

## SAFETY DATA SHEET

Conforms to EU Directive 91/155/EEC, as amended by 2001/58/EC - Switzerland  
English

### 1. Identification of the substance/preparation and company/undertaking

**Product name** PCS Scintillation Cocktail, 4 x 4 L

**Catalogue Number** NPCS104



**Hazard symbol or symbols**



Harmful

**Product type** Liquid.

#### Company/undertaking identification

**Supplier** GE Healthcare UK Ltd  
Amersham Place  
Little Chalfont  
Buckinghamshire HP7 9NA  
England  
+44 0870 606 1921

**Emergency telephone number**  
Swedish Poisons Information Centre :  
+46 (0)8 331 231

**Person who prepared the MSDS :** msdslifesciences@ge.com

**Switzerland** GE Healthcare Bio-Sciences GmbH  
Industriestr. 30  
CH-8112 Otelfingen

### 2. Hazards identification

The product is classified as dangerous according to Directive 1999/45/EC and its amendments.

**Classification** R10  
Xn; R20/21  
Xi; R38

**Physical/chemical hazards** Flammable.

**Human health hazards** Harmful by inhalation and in contact with skin. Irritating to skin.

See section 11 for more detailed information on health effects and symptoms.

### 3. Composition/information on ingredients

**Substance/preparation** Preparation

<u>Ingredient name</u>	<u>CAS number</u>	<u>%</u>	<u>EC number</u>	<u>Classification</u>
Xylene	1330-20-7	60 - 70	215-535-7	R10 Xn; R20/21 Xi; R38
Glycol ethers		1 - 5		Xi; R36/37/38

See section 16 for the full text of the R-phrases declared above

Occupational exposure limits, if available, are listed in section 8.



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## 4. First-aid measures

### First-aid measures

<b>Inhalation</b>	Move exposed person to fresh air. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
<b>Ingestion</b>	Wash out mouth with water. Remove dentures if any. Move exposed person to fresh air. Keep person warm and at rest. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
<b>Skin contact</b>	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
<b>Eye contact</b>	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
<b>Protection of first-aiders</b>	No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See section 11 for more detailed information on health effects and symptoms.

## 5. Fire-fighting measures

### Extinguishing media

<b>Suitable</b>	Use dry chemical, CO <sub>2</sub> , water spray (fog) or foam.
<b>Not suitable</b>	Do not use water jet.
<b>Special exposure hazards</b>	Flammable liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
<b>Hazardous thermal decomposition products</b>	Decomposition products may include the following materials: carbon dioxide carbon monoxide
<b>Special protective equipment for fire-fighters</b>	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## 6. Accidental release measures

<b>Personal precautions</b>	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).
<b>Environmental precautions</b>	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
<b>Large spill</b>	Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see section 1 for emergency contact information and section 13 for waste disposal.
<b>Small spill</b>	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor.

## 7. Handling and storage

<b>Handling</b>	Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by earthing and bonding containers and equipment before transferring
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<b>Storage</b>	material. Empty containers retain product residue and can be hazardous. Do not reuse container. Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.
<b>Packaging materials</b>	
<b>Recommended</b>	Use original container.

## 8. Exposure controls/personal protection

### Ingredient name

Xylene

### Occupational exposure limits

SUVA (Switzerland, 1/2007). Absorbed through skin. Notes: not temporary

STEL: 870 mg/m<sup>3</sup> 15 minut(e)s).

STEL: 200 ppm 15 minut(e)s).

TWA: 435 mg/m<sup>3</sup> 8 hour(s).

TWA: 100 ppm 8 hour(s).

### Exposure controls

<b>Occupational exposure controls</b>	Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
<b>Respiratory protection</b>	Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
<b>Hand protection</b>	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
<b>Eye protection</b>	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts.
<b>Skin protection</b>	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
<b>Environmental exposure controls</b>	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

## 9. Physical and chemical properties

### General information

#### Appearance

Physical state	Liquid.
Colour	Colourless.
Odour	Aromatic.

### Important health, safety and environmental information

Flash point	Closed cup: 27.2°C (81°F)
Explosive properties	Not considered to be a product presenting a risk of explosion.
Explosion limits	Lower: 1% Upper: 7%
Solubility	Not available.

## 10. Stability and reactivity

<b>Stability</b>	The product is stable.
<b>Materials to avoid</b>	Reactive or incompatible with the following materials: oxidizing materials
<b>Hazardous decomposition products</b>	Under normal conditions of storage and use, hazardous decomposition products should not be produced.



## 11. Toxicological information

### Potential acute health effects

Inhalation	Harmful by inhalation.
Ingestion	Irritating to mouth, throat and stomach.
Skin contact	Harmful in contact with skin. Irritating to skin.
Eye contact	May cause eye irritation.

### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
ylene	LD50 Dermal	Rabbit	>1700 mg/kg	-
	LD50 Intraperitoneal	Rat	2459 mg/kg	-
	LD50 Oral	Rat	4300 mg/kg	-
	LD50 Subcutaneous	Rat	1700 mg/kg	-

Conclusion/Summary Not available.

### Potential chronic health effects

Chronic effects	No known significant effects or critical hazards.
Carcinogenicity	No known significant effects or critical hazards.
Mutagenicity	No known significant effects or critical hazards.
Reproductive toxicity	No known significant effects or critical hazards.
Developmental effects	No known significant effects or critical hazards.
Fertility effects	No known significant effects or critical hazards.

