

## Safety Data Sheet [according to Regulation (EC) No. 1907/2006]



Version number: 5.0

Revision date: 15-MAY-2015 (supersedes all previous MSDS or SDS documents provided for this product).

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

1.1	<b>Product Identifiers</b> Product Name: Product Code:	DPX Mountant SPGY-0280-0100
1.2	<b>Relevant identified uses of the substance or mixture and uses advised against</b> Relevant Identified Uses:	Historical/Cytological Mountant. PC21: Laboratory chemicals.
1.3	<b>Details of the supplier of the safety data sheet</b> Company:	Source BioScience plc 1 Orchard Place Nottingham Business Park Nottingham, NG8 6PX Tel: +44(0)115 973 9018 Fax: +44(0)115 973 9021 E-mail: <a href="mailto:sales@sourcebioscience.com">sales@sourcebioscience.com</a>
1.4	Emergency Telephone Number:	+44(0)115 973 9018 Opening hours 08:00 – 18:00 GMT Monday to Friday English language service ONLY.

### SECTION 2 - Hazards identification

2.1	<b>Classification of the substance or mixture</b> Classification according to Regulation (EC) No 1272/2008 using the bridging principle: Flammable liquids (Category 3), H226 Skin irritant (Category 2), H315 Acute toxicity (dermal) (Category 4), H312 Acute toxicity (dust/mist) (Category 4), H332  Classification according to EU Directive 1999/45/EC: X <sub>n</sub> – Harmful, R20/21 X <sub>i</sub> – Irritant, R38 F – Flammable, R10 Additional information: None  For the full text of the H statements and R-phrases mentioned in this Section, see Section 16.	
2.2	<b>Label elements</b> Label according Regulation (EC) No 1272/2008: Hazard pictograms:  Signal word:	   Warning
	Hazard statements:  Precautionary statements:	H226 Flammable liquid and vapour. H312+H332 Harmful in contact with skin or if inhaled. H371 Causes skin irritation.  P260 Do not breathe vapours. P280 Wear protective gloves/protective clothing/eye protection/face protection. P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P304+P340

		P314 P501	Get medical advice/attention if you feel unwell. Dispose of contents/container via a licenced waste contractor.
	Supplementary Hazard		None
2.3	<b>Other hazards</b>	None	
<b>SECTION 3 - Composition/information on ingredients</b>			
3.2	<b>Mixtures</b>		
	Name	CAS No.	REACH Registration No.      % v/v
	Xylene	1330-20-7	01-2119488216-32-0000      75
	No other components need to be disclosed according to the applicable regulations.		
<b>SECTION 4 - First aid measures</b>			
4.1	<b>Description of first aid measures</b>	<p>General notes: Consult a physician. Show this safety data sheet to the doctor in attendance.          After skin contact: Wash off with soap and plenty of water and SEEK MEDICAL ADVICE.          After eye contact: Rinse with water for at least 15 minutes and then SEEK MEDICAL ADVICE.          After ingestion: Do NOT induce vomiting. Wash mouth thoroughly with water and SEEK MEDICAL ADVICE.          After inhalation: Move person into fresh air. If not breathing, give artificial respiration and SEEK MEDICAL ADVICE.</p>	
4.2	<b>Most important symptoms and effects, both acute and delayed</b>	<p>After skin contact: There may be irritation and redness at the site of contact.          After eye contact: There may be irritation and redness.          After ingestion: There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur.          After inhalation: There may be irritation of the throat with a feeling of tightness in the chest.          Delayed / immediate effects: Immediate effects can be expected after short-term exposure.</p>	
4.3	<b>Indication of any immediate medical attention and special treatment needed</b>	No data available.	
<b>SECTION 5 - Fire fighting measures</b>			
5.1	<b>Extinguishing media</b>	<p>Suitable extinguishing media:      Use water spray, alcohol resistant foam, dry chemical or carbon dioxide.          Unsuitable extinguishing media:      Standard water based foam.</p>	
5.2	<b>Special hazards arising from the substance or mixture product</b>	<p>Forms explosive air-vapour mixture.          Hazardous combustion products: Carbon oxides.</p>	
5.3	<b>Advice for fire-fighters</b>	Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.	
<b>SECTION 6 - Accidental release measures</b>			
6.1	<b>Personal precautions, protective equipment and emergency procedures</b>	<p>Use personal protective equipment – see section 8.          For large spillages evacuate area and prevent access to spillage area during clean up.          Remove sources of ignition.          Potential for vapours to accumulate to produce an explosive atmosphere.          Vapour can accumulate at low level.</p>	
6.2	<b>Environmental precautions</b>	Prevent product from entering surface or ground water drains.	

