

### 1 Identification of substance:

· **Product details:**

· **Product name:** Histoclad

· **Catalog number:** 3920, 3921, 3922, 3923, 3924, 3925

· **Manufacturer/Supplier:**

Becton, Dickinson and Company

7 Loveton Circle

Sparks, MD 21152

Tel: (410) 771-0100 or (800) 638-8663

· **Information department:** Technical Services

· **Emergency information:**

In case of a chemical emergency, spill, fire, exposure, or accident contact Becton, Dickinson and Company at (410)771-0100 or (800)638-8663, or ChemTrec at (800)424-9300.

### 2 Composition/Data on components:

· **Chemical characterization**

· **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

108-88-3	toluene	10.0%
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### 3 Hazards identification

· **Hazard description:**



F Highly flammable

· **Information pertaining to particular dangers for man and environment**

R 11 Highly flammable.

· **Classification system**

The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

· **NFPA ratings (scale 0-4)**



Health = 3

Fire = 3

Reactivity = 0

### 4 First aid measures

· **After inhalation** Supply fresh air; consult doctor in case of complaints.

· **After skin contact** Immediately wash with water and soap and rinse thoroughly.

· **After eye contact** Rinse opened eye for 15 minutes under running water. Then consult a doctor.

· **After swallowing** Call a doctor immediately.

· **Information for doctor** Show this label

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### 5 Fire fighting measures

- **Suitable extinguishing agents**  
Special powder for metal fires. Do not use water.  
CO<sub>2</sub>, sand, extinguishing powder. Do not use water.
- **For safety reasons unsuitable extinguishing agents**  
Water.  
Water with full jet.
- **Protective equipment:**  
Wear self-contained respiratory protective device.  
Wear fully protective suit.

### 6 Accidental release measures

- **Person-related safety precautions:** Wear protective equipment. Keep unprotected persons away.
- **Measures for environmental protection:**  
Do not allow product to reach sewage system or any water course.  
Prevent seepage into sewage system, workpits and cellars.  
Inform respective authorities in case of seepage into water course or sewage system.  
Do not allow to enter sewers/ surface or ground water.
- **Measures for cleaning/collecting:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders).  
Ensure adequate ventilation.  
Do not flush with water or aqueous cleansing agents

### 7 Handling and storage

- **Handling**
- **Information for safe handling:** Ensure good ventilation/exhaustion at the workplace.
- **Information about protection against explosions and fires:**  
Keep ignition sources away - Do not smoke.  
Protect against electrostatic charges.
- **Storage**
- **Requirements to be met by storerooms and receptacles:** Store in a cool location.
- **Information about storage in one common storage facility:** Store away from oxidizing agents.
- **Further information about storage conditions:**  
Keep receptacle tightly sealed.  
Store in cool, dry conditions in well sealed receptacles.
- **Storage class**
- **Class according to regulation on flammable liquids:** A 1

### 8 Exposure controls and personal protection

- **Additional information about design of technical systems:** No further data; see item 7.

- **Components with limit values that require monitoring at the workplace:**

108-88-3 toluene
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TLV	188 mg/m <sup>3</sup> , 50 ml/m <sup>3</sup>
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- **Additional information:** The lists that were valid during the creation were used as basis.
- **Personal Protective Equipment**
- **General protective and hygienic measures** Wash hands before breaks and at the end of work.

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- **Breathing equipment:**  
In case of brief exposure, use a chemical fume hood or a NIOSH/MSHA-approved respirator.
- **Protection of hands:**



Chemical resistant gloves.

- **Eye protection:** Safety glasses
- **Body protection:** Protective work clothing (lab coat).

### 9 Physical and chemical properties:

· <b>Form:</b>	Liquid
· <b>Color:</b>	Colorless
· <b>Odor:</b>	Alcohol-like
· <b>Change in condition</b>	
<b>Melting point/Melting range:</b>	Not determined
<b>Boiling point/Boiling range:</b>	110°C (230°F)
· <b>Flash point:</b>	4°C (39°F)
· <b>Ignition temperature:</b>	535.0°C (995°F)
· <b>Auto igniting:</b>	Product is not selfigniting.
· <b>Danger of explosion:</b>	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
· <b>Explosion limits:</b>	
<b>Lower:</b>	1.2 Vol %
<b>Upper:</b>	7.0 Vol %
· <b>Vapor pressure at 20°C (68°F):</b>	29.0 hPa
· <b>Density:</b>	Not determined
· <b>Solubility in / Miscibility with</b>	
<b>Water:</b>	Insoluble
· <b>Solvent content:</b>	
<b>Organic solvents:</b>	10.0 %