### Over-exposure signs/symptoms

Inhalation	No specific data.
Ingestion	No specific data.
Skin	Adverse symptoms may include the following: irritation redness
Eyes	No specific data.
Target organs	Contains material which may cause damage to the following organs: blood, kidneys, liver, gastrointestinal tract, skin, central nervous system (CNS), eye, lens or cornea.

## 12. Ecological information

Environmental effects No known significant effects or critical hazards.

### Aquatic ecotoxicity

Product/ingredient name	Test	Result	Species	Exposure
ylene	-	Acute LC50 8.5 ppm Marine water	Crustaceans - Daggerblade grass shrimp - Palaemonetes pugio - Adult	48 hours
	-	Acute LC50 13500 to 15034 ug/L Fresh water	Fish - Bluegill - Lepomis macrochirus - 0.9 g	96 hours
	-	Acute LC50 13500 to 19200 ug/L Fresh water	Fish - Rainbow trout,donaldson trout - Oncorhynchus mykiss - 0.9 g	96 hours
	-	Acute LC50 13400 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas - 31 days - 18.4 mm - 0.077 g	96 hours
	-	Acute LC50 13300 to 16114 ug/L Fresh water	Fish - Bluegill - Lepomis macrochirus - 1.1 g	96 hours
	-	Acute LC50 12000 to 16114 ug/L Fresh water	Fish - Bluegill - Lepomis macrochirus - 1.1 g	96 hours
	-	Acute LC50 12000 to 13762 ug/L Fresh water	Fish - Bluegill - Lepomis macrochirus - 1.1 g	96 hours
	-	Acute LC50 8600 to 9591 ug/L Fresh water	Fish - Bluegill - Lepomis macrochirus - 0.9 g	96 hours
	-	Acute LC50 8500 ug/L Marine water	Crustaceans - Daggerblade grass shrimp - Palaemonetes pugio	48 hours
	-	Acute LC50 8200 to 10032 ug/L Fresh water	Fish - Rainbow trout,donaldson trout - Oncorhynchus	96 hours



-	Acute LC50 3300 to 4093 ug/L Fresh water	mykiss - 0.6 g Fish - Rainbow trout,donaldson trout - Oncorhynchus mykiss - 0.6 g	96 hours
-	Acute LC50 13500 to 16100 ug/L Fresh water	Fish - Bluegill - Lepomis macrochirus - 1.1 g	96 hours

**Conclusion/Summary** ☒ Not available.

**Conclusion/Summary** Not available.

<u>Product/ingredient name</u>	<u>Aquatic half-life</u>	<u>Photolysis</u>	<u>Biodegradability</u>
<input checked="" type="checkbox"/> Xylene	-	-	Readily

#### Bioaccumulative potential

<u>Product/ingredient name</u>	<u>LogP<sub>ow</sub></u>	<u>BCF</u>	<u>Potential</u>
<input checked="" type="checkbox"/> Xylene	3.18	24	low




**Other adverse effects** ☒ No known significant effects or critical hazards.

## 13. Disposal considerations

<b>Methods of disposal</b>	<input checked="" type="checkbox"/> The generation of waste should be avoided or minimised wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.
<b>Hazardous waste</b>	The classification of the product may meet the criteria for a hazardous waste.

## 14. Transport information

#### International transport regulations

<u>Regulatory information</u>	<u>UN number</u>	<u>Proper shipping name</u>	<u>Class</u>	<u>Packing group</u>	<u>Label</u>	<u>Additional information</u>
ADR/RID Class	UN1993	<input checked="" type="checkbox"/> FLAMMABLE LIQUIDS, N.O.S. (xylene)	<input checked="" type="checkbox"/> 3	III	<input checked="" type="checkbox"/> 	-
IMDG Class	UN1993	<input checked="" type="checkbox"/> FLAMMABLE LIQUIDS, N.O.S. (xylene)	<input checked="" type="checkbox"/> 3	III	<input checked="" type="checkbox"/> 	-
IATA-DGR Class	UN1993	<input checked="" type="checkbox"/> FLAMMABLE LIQUIDS, N.O.S. (xylene)	<input checked="" type="checkbox"/> 3	III	<input checked="" type="checkbox"/> 	-

## 15. Regulatory information

#### EU regulations

Classification and labeling have been determined according to EU Directives 67/548/EEC and 1999/45/EC (including amendments) and take into account the intended product use.

**Hazard symbol or symbols**



☒ Harmful

**Risk phrases**

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

**Safety phrases**

S36/37- Wear suitable protective clothing and gloves.

**Contains**

☒ Xylene

215-535-7

**Product use**

☒ Industrial applications.

**Europe inventory**

☒ Not determined.

#### Other EU regulations

#### National regulations



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VOC content	VOC (w/w): 65%
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16. Other information

Full text of R-phrases referred to in sections 2 and 3 - Switzerland

Full text of classifications referred to in sections 2 and 3 - Switzerland

R10- Flammable.  
R20/21- Harmful by inhalation and in contact with skin.  
R38- Irritating to skin.  
R36/37/38- Irritating to eyes, respiratory system and skin.  
Xn - Harmful  
Xi - Irritant



Indicates information that has changed from previously issued version.

History

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Notice to reader

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