6.3	<b>Methods and materials for containment and cleaning up</b> Soak up with inert absorbent material and dispose of as hazardous waste. Clean site of spillage with water and detergent. Where appropriate use signage to indicate wet surface / a slip hazard.
6.4	<b>Reference to other sections</b> Refer to sections 8 and 13.

## SECTION 7 - Handling and storage

7.1	<b>Precautions for safe handling</b> Measures to prevent fire:  Measures to prevent aerosol and dust generation: Measures to protect the environment: Advice on general occupational health:	Do not use in close proximity to naked flame, hot surface and other potential sources of ignition. Use in a well ventilated area. Prevent entry to surface drains and ground water. Do not eat, drink or smoke whilst handling this product. Remove any contaminated clothing or protective equipment before leaving the work area. Wash hands after use.
7.2	<b>Conditions for safe storage</b> Store in a cool place away from potential sources of ignition and incompatible materials (see section 10). Keep container tightly closed. Keep away from direct sunlight. Must only be kept in original packaging.	

## SECTION 8 - Exposure controls/personal protection

8.1	<b>Control parameters</b> The following occupational exposure limit values exist for substances contained in this product according to EH40/2005 Workplace Exposure Limits (UK). Xylene – LTEL 50ppm / 220mg.m <sup>-3</sup> ; STEL 100ppm / 441mg.m <sup>-3</sup> ; Sk; Biological monitoring guidance values are available.	
8.2	<b>Exposure controls</b> Appropriate engineering controls:  Personal protective equipment:         Environmental exposure controls:	Control inhalation risk with local exhaust ventilation (LEV) appropriate for the volume being handled. When handling large volumes wear eye protection conforming to EN 166. Use natural or nitrile rubber gloves conforming to EN 374 shown to be chemically resistant to categories A. Where inhalation risk is not adequately mitigated with LEV use respiratory protective equipment either a full face mask conforming to EN 136 or valve filtering half mask to EN405 or half mask to EN140. Use type A (brown; organic gases and vapours, boiling point above 65°C) type filter conforming to EN371. Where RPE is used a face fit test should be carried out. Refer to sections 6 and 13.

## SECTION 9 - Physical and chemical properties

9.1	<b>Information on basic physical and chemical properties</b>	
	a) Appearance	Clear, colourless liquid
	b) Odour	Aromatic
	c) Odour threshold	No data available
	d) pH	No data available
	e) Melting point/freezing point	No data available
	f) Initial boiling point and boiling range	137-143°C
	g) Flash point	28°C
	h) Evaporation rate	Negligible
	i) Flammability	Flammable
	j) Upper/lower flammability or explosive limits	No data available
	k) Vapour pressure	10mmHg
	l) Vapour density	No data available
	m) Relative density	0.86 g.cm <sup>-3</sup>
	n) Solubility(ies)	Not miscible
	o) Partition coefficient (n-octanol/water)	No data available
	p) Auto-ignition temperature	No data available
	q) Decomposition temperature	No data available
	r) Viscosity	No data available
	s) Explosive properties	No data available
	t) Oxidising properties	No data available

## SECTION 10 - Stability and Reactivity

10.1	<b>Reactivity</b> Stable under recommended transport or storage conditions.
10.2	<b>Chemical stability</b> Stable under normal conditions.
10.3	<b>Possibility of hazardous reactions</b> Decomposition may occur on exposure to conditions or materials listed in 10.4 and 10.5
10.4	<b>Conditions to avoid</b> Keep away from flames, hot surfaces and other sources of ignition. Storage with incompatible materials.
10.5	<b>Incompatible materials</b> Oxidising agents.
10.6	<b>Hazardous decomposition products</b> Combustion emits toxic fumes.

