SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : 202C Ninhydrin Spray, 6oz.
Product code : 202C

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

Use of the substance/mixture : Latent fingerprint developer

1.3. Details of the supplier of the safety data sheet

SIRCHIE
100 Hunter Place
Youngsville, NC 27596 - USA
T 919-554-2244; 800-356-7311 - F 919-554-2266; 800-899-8181
http://www.sirchie.com

1.4. Emergency telephone number

Emergency number : 1.800.424.9300
CHEMTREC: 1.800.424.9300

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification
Flammable liquids Category 2 H225
Skin corrosion/irritation Category 2 H315
Serious eye damage/eye irritation Category 2A H319
Germ cell mutagenicity Category 1B H340
Carcinogenicity Category 1A H350
Specific target organ toxicity (single exposure) Category 3 H336
Specific target organ toxicity (repeated exposure) Category 2 H336

Full text of H statements : see section 16

2.2. Label elements

GHS-US labeling
Hazard pictograms (GHS-US) :

<table>
<thead>
<tr>
<th>Pictogram</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GHS02</td>
<td>Flame icon</td>
</tr>
<tr>
<td>GHS07</td>
<td>Exclamation</td>
</tr>
<tr>
<td>GHS08</td>
<td>Helmet icon</td>
</tr>
</tbody>
</table>

Signal word (GHS-US) : Danger
Contains : ethyl acetate; ethylbenzene

Hazard statements (GHS-US) :
H225 - Highly flammable liquid and vapor
H315 - Causes skin irritation
H319 - Causes serious eye irritation
H336 - May cause drowsiness or dizziness
H340 - May cause genetic defects (Dermal, oral)
H350 - May cause cancer (Dermal, oral)
H373 - May cause damage to organs (kidneys) through prolonged or repeated exposure (oral)

Precautionary statements (GHS-US) :
P210 - Keep away from heat, hot surfaces, open flames, sparks. - No smoking
P233 - Keep container tightly closed
P260 - Do not breathe fume, mist
P264 - Wash hands, exposed skin thoroughly after handling
P271 - Use only outdoors or in a well-ventilated area
P280 - Wear eye protection, protective gloves
P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing
2.3. Other hazards

Other hazards not contributing to the classification: Toxicity of this product has not been fully tested.

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>GHS-US classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petroleum gases, liquefied, sweetened</td>
<td>(CAS No) 68476-88-8</td>
<td>40 - 70</td>
<td>Not classified</td>
</tr>
<tr>
<td>ethyl acetate</td>
<td>(CAS No) 141-78-6</td>
<td>10 - 30</td>
<td>Flam. Liq. 2, H225 Eye Irrit. 2A, H319 STOT SE 3, H36</td>
</tr>
<tr>
<td>xylene, mixture of isomers</td>
<td>(CAS No) 1330-20-7</td>
<td>10 - 30</td>
<td>Flam. Liq. 3, H226 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315</td>
</tr>
<tr>
<td>ethanol</td>
<td>(CAS No) 64-17-5</td>
<td>7 - 13</td>
<td>Flam. Liq. 2, H225</td>
</tr>
<tr>
<td>ethylbenzene</td>
<td>(CAS No) 100-41-4</td>
<td>3 - 7</td>
<td>Flam. Liq. 2, H225 Acute Tox. 4 (Inhalation), H332 Carc. 2, H351 STOT RE 2, H373 Asp. Tox. 1, H304</td>
</tr>
</tbody>
</table>

Full text of H-phrases: see section 16

SECTION 4: First aid measures

4.1. 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).

First-aid measures after inhalation: Allow victim to breathe fresh air. Allow the victim to rest. Cough.

First-aid measures after eye contact: Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist. Direct contact with the eyes is likely to be irritating.

First-aid measures after ingestion: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation: Shortness of breath.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media


Unsuitable extinguishing media: Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard: Flammable aerosol. Flammable liquid and vapor. May cause fire or explosion; strong oxidizer.

Explosion hazard: Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries. May form flammable/explosive vapor-air mixture.

Reactivity: No reactivity hazard other than the effects described in sub-sections below.
202C Ninhydrin Spray, 6oz.
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5.3. **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. DO NOT fight fire when fire reaches explosives. Evacuate area. In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.

