



MULTISOL SATURATOR

Method Statement – Commission Service

Description of equipment covered by this SSoW

Salt Saturator - type Multisol

Referring To:- Peacock Service Engineer's or appointed representative who are skilled in all types of work or similar equipment as designated.

Prerequisites required

Safe working area with Water Supply: Drainage, and Mains electricity available.

Salt and Salt loading equipment / operator available from customer.

PPE: All Mandatory - Hard Hat; High Visibility Vest; High Visibility Trousers; Gloves; Safety boots; Safety goggles (EN166) as Appropriate. Additional PPE may be site specific.

Plant and Equipment – General hand-tools (screwdrivers, spanners, pliers, etc.); Multimeter; Brine Refractometer; High level access equipment if specific to site.

COSHH & Safety Data Sheets Required: MSDS 086 – NaCl Salt / Brine (attached)

Documentation Required on Site: Permit to work, Site Inductions as required by customer.

First Aid Facilities: General First Aid box located in Service Vehicle. First aid facilities and support will also be available on site and shall be identified at initial site briefing.

Contact Numbers: Peacock - 01292 292 000

SEQUENCE OF ACTIVITIES

1. Check in with appointed person as listed on the Service Enquiry Form prior to starting work. Sign log book and Work Permit (if required) Check for operators and salt loading equipment availability, and request general client assistance.
2. On arrival on the salt saturator area, carry out a visual check of the whole system noting any immediate physical issues or problems.
3. Hand tighten all pipe unions and check for fastness of pipe adhesion and presence of all O-rings / rubber gaskets. Ensure hopper dump valve is fitted to rear of saturator and is left in a closed position.
4. Establish that water connection and electrical connection have been made correctly.



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5. Connect backflow prevention tank (where applicable) and start water supply filling into saturator. Equalise flow rate of main water valve to match that of inlet flow rate.
6. Inspect water flow into top of hopper to ensure no blockages / correct operation.
7. Install dilution chamber deflection shield.
8. Request that salt is added into hopper, ensuring that the hopper is fully laden (between 5 – 8 tonnes on first fill).
9. Observe brine dilution process ensuring correct mix of salt and water.
10. Open hatch to side of tank and inspect internal tank mechanisms, ensuring correct operation of max/min float and counterweight, and inspecting orientation of function of the brine draw pipe ball check valve. Please ensure site assistance is provided during tank access.
 - NEVER ENTER THE BRINE TANK - THIS IS A CONFINED SPACE
11. When brine starts overflowing from the hopper into the storage tank, observe the flow and ensure brine flows through the concentration sensor, purging any airlocks where necessary. Check concentration reading on main control panel and adjust concentration / sensor setting where necessary.
12. When sufficient brine is stored in the main holding tank, prime the brine delivery pump using the priming cap located directly above the pump inlet (outside the cabinet). Ensure that the pump holds its prime and check for its correct impeller rotation.
13. Check all system parameters are correct, and apply any software updates as required.
14. Carry out the full check of the salt saturator unit as per related check sheet, noting all information, flow, voltage and quality readings.
15. Purge the drain pipe and purge the analyser down pipe. Purge the analyser's hydraulic circuit and proceed with calibration of the instrument.
16. Check the correct operation of the leak detection system.
17. Check all spreader connections, electric cable and sockets, hoses, connectors and valves.

ENSURE ALL WORK CARRIED OUT AT HEIGHT IS DONE SO WITH APPROPRIATE PRE-APPROVAL AND WITH TWO OPERATIVES PRESENT, UTILISING CLIENT OPERATIVE WHERE NECESSARY .



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18. Check panel's electrical socket and light.
19. Check operations and leave unit in stand by position. Dry all remaining water and do a general cleaning of the control panel. Spay all parts with water repellent.
20. Complete inspection sheet and service report. Request signature from appointed person and leave a copy on site. On the document, note all recommendations and required parts (if necessary).
21. Leave system in safe clean working state, ensuring any faulty replaced items or packaging is correctly disposed of.

Notes:

Outside of this scope of work, specific to Peacock's equipment, any site hazard or specific health and safety requirement related to the environment / location where Peacock's engineer is working, must be adequately controlled by the customer for this Method Statement/SSOW to be applicable.

Customer owes a duty of care to the Peacock engineer whilst working on their premises. This refers particularly to any out of hours or lone working situations.

All Peacock service engineers are empowered to make on site dynamic risk assessments as and when the situation dictates.