## SECTION 11 - Toxicological information

11.1	<b>Information on toxicological effects</b> No test information available for this product.
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For Xylene: General information: Exposure via inhalation:	1ppm = odour threshold; 100 - 200ppm = eye, nose and throat irritation; short-term memory change; 300ppm = impairment of reaction time and short-term memory, >3000ppm = CNS depression, confusion and coma, 10,000ppm = CNS depression, lung congestion and death.
Exposure via ingestion: Acute Toxicity:	50 mg/kg = estimated fatal dose in adults. LD <sub>50</sub> Oral – Mouse – 5251 mg/kg LD <sub>50</sub> Mouse EU Method B.1 (Female mouse) – 5627 mg/kg. LD <sub>50</sub> Dermal – Rabbit - 4 hr – > 4200 mg/kg (up to 5 mls per dose). LC <sub>50</sub> Inhalation – Rat – 4hr - 29091 mg/l (vapours) LC <sub>50</sub> EU Method B.2 - Male rats; = 6700 ppm.
Skin corrosion/irritation:	Rabbit - 4 (Semi-occlusive contact) hr - primary dermal irritation index (PDI) 2.21 (Average of erythema and oedema for both intact and abraded skin). Other registered information classes xylenes as either moderately irritating or non-corrosive. Moderately Irritating. Human Skin Model Test No information available. Serious eye damage/irritation: Moderately Irritating. 0.1 ml sample; Draize system - 24, 48 and 72 hour observation periods. Average eye irritation scores; 24 hours - 5.33; 48 hours - 6.33; 72 hours - 4.67.
Serious eye damage/irritation:	Respiratory sensitisation No information available. No registered information. Skin sensitisation Mouse Xylene is not classed as a skin sensitizer, but this score indicates a very slight positive result (> 3.0) at 100% concentration. Can cause dermatitis on prolonged or repeated exposure. OECD Guideline 429 (Skin Sensitisation Local Lymph Node Assay). Stimulation Index = 3.1.
Respiratory or skin sensitisation:	Genotoxicity - In Vitro Chromosome aberration: All registered tests gave negative results. Tests on hamster ovary. Negative. EU Method B.19 Genotoxicity - In Vivo Chromosome aberration: All registered tests gave negative results. Tests on mice and rats. Negative. OECD 478 (Genetic toxicology).
Germ cell mutagenicity:	Carcinogenicity Not relevant EU Method B.32 (Carcinogenicity test). Based on evidence related to animal testing xylenes do not possess carcinogenic potential.
Carcinogenicity:	Fertility - One-generation study: Inhalation Dose Level: 0, 60, 250, 500 ppm - Rat P, NOAEC = 500ppm for systemic and reproductive toxicity. Exposure = 6 hours / day, 5 days / week, for 131 days. Development Developmental toxicity: OECD Guideline 414. Inhalation - Rat NOAEC 500 ppm. Exposure = 6 hours / day for 21 days. Foetal toxicity was observed at 1000 and 2000ppm. No teratogenic effects up to 2000ppm.
Reproductive toxicity:	STOT – single exposure: No information available. STOT – repeated exposure: OECD Guideline 408. Oral Dose Level: 0, 150, 750, 1500 mg/kg - Rat 90 day exposure. Target Organs: Liver, Kidneys.

