



# BPD3 Blood Print Solution

## Safety Data Sheet

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

Date of issue: 03/05/2013

Revision date: 01/03/2015

Supersedes: 01/19/2011

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product form : Mixture  
Product name : BPD3 Blood Print Solution  
Product code : BPD3

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

Use of the substance/mixture : Laboratory chemical

#### 1.3. Details of the supplier of the safety data sheet

SIRCHIE Finger Print Laboratories  
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

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification (GHS-US)

Flam. Liq. 2 H225  
Muta. 1B H340  
Carc. 1A H350

Full text of H-phrases: see section 16

#### 2.2. Label elements

##### GHS-US labeling

Hazard pictograms (GHS-US) :



GHS02

GHS08

Signal word (GHS-US) :

Danger

Hazard statements (GHS-US) :

H225 - Highly flammable liquid and vapor  
H340 - May cause genetic defects  
H350 - May cause cancer

Precautionary statements (GHS-US) :

P201 - Obtain special instructions before use  
P202 - Do not handle until all safety precautions have been read and understood  
P210 - Keep away from heat, hot surfaces, open flames, sparks. - No smoking  
P233 - Keep container tightly closed  
P240 - Ground/bond container and receiving equipment  
P241 - Use explosion-proof electrical, lighting, ventilating equipment  
P242 - Use only non-sparking tools  
P243 - Take precautionary measures against static discharge  
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  
P308+P313 - If exposed or concerned: Get medical advice/attention  
P370+P378 - In case of fire: Use CO2, dry chemical, foam, water spray to extinguish  
P403+P235 - Store in a well-ventilated place. Keep cool  
P405 - Store locked up  
P501 - Dispose of contents/container to local/regional/national/international regulations

#### 2.3. Other hazards

Other hazards not contributing to the classification :

None under normal conditions.

# BPD3 Blood Print Solution

## Safety Data Sheet

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

### 2.4. Unknown acute toxicity (GHS-US)

Not applicable

## SECTION 3: Composition/information on ingredients

### 3.1. Substance

Not applicable

### 3.2. Mixture

Name	Product identifier	%	Classification (GHS-US)
ethanol	(CAS No) 64-17-5	79.2	Flam. Liq. 2, H225 Carc. 1A, H350
Hydrocarbons, C $\geq$ 5, C5-6-rich	(CAS No) 68476-50-6	15.2	Muta. 1B, H340 Carc. 1B, H350 Asp. Tox. 1, H304
nitrocellulose, conc water $\geq$ 25%	(CAS No) 9004-70-0	5.6	Not classified

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.
- First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.
- First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.
- 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 : Not expected to present a significant hazard under anticipated conditions of normal use.

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

No additional information available

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

- Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.
- Unsuitable extinguishing media : Do not use a heavy water stream.

### 5.2. Special hazards arising from the substance or mixture

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

### 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.
- 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

#### 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.

# BPD3 Blood Print Solution

## Safety Data Sheet

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

### 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

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.

### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Keep container closed when not in use.

Incompatible products : Strong bases. Strong acids.

Incompatible materials : Sources of ignition. Direct sunlight.

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

BPD3 Blood Print Solution	
ACGIH	Not applicable
OSHA	Not applicable
nitrocellulose, conc water >=25% (9004-70-0)	
ACGIH	Not applicable
OSHA	Not applicable
ethanol (64-17-5)	
ACGIH	Not applicable
OSHA	Not applicable
Hydrocarbons, C<sub>5</sub>-rich (68476-50-6)	
ACGIH	Not applicable
OSHA	Not applicable

### 8.2. Exposure controls

Personal protective equipment : Avoid all unnecessary exposure. Gas mask. High dust production: self-contained breathing apparatus. Safety glasses.



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 liquid.  
Color : Colorless  
Odor : hydrocarbon-like odor  
Odor threshold : No data available  
pH : No data available  
Relative evaporation rate (butyl acetate=1) : No data available

# BPD3 Blood Print Solution

## Safety Data Sheet

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

Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Solubility	: Soluble in water. Water: Solubility in water of component(s) of the mixture : •: •:
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Explosive limits	: 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).

### 10.3. Possibility of hazardous reactions

Not established.

### 10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Open flame. Sparks.

### 10.5. Incompatible materials

Strong acids. Strong bases.

### 10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Not classified

<b>nitrocellulose, conc water &gt;=25% (9004-70-0)</b>	
LD50 oral rat	> 5000 mg/kg (Rat)
<b>ethanol (64-17-5)</b>	
LD50 oral rat	10740 mg/kg body weight (Rat; OECD 401: Acute Oral Toxicity; Experimental value)
LD50 dermal rabbit	> 16000 mg/kg (Rabbit; Literature study)
ATE US (oral)	10740.000 mg/kg body weight

Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: May cause genetic defects. Based on available data, the classification criteria are not met

# BPD3 Blood Print Solution

## Safety Data Sheet

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

Carcinogenicity : May cause cancer.

