



COSHH ASSESSMENT

AMMONIA SOLUTION

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Health Hazards :			
TOXIC BY INHALATION (MAY CAUSE RESPIRATORY SPASM) CAUSES CHEMICAL BURNS (PARTICULARLY TO MOIST AREAS OF THE BODY - EYES, SKIN, MOUTH, ETC) HARMFUL TO THE ENVIRONMENT			
Department/ Work area: Various			
Approved use: NONE – waste product resulting from purging ammonia from a refrigeration system into water.			Duration of use: N/A
Who is exposed and when? Handlers during transport of open top drums or buckets, decanting and service work.			No of People exposed? Dependant on nature of work
How is/could anyone be exposed? Inhalation of gas and Splashes of liquid to the hands, body and eyes are possible as a result of leakage during, charging, decanting, opening up a system during service work or as a result of system/container mechanical failure.			
Risk assessment: Medium Risk Providing that the following controls are followed			
Control measures	Yes	No	Description/approved type
Process enclosure		N	The product will be transported, used and transferred in a sealed system
Local exhaust ventilation		N	
Other ventilation	Y		Ensure good natural or forced general ventilation.
Method of work	Y		Use appropriate lines when purging ammonia into water. Tie them off Do not work alone during purging. In case of catastrophic leak evacuate area and implement site emergency plan. Only trained engineers with BA or emergency services to enter containment area
Personal protective equipment	Y		For purging and carrying open drums or buckets. Goggles to BSEN 166-349B Gloves - Nitrile impervious gloves to BSEN374 Approved standard issue overalls
Respirators	Y		A respirator must be to hand when purging Full face mask respirator to BS EN 136 fitted with filter cartridge type K2 P3.
Welfare	Y		Hand washing facilities must be available Eye wash must be available Drench shower or a supply of water must be available.
Hygiene	Y		Do not smoke, eat or drink whilst handling
Other			N/A
Transport: Transport by Star engineers is NOT allowed. registered waste operators are required for transport			
Storage: Keep containers:- In a cool well ventilated area, at temperatures not exceeding 50°C Away from direct sunlight, sources of heat and ignition. Heating of container may cause pressure rise with risk of explosion. Do not store adjacent to oxygen cylinders or other oxidant products.			
Spillage: - Leaks from containers:- Evacuate and ventilate area. Warn other people particularly those downwind. Isolate the leak as quickly as possible, if without risk - people dealing with major leaks must wear full protective clothing including respiratory protection e.g. BA (Not respirators). Contain spillages. Consider covering spill with foam to reduce evaporation Spillages or discharges into watercourses must be alerted to the National Rivers Authority or other appropriate regulatory body.			
First aid: Inhalation - remove patient from exposure, keep warm and at rest. Apply artificial respiration if breathing has ceased or shows signs of failing. Obtain medical attention. Skin contact - drench with large quantities of water. Remove contaminated clothing. Continue to wash the affected area for at least 15 minutes. Obtain medical attention. Eye contact - immediately irrigate with eyewash solution or clean water, holding the eyelids apart, for at least 15 minutes. OBTAIN IMMEDIATE HOSPITAL MEDICAL ATTENTION. Continue irrigation until medical attention can be obtained.			
Fire fighting measures: Ammonia solution is non-combustible however concentrated ammonia vapour is and may be released from the solution during a fire therefore the following is as for ammonia vapour: Extinguishing media - Foam, dry powder or carbon dioxide. Water spray may only be used to knock down escaping vapour (water poured onto pools of liquid ammonia may result in a violent reaction) Move cylinders away or keep them cool by spraying with water from a protected position if exposed to fire. Self contained breathing apparatus and suitable protective clothing must be worn in fire conditions.			
Disposal of packaging and unused substance: Ammonia solution is a waste product and must be disposed of by special means and classed as controlled waste.			

Manufacturer/supplier:	
Terra Nitrogen (UK) Ltd PO Box 81 Billingham TS23 1XT	Tel 01642 550022 Emergency Tel 01642 452461
Substance: Ammonia Solution	
Data sheet ref:	



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N/A		
Hazardous components:	Anhydrous Ammonia	
Risk No and phrase:	R10 - Flammable, R23 - Toxic by inhalation, R34 - causes burns, R50 very toxic to aquatic organisms	
Safety No and phrase:	S7/9 - Keep container tightly closed and in well ventilated place. S16 - keep away from sources of ignition - No smoking. S26 - in case of contact with eyes, rinse immediately with plenty of water and seek medical attention. S36/37/39 - wear suitable protective clothing, gloves and eye/face protection. S45 - in case of accident or if you feel unwell, seek medical advice immediately (show label where possible). S61 - Avoid release to environment S1/2 - keep locked up and out of reach of children	
EEC Labelling Classification :	Very toxic (<input type="checkbox"/>) Toxic (Y) Irritant (<input type="checkbox"/>) Harmful (<input type="checkbox"/>) Corrosive (<input type="checkbox"/>) Flammable (<input type="checkbox"/>)	
OEL:MEL	N/A or OES 25 ppm 8hr TWA 35 ppm 15 minutes	
<u>Sections below to be completed and signed by the Site/Service/Branch Manager issuing the Assessment</u>		
Site:		
Plant Details:		
Description of Work:		
Duration of Work:		
IS exposure likely to be significant in normal use? (ie is the OES being exceeded or is there otherwise a risk to health)	Yes(<input type="checkbox"/>)	No(<input type="checkbox"/>)
Is sampling necessary to establish this?	Yes(<input type="checkbox"/>)	No(<input type="checkbox"/>)
If so has this been done, by whom, and with what result?		
Are control measures adequate to control exposure? If not what further action is required?	Yes(<input type="checkbox"/>)	No(<input type="checkbox"/>)
By whom?	Date action complete:	
Are all specified controls in use?	Yes(<input type="checkbox"/>)	No(<input type="checkbox"/>)
Who checks on this?.....		
When?.....		
Who takes follow up action?.....		
Non-Disposable Respirators require maintenance; who carries this out?		
	Engineers	
Has information/instruction/training been given to employees?	Yes(<input type="checkbox"/>)	No(<input type="checkbox"/>)
Any other comments:		
Assessor:	Date:	Date for review:
Manager:	Date:	