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

### SECTION 6: Accidental release measures

**6.1. Personal precautions, protective equipment and emergency procedures**

**General measures**: No open flames. No smoking. Isolate from fire, if possible, without unnecessary risk. Remove ignition sources. Use special care to avoid static electric charges.

**6.1.1. For non-emergency personnel**

**Emergency procedures**: Evacuate unnecessary personnel.

**6.1.2. For emergency responders**

**Protective equipment**: Equip cleanup crew with proper protection.

**Emergency procedures**: Ventilate area.

**6.2. Environmental precautions**

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

**6.3. Methods and material for containment and cleaning up**

**Methods for cleaning up**: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

**6.4. Reference to other sections**

See Heading 8. Exposure controls and personal protection.

### SECTION 7: Handling and storage

**7.1. Precautions for safe handling**

**Additional hazards when processed**: Handle empty containers with care because residual vapors are flammable. In use, may form flammable vapor-air mixture. Pressurized container: Do not pierce or burn, even after use. Hazardous waste due to potential risk of explosion.

**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. Do not spray on an open flame or other ignition source. No open flames. No smoking. Take precautionary measures against static discharge. Use only non-sparking tools. Take any precaution to avoid mixing with combustibles/..

**7.2. 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 : Do not expose to temperatures exceeding 50 °C/ 122 °F. Keep in fireproof place. Keep container tightly closed.

**Incompatible products**: Strong bases. Strong acids.


**Storage area**: Store in a well-ventilated place.

### SECTION 8: Exposure controls/personal protection

**8.1. Control parameters**

<table>
<thead>
<tr>
<th>Substance</th>
<th>ACGIH</th>
<th>ACGIH STEL (ppm)</th>
<th>Additional Information</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ethanol (64-17-5)</strong></td>
<td>ACGIH</td>
<td>1000 ppm</td>
<td>(Ethanol; USA; Short time value; TLV - Adopted Value)</td>
</tr>
<tr>
<td><strong>ethyl acetate (141-78-6)</strong></td>
<td>ACGIH</td>
<td>400 ppm</td>
<td>(Ethyl acetate; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)</td>
</tr>
<tr>
<td><strong>xylene, mixture of isomers (1330-20-7)</strong></td>
<td>Not applicable</td>
<td>Not applicable</td>
<td></td>
</tr>
</tbody>
</table>
202C Ninhydrin Spray, 6oz.
Safety Data Sheet
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Petroleum gases, liquefied, sweetened (68476-86-8)
Not applicable

ethylbenzene (100-41-4)

<table>
<thead>
<tr>
<th>ACGIH</th>
<th>ACGIH TWA (ppm)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>20 ppm (Ethyl benzene; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)</td>
</tr>
</tbody>
</table>

Not applicable

8.2. Exposure controls


Hand protection: Wear protective gloves.

Eye protection: Chemical goggles or safety glasses.

Respiratory protection: Wear appropriate mask.

Other information: Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Liquid
Appearance: Clear, colorless, volatile liquid.
Color: Colorless
Odor: Irritating/pungent odour
Odor threshold: No data available
pH: No data available
Melting point: No data available
Freezing point: No data available
Boiling point: No data available
Flash point: No data available
Relative evaporation rate (butyl acetate=1): No data available
Flammability (solid, gas): No data available
Explosion limits: No data available
Explosive properties: No data available
Oxidizing properties: May cause fire or explosion; strong oxidizer.
Vapor pressure: No data available
Relative density at 20 °C: No data available
Solubility: Insoluble in water.

Water: Solubility in water of component(s) of the mixture:
- ethanol: Complete
- ethyl acetate: 8 g/100ml (25 °C)
- xylene, mixture of isomers: < 0.02 g/100ml
- ethylbenzene: 0.02 g/100ml

Log Pow: No data available
Auto-ignition temperature: No data available
Decomposition temperature: No data available
Viscosity: No data available
Viscosity, kinematic: No data available
Viscosity, dynamic: No data available

9.2. Other information

No additional information available
SECTION 10: Stability and reactivity

10.1. Reactivity
No reactivity hazard other than the effects described in sub-sections below.

10.2. Chemical stability
Stable under recommended handling and storage conditions (see section 7). Flammable aerosol. Contains gas under pressure; may explode if heated. Extreme risk of explosion by shock, friction, fire or other sources of ignition. Flammable liquid and vapor. May form flammable/explosive vapor-air mixture. May cause fire or explosion; strong oxidizer.

