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POCT-BSPS-COSHH-002

Site: RBH, ASPH, RSH, WPH and FPH	Department: POCT
Name of substance (this should include the trade name and chemical name): Radiometer SDS M3 037; 944-457 SOLUTION PACK High Volume, 944-157 ABL90 FLEX Solution pack, 944-369 ABL90 FLEX Solution Pack SP90 Ki (urea and creatinine)	Physical form (aerosol; gas; fumes; dust; liquid; powder etc) Bag 1: Gas.: 150 ml (760 mmHg / 25°C) Bags 2-7: Liquid.: 2 x 200 ml, 4 x 100 ml Bags 2-7: Liquid.: 1 x 270 ml, 1 x 280 ml, 4 x 100 ml Bag 8-9: Waste container
CAS Registration number: 7727-37-9: Nitrogen 7782-44-7: Oxygen 124-38-9: Carbon dioxide 1124-38-9: 4-Morpholinopropanesulphonic acid 2682-20-4: 2-Methyl-2H-isothiazol-3-one Acute	Additional comments:
Suppliers name: Radiometer Ltd	Suppliers contact information: Manor Court Manor Royal, Crawley Crawly, West Sussex RH10 9FY Tel: +44 (0) 1293 517599 www.radiometer.co.uk
Description of the process where chemical/substance/product is used: Solution packs are self-contained ABL90 FP reagent packs with IQC, Calibration and Rinse solution for use in the analysis of blood gas samples in acute, medical and urgent care wards across all BSPS POCT sites. The reagents are contained in pouches and segregated according to physical form and use. Bag 1 contains gases and bag 2-7 contains liquids and salts. IQC and Calibrator are automatically triggered at set intervals. Waste is self-contained and removed from the analyser for disposal when the solution packs are used up.	
Is there a safe system of work for the activity? <input checked="" type="radio"/> Yes <input type="radio"/> No	Is it possible for the hazardous substance to be substituted for a safer alternative? <input checked="" type="radio"/> Yes <input type="radio"/> No

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Safety/Risk Phrases	Hazard Classification (corrosive; environmental hazard; irritant; oxidising agent etc)	Route of entry (absorption; ingestion; inhalation; injection etc)	On each occasion quantity used:	On each occasion duration of exposure (minutes)	Frequency of exposure
Bag 1- Danger Bag 2- 7 Warning	May cause or intensify fire; oxidiser. 4-Morpholinopropanesulphonic Acid and 2-Methyl-2H-isothiazol-3-one Irritant –may cause an allergic skin and eye reaction 2-Methyl-2H-isothiazol-3-one Environment hazard to aquatic life	Absorption and inhalation	Small quantities but staff will not be in direct contact with substances as they are self-contained unless damage to pack occurs.	Staff will not be in direct contact with substances as they are self-contained unless damage to pack occurs. Sample processing takes less than a minute and maintenance varies but is less than 30minutes.	Daily. Due to the design of the product, exposure is likely to be brief and in small quantities.
Individuals/Groups exposed? Patients/Staff/Visitors/Contractor		Numbers of individuals potentially exposed. 40 POCT staff who do maintenance and engineers.			
Does the substance have a Workplace Exposure Limit (WEL)? <input checked="" type="radio"/> Yes <input type="radio"/> No		If there is a WEL, what is it? (EH40 reference information to be included i.e.) EH40/2005. Carbon dioxide 5000 ppm (9150 mg/m3) and 15000 ppm (27400 mg/m3) for 15minutes			
Likely effects on the body from the substance: Minimal effect only applies in high concentrations. Bag 1 – Contains gases that may cause or intensify fire or harmful if inhaled. Keep away from clothing and other combustible materials. Bag 2-7 –Contains liquids and salts that can cause an allergic skin and eye reaction and can be toxic to aquatic organisms if released into the drainage system. The waste pouch will contain human blood but is self-contained for biosafety.					
Controls					
Describe the existing controls in place (your description should include ventilation such natural, mechanical and LEVs; segregation; substitution to less hazardous substance; use of substance in a different form; restrict access; staff rotation etc) Due to the design of the product, exposure is likely to be brief and in small quantities. No special precautions when handling undamaged units. Staff should avoid contact with skin and eyes if packs are damaged. Pack changes are restricted to POCT staff only. Once removed from the machines the packs are disposed in sulo bins and sealed to avoid spillages if any. All POCT rooms are well ventilated.					