Revision:	v2.2	
Prepared by:	Andrew Manson	
Position:	Technical Manager	Date: 28/11/2016
Reviewed by:	Angus Craig	
Position:	Commercial Director	Date: 28/11/2016



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Appendix I – NaCl Salt / Brine – COSHH Assessment

COSHH Assessment - Technical Support (Saturators)

JC Peacock Company Ltd

Department: Technical



Date assessment made: 1st August 2016		Date discussed with employees: 3rd August 2016				
Step 1	Step 2	Step 3		Step 4		
Substance				Action		
Whats the hazard?	What harm, and who?	What are you doing already?	What improvements do you need?	Who	When	Cost
Sodium Chloride Salt / Brine	Skin Irritation from direct contact					
	Service Engineers	Heavy duty gloves for handling / cleaning operations. Use of spill kit	Greater control of telehandler to minimise potential salt spills			
	Contact with eyes causing irritation					
	Service Engineers	Eye Protection				
	Accidental consumption					
	Service Engineers / Site Staff	Training in order to prevent this occurring	Clear labelling of product within storage	AM	05/08/16	05/08/17
Also:		Action taken	Action needed			
Thorough examination & test - COSHH						
Supervision		Yes				
Instruction and training		Yes				
Emergency plans		Spills clearance	Practice			
Health surveillance		Skin checks				
Monitoring						
Step 5			1. Review your assessment - make sure you are not			
Review date: 1st August 2017			2. Any significant change in the work? Check the assessment and change it if necessary			
Other hazards needing attention: Cleanliness to avoid slips or trips. Manual handling.						



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Appendix Ii – NaCL Salt / Brine – Chemical Safety Data Sheet

chemical safety data sheet

IDENTIFICATION OF THE SUBSTANCE AND COMPANY

PRODUCT NAME: Sodium Chloride Brine

Address/Phone Number:

J C Peacock & Co Ltd
T/A Peacock Salt
North Harbour
Ayr
KA8 8AE
Tel: 01292 292000
Fax: 01292 292001

Emergency Phone Number:
For specialist advice in an emergency telephone

IN AN EMERGENCY DIAL 999
+44 (0)1292 292000

PRODUCT DESCRIPTION

A saturated solution of sodium chloride in water
Alternative Names: Ammonia soda quality brine; AS Brine

CAS Number: 007647 14 5

EINECS Number: 231 598 3

HAZARDOUS INGREDIENT(S) Contains no Hazardous Ingredients in accordance with EC Directive 93/112/EEC

HAZARDS IDENTIFICATION May cause irritation to skin, eyes and gastro intestinal tract.

FIRST AID MEASURES

Inhalation: Unlikely, but if necessary treat symptomatically.

Skin Contact: Wash skin with water.

Eye Contact: Irrigate with eyewash solution or clean water, holding the eyelids apart, for at least 10 minutes. If symptoms develop, obtain medical attention.

Ingestion: Vomiting is likely. Wash out mouth with water and give 200-300ml (half a pint) of water to drink. Obtain medical attention, especially if vomiting has not occurred.

Further Medical Treatment: Symptomatic treatment and supportive therapy as indicated.



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FIRE FIGHTING MEASURES

Non-combustible.

Extinguishing Media: As appropriate for surrounding fire.

Fire Fighting Protective Equipment: No special requirements.

ACCIDENTAL RELEASE MEASURES

- Clear up spillages.
- Transfer to a container for disposal.
- Wash the spillage area with water.
- Spillages or uncontrolled discharges into watercourses, drains or sewers must be IMMEDIATELY alerted to the Environment Agency or other appropriate regulatory body.

HANDLING AND STORAGE

HANDLING Avoid prolonged skin contact. Keep away from strong acids and common metals.

STORAGE Keep away from strong acids.

PERSONAL PROTECTION AND EXPOSURE CONTROLS

Wear suitable protective clothing, gloves and eye/face protection, especially if splashing or mist is likely to occur.

No occupational exposure limits assigned

PHYSICAL AND CHEMICAL PROPERTIES

Form:	Liquid
Colour:	Colourless
Odour:	Odourless
Boiling Point (Deg C):	>107
PH range	7.5-11.5



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STABILITY AND REACTIVITY

Hazardous Reactions:	Reacts with acids to yield carbon dioxide Reactions with concentrated acid will produce hydrogen chloride. Under wet conditions, will corrode many common metals, particularly iron, aluminium and zinc.
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TOXICOLOGICAL INFORMATION

This health hazard assessment is based on a consideration of the composition of the product.

Inhalation:	Mist may be irritant to the respiratory tract.
Skin Contact:	Repeated and/or prolonged skin contact may cause irritation.
Eye Contact:	High concentrations may cause irritation.
Ingestion:	May cause vomiting and diarrhoea through irritation of the gastro-intestinal tract. The swallowing of small amounts is unlikely to cause any adverse effects.
Long Term Exposure:	Repeated ingestion of excessive amounts may cause disturbance of body electrolyte and fluid balance.

ECOLOGICAL INFORMATION

Environmental Fate and Distribution	High tonnage material used in open systems. The product has no potential for bio accumulation. The product is predicted to have high mobility in soil.
Toxicity	Low toxicity to aquatic organisms, though large spillages may cause severe damage to land vegetation and organisms and to aquatic life. Effect on Effluent Treatment Concentrations sufficient to render effluent alkaline may cause damage to effluent treatment organisms.

DISPOSAL CONSIDERATIONS

Disposal should be in accordance with local, state or national legislation.

TRANSPORT INFORMATION

Not classified as dangerous for transport.

REGULATORY INFORMATION

Not classified as dangerous for Supply/Use

Important Note: The information contained in this document is given in good faith and is to the best of suppliers Knowledge correct at the date of publication, but it is for the users to satisfy themselves of the suitability of the product for their purposes.