10.3. Possibility of hazardous reactions
Not established.

10.4. Conditions to avoid

10.5. Incompatible materials
Strong acids. Strong bases.

10.6. Hazardous decomposition products

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

<table>
<thead>
<tr>
<th>Chemical</th>
<th>LD50 oral</th>
<th>LD50 dermal rabbit</th>
</tr>
</thead>
<tbody>
<tr>
<td>ethanol (64-17-5)</td>
<td>10740 mg/kg body weight (Rat; OECD 401: Acute Oral Toxicity; Experimental value)</td>
<td>&gt; 16000 mg/kg (Rabbit; Literature study)</td>
</tr>
<tr>
<td>ethyl acetate (141-78-6)</td>
<td>5620 mg/kg (Rat; Equivalent or similar to OECD 401; Experimental value; 10200 mg/kg bodyweight; Rat)</td>
<td>&gt; 18000 mg/kg (Rabbit; Experimental value; 24 hour cuff method; &gt;20000 mg/kg bodyweight; Rabbit)</td>
</tr>
<tr>
<td>LC50 inhalation rat (mg/l)</td>
<td>70.56 mg/l/4h (Rat)</td>
<td></td>
</tr>
<tr>
<td>LC50 inhalation rat (ppm)</td>
<td>19600 ppm/4h (Rat)</td>
<td></td>
</tr>
<tr>
<td>ATE US (oral)</td>
<td>5620.000 mg/kg body weight</td>
<td></td>
</tr>
<tr>
<td>ATE US (gases)</td>
<td>19600.000 ppmV/4h</td>
<td></td>
</tr>
<tr>
<td>ATE US (vapors)</td>
<td>70.560 mg/l/4h</td>
<td></td>
</tr>
<tr>
<td>ATE US (dust, mist)</td>
<td>70.560 mg/l/4h</td>
<td></td>
</tr>
<tr>
<td>xylene, mixture of isomers (1330-20-7)</td>
<td>3523 - 8600 mg/kg (Rat; OECD 401: Acute Oral Toxicity; Literature study; 3523 mg/kg bodyweight; Rat; OECD 401: Acute Oral Toxicity; Experimental value; &gt;4000 mg/kg bodyweight; Rat; OECD 401: Acute Oral Toxicity; Experimental value)</td>
<td>&gt; 4200 mg/kg body weight (Rabbit; Experimental value; OECD 402: Acute Dermal Toxicity)</td>
</tr>
<tr>
<td>LC50 inhalation rat (mg/l)</td>
<td>29 mg/l/4h (Rat; Experimental value; 27.57 mg/l/4h; Rat; Experimental value)</td>
<td></td>
</tr>
<tr>
<td>ATE US (oral)</td>
<td>3523.000 mg/kg body weight</td>
<td></td>
</tr>
<tr>
<td>ATE US (dermal)</td>
<td>1100.000 mg/kg body weight</td>
<td></td>
</tr>
<tr>
<td>ATE US (gases)</td>
<td>4500.000 ppmV/4h</td>
<td></td>
</tr>
<tr>
<td>ATE US (vapors)</td>
<td>11.000 mg/l/4h</td>
<td></td>
</tr>
<tr>
<td>ATE US (dust, mist)</td>
<td>1.500 mg/l/4h</td>
<td></td>
</tr>
<tr>
<td>ethylbenzene (100-41-4)</td>
<td>3500 mg/kg (Rat; Other; Experimental value)</td>
<td></td>
</tr>
<tr>
<td>LD50 oral rat</td>
<td>35415 mg/kg (Rabbit; Literature study; Other; 15432 mg/kg; Rabbit; Experimental value)</td>
<td></td>
</tr>
<tr>
<td>LC50 inhalation rat (mg/l)</td>
<td>17.8 mg/l/4h (Rat; Literature study)</td>
<td></td>
</tr>
<tr>
<td>LC50 inhalation rat (ppm)</td>
<td>4000 ppm/4h (Rat; Literature study)</td>
<td></td>
</tr>
<tr>
<td>ATE US (oral)</td>
<td>3500.000 mg/kg body weight</td>
<td></td>
</tr>
<tr>
<td>ATE US (dermal)</td>
<td>15415.000 mg/kg body weight</td>
<td></td>
</tr>
<tr>
<td>ATE US (gases)</td>
<td>4000.000 ppmV/4h</td>
<td></td>
</tr>
<tr>
<td>ATE US (vapors)</td>
<td>17.800 mg/l/4h</td>
<td></td>
</tr>
</tbody>
</table>
**202C Ninhydrin Spray, 6oz.**

**Safety Data Sheet**

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

---

**ethylbenzene (100-41-4)**

<table>
<thead>
<tr>
<th>ATE US (dust, mist)</th>
<th>1.500 mg/l/4h</th>
</tr>
</thead>
</table>

**Skin corrosion/irritation**

Causes skin irritation.