<p>Health surveillance: Is health surveillance required? If yes, please outline what is required and the current arrangements with Trust Occupational Health Departments.</p> <p>Not required</p>	<p>Atmospheric monitoring: Is atmospheric monitoring required? If yes, please outlined the process currently in use. Please ensure that all records of atmospheric monitoring are retained in line with recommended record retention period.</p> <p>Not required</p>																				
<p>Storage and transport:</p> <p>Unused solution packs are securely transported to all sites by Radiometer. They are kept in POCT storeroom until needed and only transported to the machine when a solution pack change is required. No special precautions when handling undamaged units.</p>	<p>Disposal:</p> <p>Disposed in UN3291 clinical waste SULO bins with a lead on. Any broken packs have collected in containers and seal securely. Due to the design of the product, exposure is likely to be brief and in small quantities.</p>																				
<p>PPE used:</p>																					
<table border="1" style="width: 100%; text-align: center;"> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Hard Hat</td> <td>Ear Prot.</td> <td>Boots</td> <td>Laboratory coat</td> <td>Dust Mask</td> <td>Respirator</td> <td>Glasses/Goggles</td> <td>Face Prot.</td> <td>Gloves</td> <td>Hygiene</td> </tr> </table>												Hard Hat	Ear Prot.	Boots	Laboratory coat	Dust Mask	Respirator	Glasses/Goggles	Face Prot.	Gloves	Hygiene
																					
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<p>Apron is preferred over lab coat. When POCT performs maintenance in Covid areas, they will need to abide with the trust policy. Therefore, a respirator mask, hat, shoe covers and gown may be required but this is not related to use of solution packs on the blood gas machine.</p>																					
<p>Emergency procedures</p>																					
<p>First Aid:</p> <p>Not relevant during normal use. In case of breakage of the packaging: Inhalation: Move into fresh air and keep at rest. Skin contact: Remove contaminated clothes and rinse skin thoroughly with water. In case of skin irritation: Seek medical attention and bring these instructions. Eye contact: Immediately flush with plenty of water for at least 15 minutes. Remove any contact lenses and open eyelids widely. If irritation persists: Seek medical attention and bring along these instructions.</p>	<p>Management of Spillages</p> <p>Extinguishing media: Use fire-extinguishing media appropriate for surrounding materials. Considering the size of the packaging, the risk is regarded as minimal. Personal precautions: Follow precautions for safe handling described in this safety data sheet. In case of breakage of the packaging: Avoid contact with skin and eyes Avoid discharge into drains, watercourses or onto the ground. Collect in containers and seal securely.</p>																				

Ingestion: Immediately rinse mouth and drink 1-2 glasses of water. Keep person under observation. If uncomfortable: Transportation to hospital. Bring along these instruction.

Initial Risk Level Assessment Is the control of the risk adequate? It is important to include more than one level of risk if the substance is used in multiple processes. Please use the risk matrix appropriate for the site you are located at.

Consequence/impact X Likelihood/probability = Insert numerical value and grade (low, medium, high) Unlikely. Risk is 4-low risk

Where risk level is identified as being high following implementation of controls has this been escalated to senior management and discussed in BSPS Health and safety meetings
Yes/No

Action plan (what additional actions are to be taken if the risk level is identified as high or very high)

Proposed action required	By Whom please include title of manager who has been informed	Action Start Date	Action Due Date	Date completed

Risk Level Assessment following additional actions:

Is the control of the risk now deemed as adequate? It is important to include more than one level of risk if the substance is used in multiple processes. Please use the risk matrix appropriate for the site you are located at.

Consequence/impact X Likelihood/probability = Insert numerical value and grade (low, medium, high)

Are the risks now adequately controlled? Yes/No

Communication and staff training:			
Induction, training, competency, SOPs, IPassport skill			
Assessor Name: Eulitty Gumunyu	Assessor Title: POCT Coordinator and H&S Officer	Date: 07/11/22	Review date: 21/11/23
Managers Name: David Baulch	Managers Title: POCT Manager	Date: 16/11/23	Review date: 21/11/23