### 10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Dangerous reactions** No dangerous reactions known
- **Dangerous products of decomposition:** No dangerous decomposition products known

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### 11 Toxicological information

· **Acute toxicity:**

· **LD/Lc50 values that are relevant for classification:**

**108-88-3 toluene**

Oral	LD50	5000 mg/kg (rat)
Dermal	LD50	12124 mg/kg (rab)
Inhalative	LC50/4 h	5320 mg/l (mus)

· **Primary irritant effect:**

· **on the skin:** No irritant effect.

· **on the eye:** No irritating effect.

· **Sensitization:** No sensitizing effects known.

· **Subacute to chronic toxicity:** Target organs: respiratory tract, eyes, kidneys, and skin.

· **Additional toxicological information:**

Harmful

The product shows the following dangers according to internally approved calculation methods for preparations:

### 12 Ecological information:

· **Ecotoxicological effects:**

· **Other information:**

The ecological effects have not been thoroughly investigated, but currently none have been identified.

· **General notes:**

Water hazard class 2 (Self-assessment): hazardous for water.

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

### 13 Disposal considerations

· **Product:**

· **Recommendation**

Must adhere to state and federal regulations.

Must not be disposed of with solid waste.

Disposal must be made according to the regulations found in 40 CFR 261.

RCRA hazardous waste - RCRA # D001 (ignitable).

· **Uncleaned packagings:**

· **Recommendation:** Disposal must be made according to state and federal regulations.

· **Recommended cleansing agent:** Water, if necessary with cleansing agents.

### 14 Transport information

· **DOT regulations:**



· **Hazard class:**

3

· **Identification number:**

UN1993

· **Packing group:**

II

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· **Proper shipping name (technical name):** *Flammable liquid, n.o.s., toluene*

· **Land transport ADR/RID (cross-border)**



· **ADR/RID class:** *3 Flammable liquids*  
 · **Item:** *3b*  
 · **Danger code (Kemler):** *33*  
 · **UN-Number:** *1993*  
 · **Description of goods:** *1993 Flammable liquid, n.o.s., toluene*

· **Maritime transport IMDG:**



· **IMDG Class:** *3.2*  
 · **Page:** *3230*  
 · **UN Number:** *1993*  
 · **Packaging group:** *II*  
 · **EMS Number:** *3-07*  
 · **MFAG:** *340*  
 · **Marine pollutant:** *No*  
 · **Proper shipping name:** *Flammable liquid, n.o.s., toluene*

· **Air transport ICAO-TI and IATA-DGR:**



· **ICAO/IATA Class:** *3*  
 · **UN/ID Number:** *1993*  
 · **Packaging group:** *II*  
 · **Proper shipping name:** *Flammable liquid, n.o.s., toluene*

## 15 Regulations

- **Product related hazard informations:**  
*The product has been classified and marked in accordance with regulations on hazardous materials.*
- **Hazard symbols:**  
*F Highly flammable*
- **Risk phrases:**  
*11 Highly flammable.*
- **Safety phrases:**  
  - 2 Keep out of the reach of children.*
  - 9 Keep container in a well-ventilated place.*
  - 16 Keep away from sources of ignition - No smoking.*
  - 46 If swallowed, seek medical advice immediately and show this container or label.*

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· **National regulations**

· **Additional classification according to Decree on Hazardous Materials:**

RCRA: This product contains toluene has a Reportable Quantity (RQ) of 100 lbs.

SARA 311/312: Maybe subject to reporting.  
313: Not subject to reporting.

TSCA: This product is exempt under TSCA.

· **Technical instructions (air):**

Class	Share in %
II	10.0

· **Water hazard class:** Water hazard class 2 (Self-assessment): hazardous for water.

**16 Other information:**

To the best of our knowledge, the information contained herein is accurate. However, neither Becton, Dickinson and Company or any of its subsidiaries assumes any liabilities whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

· **Department issuing MSDS:** Safety & Environment Department

· **Contact:** Technical Service Representative