<b>ethanol (64-17-5)</b>	
IARC group	1 - Carcinogenic to humans

Reproductive toxicity : Not classified  
Based on available data, the classification criteria are not met

Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : Not classified

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

## SECTION 12: Ecological information

### 12.1. Toxicity

<b>ethanol (64-17-5)</b>	
LC50 fish 1	14200 mg/l (96 h; Pimephales promelas)
EC50 Daphnia 1	9300 mg/l (48 h; Daphnia magna)
LC50 fish 2	13000 mg/l 96 h; Salmo gairdneri (Oncorhynchus mykiss)
EC50 Daphnia 2	10800 mg/l (24 h; Daphnia magna)
Threshold limit other aquatic organisms 1	65 mg/l (72 h; Protozoa)
Threshold limit algae 1	1450 mg/l (192 h; Microcystis aeruginosa; Growth rate)
Threshold limit algae 2	5000 mg/l (168 h; Scenedesmus quadricauda; Growth rate)

### 12.2. Persistence and degradability

<b>BPD3 Blood Print Solution</b>	
Persistence and degradability	Not established.

<b>nitrocellulose, conc water &gt;=25% (9004-70-0)</b>	
Persistence and degradability	Biodegradability in water: no data available. No (test)data on mobility of the components available.

<b>ethanol (64-17-5)</b>	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. Highly mobile in soil.
Biochemical oxygen demand (BOD)	0.8 - 0.967 g O <sub>2</sub> /g substance
Chemical oxygen demand (COD)	1.70 g O <sub>2</sub> /g substance
ThOD	2.10 g O <sub>2</sub> /g substance
BOD (% of ThOD)	0.43 % ThOD

### 12.3. Bioaccumulative potential

<b>BPD3 Blood Print Solution</b>	
Bioaccumulative potential	Not established.

<b>nitrocellulose, conc water &gt;=25% (9004-70-0)</b>	
Bioaccumulative potential	No bioaccumulation data available.

<b>ethanol (64-17-5)</b>	
BCF fish 1	1 (72 h; Cyprinus carpio)
Log Pow	-0.31 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

### 12.4. Mobility in soil

<b>ethanol (64-17-5)</b>	
Surface tension	0.022 N/m (20 °C)

# BPD3 Blood Print Solution

## Safety Data Sheet

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

### 12.5. Other adverse effects

Effect on ozone layer	:	
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.
Ecology - waste materials	:	Avoid release to the environment.

## SECTION 14: Transport information

In accordance with DOT	:	
Transport document description	:	UN1993 Flammable liquid (Petroleum ether, Ethyl alcohol) Flammable liquid, 3, II
UN-No.(DOT)	:	UN1993
Proper Shipping Name (DOT)	:	Flammable liquid (Petroleum ether, Ethyl alcohol) Flammable liquid
Department of Transportation (DOT) Hazard Classes	:	3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120
Hazard labels (DOT)	:	3 - Flammable liquid 6.1 - Poison inhalation hazard



Packing group (DOT)	:	II - Medium Danger
---------------------	---	--------------------

### Additional information

Other information	:	No supplementary information available.
-------------------	---	---

### ADR

No additional information available

### Transport by sea

No additional information available

### Air transport

UN-No.(IATA)	:	1993
Proper Shipping Name (IATA)	:	Flammable liquid, n.o.s. (Petroleum ether/Ethyl alcohol solution)
Class (IATA)	:	3 - Flammable Liquids
Packing group (IATA)	:	II - Medium Danger

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

#### BPD3 Blood Print Solution

Listed on United States SARA Section 313  
Listed on the United States TSCA (Toxic Substances Control Act) inventory

### 15.2. International regulations

#### CANADA

No additional information available

#### EU-Regulations

No additional information available

# BPD3 Blood Print Solution

## Safety Data Sheet

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

### Classification according to Regulation (EC) No. 1272/2008 [CLP]

### Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Carc.Cat.2; R45  
Muta.Cat.2; R46  
F; R11  
Xn; R65

Full text of R-phrases: see section 16

### 15.2.2. National regulations

### 15.3. US State regulations

BPD3 Blood Print Solution()	
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

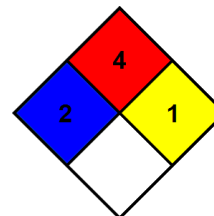
## SECTION 16: Other information

Indication of changes	: Revision - See : *.
Revision date	: 01/03/2015
Data sources	: REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labeling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.
Training advice	: Normal use of this product shall imply use in accordance with the instructions on the packaging. Keep in tightly closed container. Keep cool and dry. Avoid all ignition sources - heat, open flame, sparks. Avoid incompatible materials. Avoid dust creation and accumulation. Avoid inhalation and ingestion. Avoid contact with eyes. Wash thoroughly after handling.
Other information	: This Safety Data Sheet has been established in accordance with the applicable European Union legislation.

Full text of H-phrases:

Asp. Tox. 1	Aspiration hazard Category 1
Carc. 1A	Carcinogenicity Category 1A
Carc. 1B	Carcinogenicity Category 1B
Flam. Liq. 2	Flammable liquids Category 2
Muta. 1B	Germ cell mutagenicity Category 1B
H225	Highly flammable liquid and vapor
H304	May be fatal if swallowed and enters airways
H340	May cause genetic defects
H350	May cause cancer

NFPA health hazard	: 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention 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	: 1 - Normally stable, but can become unstable at elevated temperatures and pressures or may react with water with some release of energy, but not violently.



# BPD3 Blood Print Solution

## Safety Data Sheet

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

---

### HMIS III Rating

Health	: 2 Moderate Hazard - Temporary or minor injury may occur
Flammability	: 4 Severe Hazard
Physical	: 1 Slight Hazard
Personal Protection	: G

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.*