**Serious eye damage/irritation**

Causes serious eye irritation.

**Respiratory or skin sensitization**

Not classified

**Germ cell mutagenicity**

May cause genetic defects (Dermal, oral).

Based on available data, the classification criteria are not met

**Carcinogenicity**

May cause cancer (Dermal, oral).

**ethanol (64-17-5)**

**Additional information**

Ethyl alcohol (200 Proof) has been shown to cause cancer in Human and Animals when ingested in volume over time. There is no link to cancer in limited exposure scenarios.

**IARC group**

1 - Carcinogenic to humans

**xylene, mixture of isomers (1330-20-7)**

**IARC group**

3 - Not classifiable

**ethylbenzene (100-41-4)**

**IARC group**

2B - Possibly carcinogenic to humans

**Reproductive toxicity**

Not classified

Based on available data, the classification criteria are not met

**Specific target organ toxicity (single exposure)**

May cause drowsiness or dizziness.

**Specific target organ toxicity (repeated exposure)**

May cause damage to organs (kidneys) through prolonged or repeated exposure (oral).

**Aspiration hazard**

Not classified

**Potential Adverse human health effects and symptoms**

Based on available data, the classification criteria are not met.

**Symptoms/injuries after inhalation**

Shortness of breath.

---

**SECTION 12: Ecological information**

12.1. **Toxicity**

**ethanol (64-17-5)**

<table>
<thead>
<tr>
<th>LC50 fish 1</th>
<th>14200 mg/l (LC50; US EPA; 96 h; Pimephales promelas; Flow-through system; Fresh water; Experimental value)</th>
</tr>
</thead>
</table>

**ethyl acetate (141-78-6)**

<table>
<thead>
<tr>
<th>LC50 fish 2</th>
<th>230 mg/l (LC50; US EPA; 96 h; Pimephales promelas; Flow-through system; Fresh water; Experimental value)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC50 Daphnia 2</td>
<td>154 mg/l (EC50; 48 h; Daphnia magna)</td>
</tr>
</tbody>
</table>

**ethylbenzene (100-41-4)**

<table>
<thead>
<tr>
<th>LC50 fish 2</th>
<th>4.2 mg/l (LC50; OECD 203: Fish, Acute Toxicity Test; 96 h; Salmo gairdneri; Semi-static system; Fresh water; Experimental value)</th>
</tr>
</thead>
</table>

12.2. **Persistence and degradability**

**202C Ninhydrin Spray, 6oz.**

**Persistence and degradability**

Not established.

**ethanol (64-17-5)**

**Persistence and degradability**


**Biochemical oxygen demand (BOD)**

0.8 - 0.967 g O₂/g substance

**Chemical oxygen demand (COD)**

1.70 g O₂/g substance

**ThOD**

2.10 g O₂/g substance

**BOD (% of ThOD)**

0.43

**ethyl acetate (141-78-6)**

**Persistence and degradability**

### 202C Ninhydrin Spray, 6oz.

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#### ethyl acetate (141-78-6)

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biochemical oxygen demand (BOD)</td>
<td>0.293 g O₂/g substance</td>
</tr>
<tr>
<td>Chemical oxygen demand (COD)</td>
<td>1.69 g O₂/g substance</td>
</tr>
<tr>
<td>ThOD</td>
<td>1.82 g O₂/g substance</td>
</tr>
</tbody>
</table>

#### xylene, mixture of isomers (1330-20-7)

**Persistence and degradability**

Readily biodegradable in water. Biodegradable in the soil. No (test)data on mobility of the substance available. Photolysis in the air.