	<p>Aspiration hazard:</p> <p>Increased liver weight (males) - LOAEL = 150 mg/kg. Increased liver weight (females) - NOAEL= 150 mg/kg. Reduction in body weight gain (males) - NOAEL = 750 mg/kg. No information available.</p>
<b>SECTION 12 - Ecological information</b>	
12.1	<p><b>Toxicity</b> No test information available for this product.</p>
	<p>For Xylene: Toxicity to fish mortality: LC<sub>50</sub> 96 hrs 2.6 mg/l Onchorhynchus mykiss (Rainbow trout) OECD Guideline 203: freshwater, static. Only read-across information available. LC<sub>50</sub> 96 hrs 7.6 mg/l Onchorhynchus mykiss (Rainbow trout) OECD Guideline 203: freshwater, static. Only read-across information available. EC<sub>50</sub> 56 days &gt; 1.3 mg/l Onchorhynchus mykiss (Rainbow trout- adult) flow through method, freshwater. NOEC value relates to mortality and behaviour. Toxicity to daphnia and other aquatic invertebrates: EC<sub>50</sub> 48 hrs 3.82 mg/l Daphnia magna, freshwater, flow through. EC<sub>50</sub> 48 hrs &gt; 3.4 mg/l Ceriodaphnia dubia, freshwater. NOEC 0.96 mg/l 7 day study period on Ceriodaphnia dubia. Freshwater, daily renewal, test on reproduction. EC<sub>50</sub> 7 and 14 days &gt; 1000 Lactuca sativa OECD Guideline 208: Emergence and Growth Test. Toxicity to aquatic plants: EC<sub>50</sub> 73 hrs 4.36 mg/l Selenastrum capricornutum OECD Guideline 201: Growth rate, static, freshwater. EC<sub>50</sub> 72 hrs 4.6 mg/l Selenastrum capricornutum OECD Guideline 201, Growth inhibition. Static, freshwater. Toxicity to microorganisms: EC<sub>50</sub> 3 hrs &gt; 157 mg/l Activated sludge OECD Guideline 209: Activated sludge, respiration inhibition test. Static, freshwater. EC<sub>50</sub> 30 mins &gt; 175 mg/l Activated sludge OECD 209: Activated sludge, respiration inhibition test.</p>
12.2	<p><b>Persistence and Degradability</b> No test information available for this product. For Xylene: Phototransformation: Air. DT50, registered values for DT50 for xylene isomers range from 23.2 hours to 2.14 days. Only read-across information available. Stability (Hydrolysis): Scientifically unjustified. Xylenes are not hydrolysed. Biodegradation: Degradation (88%) 28 days OECD 301 F (ready biodegradability), aerobic, activated sludge. Only read-across information available. Soil Degradation (50%) 13 days OECD Guideline 304A, aerobic, activated sludge. Only read-across information available. The substance is readily biodegradable.</p>
12.3	<p><b>Bioaccumulative potential</b> No test information available for this product. For Xylene: Low bioaccumulation potential. Not sufficient for classification. Bioaccumulation factor (BCF) &lt; 25.9 Onchorhynchus mykiss (Rainbow trout) 56 days, 1.3mg/l, BCF &gt;7.4 &lt;18.5, (The highest BCF of 25.9 was recorded at 0.74mg/l), freshwater, flow through. Partition coefficient: registered values for xylene isomers range from 3.12 - 3.2. Only read-across information available.</p>
12.4	<p><b>Mobility in soil</b> No test information available for this product. Fore Xylene: Evaporation will take place from the soil surface. Immiscible with water. Slightly mobile in soil. No information available on mixed xylene isomers however the substance is expected to have a low to moderate absorption based on Kow values. Adsorption/Desorption Coefficient: Soil Koc 537 20-25°C log koc = 2.73 OECD guideline 121. Henry's Law Constant 623 Pa m<sup>3</sup>/mol 25°C. QSAR calculation gives values of 623(group contribution) and 665(bond contribution). Surface tension: 28.47 mN/m 25°C Refers to m-xylene. Other quoted values; p-xylene 28.01 and o-xylene 29.76 mN/m.</p>
12.5	<p><b>Results of PBT and vPvB assessment</b> PBT/vPvB assessment is not available for this product as chemical safety assessment is not required/not conducted.</p>
12.6	<p><b>Other adverse effects</b> No data available.</p>

**SECTION 13 – Disposal considerations**

13.1	<b>Waste treatment methods</b> Use a licensed waste disposal service to dispose of this material, container washings and packaging by reclamation or incineration .
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**SECTION 14 - Transport information**

14.1	<b>UN Number</b>	1307
14.2	<b>UN proper shipping name</b>	Xylenes
14.3	<b>Transport hazard class(es)</b>	3
14.4	<b>Packing group</b>	III
14.5	<b>Environmental hazards</b>	Not applicable.
14.6	<b>Special precautions for user</b>	Warning: Flammable liquids.

**SECTION 15 - Regulatory information**

15.1	<b>Safety, health and environmental regulations/legislation specific for the substance or mixture</b> UK legislation: The Management of Health and Safety at work Regulations 1999 [SI 1999 No. 3242] (regulation 3) requires suitable and sufficient assessment of risks in the workplace. Assessment should include arrangements to so far as reasonably practical ensure the safe use, handling, storage and transport of this product. Waste product and packaging should be disposed of in accordance with the Environmental Protection Act 1990 [1990 Chapter 43].
15.2	<b>Chemical Safety Assessment</b> No chemical safety assessment has been carried out for this product.

**SECTION 16 - Other information**

Full text of H-Statements referred to under sections 2:

H226	Flammable liquid and vapour.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H332	Harmful if inhaled.

Full text of R-phrases referred to under sections 2:

R10	Flammable.
R20/21	Harmful by inhalation and in contact with skin.
R38	Irritating to skin.

The information in this Safety Data Sheet should be provided to all who will use, handle, store, transport or otherwise be exposed to this product. This information is believed to be reliable and updated at Revision Date, and represents the best information currently available and known by Source BioScience. However, Source BioScience makes no guarantee or warranty, express or implied, with respect to such information and we assume no liability resulting from its use. The information related herein is based on proper handling and anticipated uses and is for the material without chemical additions or alterations. Users should make their own investigations to determine the suitability of the information for their particular purposes.