

## RISK ASSESSMENT - Document N° PRHS RA01 Rev 09

PROJECT	Generic Assessment for Standard Operations	DATE	January 2017
CUSTOMER / SITE DETAILS	TBC		
OPERATION / TASK	<b>Use of Refrigerant Gases / Liquids</b>		

HAZARD IDENTIFIED	
1.	High pressure in refrigeration systems and cylinders.
2.	High concentrations can cause asphyxiation by exclusion of air / oxygen
3.	Freeze burns if liquid refrigerant contacts skin or eyes
4.	Toxicity
5.	Injury to operatives when moving cylinders
6.	Fire / Burns when using flammable hydrocarbon refrigerants (Care / Propane / Isobutane)

PERSONS / GROUPS AT RISK ! = Before control measure taken. + = After control measures implemented.		DEGREE OF RISK		
		Low	Med	High
a.	Operatives		+	!
b.	Others within 10 metres	+	!	
c.	Others within 50 metres	+	!	

MEASURES NECESSARY TO ELIMINATE OR CONTROL RISK <b>If you are doing this task, simply make sure you do the following.</b>	GROUP	HAZARD
Suitably qualified / competent personnel only to work with refrigerant gases. <i>City &amp; Guilds 2079 Refrigerant Handling or CITB equal for HCFC / HFC's. City &amp; Guilds 6187-21 or BOC Care for Hydrocarbon Refrigerants.</i>	a.	1.2.3.4.6.
Keep away from sources of heat / ignition, no smoking advised.	a.b.c.	1.3.4.6.
Condition of cylinders to be visually checked before use.	a.	1.2.3.4.6.
Type of refrigerant in system to be verified before adding refrigerant.	a.	1.2.3.4.6.
Cylinders should be clearly marked indicating substance and max fill weights.	a.b.	1.2.3.4.6.
Ensure adequate ventilation to working area.	a.b.	2.4.6.
Standard Personal Protective Equipment must be worn (inc eye protection).	a.	All
All cylinders to be correctly labelled and identified.	a.	All
Where possible trolleys to be used to move refrigerant cylinders.	a.	5.
Where possible small / dumpy refrigerant cylinders to be used.	a.	5.
Cylinders to be stored / fixed correctly for transportation.	a.	1.2.3.4.6.
Cylinders to be stored correctly in specific areas with sufficient ventilation.	a.b.	1.2.3.4.6.
Quantity of refrigerant stored to be kept to a practical minimum.	a.b.	1.2.3.4.6.
Where possible restrict access to work area to operatives only.	b.	1.2.3.4.6.
Check condition of service manifold, gauges and lines before use.	a.b.	1.2.3.4.6.

ADDITIONAL INFORMATION	<b>Environmental legislation, inc (EU) 517/2014 Revised F-Gas Regulation, to be strictly adhered to at all times. Also refer to any Project Specific Procedures in the Site Safety File or any Site Specific Rules regarding refrigerant use.</b>		
ASSESSED BY	Dean Clackett	ACTION BY	All Engineering Staff