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biochemical oxygen demand (BOD)</td>
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<td>ThOD</td>
<td>1.82 g O₂/g substance</td>
</tr>
</tbody>
</table>

#### ethylbenzene (100-41-4)

**Persistence and degradability**


<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
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</tr>
</tbody>
</table>

#### ethylbenzene (100-41-4)

**Persistence and degradability**


<table>
<thead>
<tr>
<th>Property</th>
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<tbody>
<tr>
<td>Biochemical oxygen demand (BOD)</td>
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<td>Chemical oxygen demand (COD)</td>
<td>1.69 g O₂/g substance</td>
</tr>
<tr>
<td>ThOD</td>
<td>1.82 g O₂/g substance</td>
</tr>
</tbody>
</table>

#### Bioaccumulative potential

**202C Ninhydrin Spray, 6oz.**

Bioaccumulative potential

Not established.

**ethanol (64-17-5)**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCF fish 1</td>
<td>1 (BCF; Other; 72 h; Cyprinus carpio; Static system; Fresh water; Read-across)</td>
</tr>
<tr>
<td>Log Pow</td>
<td>-0.31 (Experimental value)</td>
</tr>
<tr>
<td>Bioaccumulative potential</td>
<td>Low potential for bioaccumulation (Log Kow &lt; 4).</td>
</tr>
</tbody>
</table>

**ethyl acetate (141-78-6)**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCF fish 1</td>
<td>1 (BCF; Other; 6 weeks; Oncorhynchus kisutch; Flow-through system; Salt water; Literature study)</td>
</tr>
<tr>
<td>Log Pow</td>
<td>0.68 (Experimental value; EPA OPPTS 830.7560; 25 °C)</td>
</tr>
<tr>
<td>Bioaccumulative potential</td>
<td>Low potential for bioaccumulation (BCF &lt; 500).</td>
</tr>
</tbody>
</table>

**xylene, mixture of isomers (1330-20-7)**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCF fish 2</td>
<td>7 - 26 (BCF; 8 weeks; Oncorhynchus mykiss; Flow-through system; Fresh water)</td>
</tr>
<tr>
<td>Log Pow</td>
<td>3.2 (Conclusion by analogy; 20 °C)</td>
</tr>
<tr>
<td>Bioaccumulative potential</td>
<td>Low potential for bioaccumulation (BCF &lt; 500).</td>
</tr>
</tbody>
</table>

**ethylbenzene (100-41-4)**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCF fish 1</td>
<td>1 (BCF; Other; 6 weeks; Oncorhynchus kisutch; Flow-through system; Salt water; Literature study)</td>
</tr>
<tr>
<td>BCF fish 2</td>
<td>15 - 79 (BCF)</td>
</tr>
<tr>
<td>BCF other aquatic organisms 1</td>
<td>4.68 (BCF)</td>
</tr>
<tr>
<td>Log Pow</td>
<td>3.15 (Experimental value; 3.6; Experimental value; EU Method A.8: Partition Coefficient; 20 °C)</td>
</tr>
<tr>
<td>Bioaccumulative potential</td>
<td>Low potential for bioaccumulation (BCF &lt; 500).</td>
</tr>
</tbody>
</table>

#### Mobility in soil

**ethanol (64-17-5)**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface tension</td>
<td>0.022 N/m (20 °C)</td>
</tr>
<tr>
<td>Log Koc</td>
<td>Koc,PCKOCWIN v1.66; 1; Read-across</td>
</tr>
</tbody>
</table>

**ethyl acetate (141-78-6)**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface tension</td>
<td>0.022 N/m (20 °C)</td>
</tr>
</tbody>
</table>

**xylene, mixture of isomers (1330-20-7)**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ecology - soil</td>
<td>May be harmful to plant growth, blooming and fruit formation.</td>
</tr>
</tbody>
</table>

**ethylbenzene (100-41-4)**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface tension</td>
<td>0.022 N/m</td>
</tr>
<tr>
<td>Log Koc</td>
<td>Koc,PCKOCWIN v1.66; 2.71; Calculated value; Koc; PCKOCWIN v1.66; 517.8; Calculated value</td>
</tr>
</tbody>
</table>

#### Other adverse effects
202C Ninhydrin Spray, 6oz.
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Effect on the global warming : No known ecological damage caused by this product.
Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Container under pressure. Do not drill or burn even after use. Dispose of contents/container to ..
Additional information : Flammable vapors may accumulate in the container. Handle empty containers with care because residual vapors are flammable. Hazardous waste due to potential risk of explosion.
Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

