the ingredients are listed.

**Chemicals known to cause reproductive toxicity in women:**

None of the ingredients are listed.

**Chemicals known to cause reproductive toxicity in men:**

None of the ingredients are listed.

**Chemicals known to cause developing toxicity:**

None of the ingredients are listed.

**Cancer categories**

**EPA (Environmental Protection Agency)**

None of the ingredients are listed.

**TLV (Threshold limit value set by ACGIH)**

77-58-7 Dibutyltin Dilaurate

**NIOSH-Ca (National Institute for Occupational Health and safety)**

None of the ingredients are listed.

**National regulations**

The product is subject to classification according to the latest version of the Regulations on hazardous substances.

**State Law of Knowledge**

All ingredients are listed.

**Chemical Safety Assessment:**

A Chemical Safety Assessment has not yet been carried out.

**16. Other information on the preparations and Update of safety Data Sheets**

**More Information**

The information and recommendations in this sheet are secure with, to our best knowledge and understanding, accurate to the date of your expedition. Nothing contained herein shall be deemed to create warranty, express or implied, and shall not establish legally valid contractual relationship. It is the user's responsibility to determine the applicability of this information and the suitability of the material or product for any particular purpose.

**Update Date**

19 – Jul – 2018

**Next Review Date**

No data available.

**Version**

01

**References**