Department of Transportation (DOT)
In accordance with DOT
Transport document description : UN1950 Aerosols (flammable, (each not exceeding 1 L capacity)), 2.1
UN-No.(DOT) : UN1950
Proper Shipping Name (DOT) : Aerosols (flammable, (each not exceeding 1 L capacity))
Class (DOT) : 2.1 - Class 2.1 - Flammable gas 49 CFR 173.115
Hazard labels (DOT) : 2.1 - Flammable gas

DOT Packaging Non Bulk (49 CFR 173.xxx) : None
DOT Packaging Bulk (49 CFR 173.xxx) : None
DOT Special Provisions (49 CFR 172.102) : N82 - See 173.306 of this subchapter for classification criteria for flammable aerosols
DOT Packaging Exceptions (49 CFR 173.xxx) : 306
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 75 kg
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 150 kg
DOT Vessel Stowage Location : A - The material may be stowed “on deck” or “under deck” on a cargo vessel and on a passenger vessel
DOT Vessel Stowage Other : 25 - Shade from radiant heat, 87 - Stow “separated from” Class 1 (explosives) except Division 14, 126 - Segregation same as for Class 9, miscellaneous hazardous materials
Other information : No supplementary information available.

TDG
No additional information available

Transport by sea
No additional information available

Air transport
UN-No. (IATA) : 1950
Proper Shipping Name (IATA) : Aerosols, flammable, containing substances in division 6.1, packing group iii
Class (IATA) : 2
Subsidiary risks (IATA) : Containing substances in Division 6.1

SECTION 15: Regulatory information

15.1. US Federal regulations
No additional information available
15.2. International regulations

**CANADA**
No additional information available

**EU-Regulations**
No additional information available

**National regulations**

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**202C Ninhydrin Spray, 6oz.**

Listed on IARC (International Agency for Research on Cancer)

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15.3. US State regulations

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**202C Ninhydrin Spray, 6oz.**

| U.S. - California - Proposition 65 - Carcinogens List | Yes |
| U.S. - California - Proposition 65 - Developmental Toxicity | No |
| U.S. - California - Proposition 65 - Reproductive Toxicity - Female | No |
| U.S. - California - Proposition 65 - Reproductive Toxicity - Male | No |

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SECTION 16: Other information

**Data sources**

**Training advice**
Normal use of this product shall imply use in accordance with the instructions on the packaging.

**Other information**
None.

**Full text of H-phrases:**

- **H225**: Highly flammable liquid and vapor
- **H226**: Flammable liquid and vapor
- **H304**: May be fatal if swallowed and enters airways
- **H312**: Harmful in contact with skin
- **H315**: Causes skin irritation
- **H319**: Causes serious eye irritation
- **H322**: Harmful if inhaled
- **H336**: May cause drowsiness or dizziness
- **H340**: May cause genetic defects
- **H350**: May cause cancer
- **H351**: Suspected of causing cancer
- **H373**: May cause damage to organs through prolonged or repeated exposure

**NFPA health hazard**
1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.

**NFPA fire hazard**
4 - Will rapidly or completely vaporize at normal pressure and temperature, or is readily dispersed in air and will burn readily.

**NFPA reactivity**
0 - Normally stable, even under fire exposure conditions, and are not reactive with water.

**NFPA specific hazard**
OX - This denotes an oxidizer, a chemical which can greatly increase the rate of combustion/fire.
### 202C Ninhydrin Spray, 6oz.

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<table>
<thead>
<tr>
<th>HMIS III Rating</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>1 Slight Hazard - Irritation or minor reversible injury possible</td>
</tr>
<tr>
<td>Flammability</td>
<td>4 Severe Hazard - Flammable gases, or very volatile flammable liquids with flash points below 73 F, and boiling points below 100 F. Materials may ignite spontaneously with air. (Class IA)</td>
</tr>
<tr>
<td>Physical</td>
<td>0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.</td>
</tr>
<tr>
<td>Personal Protection</td>
<td>G</td>
</tr>
<tr>
<td></td>
<td>G - Safety glasses, Gloves, Vapor respirator</td>
</tr>
</tbody>
</table>

SDS US (GHS HazCom 2012)

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, expressed or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigation to determine the suitability of the information for their particular purposes.