

OKHC – Refrigeration systems/heat pumps with flammable refrigerants



Schedule – CW xx/20xx

Training leadership: N.N.

Day 1

09:00	N.N.	<p>Welcome, general remarks</p> <p>Motivation for usage of hydrocarbons und A2L-refrigerants <i>F-Gas Regulation, effects of synthetical refrigerants to the environment</i></p> <p>Applications and characteristics of different flammable refrigerants, safety-related basics</p> <p><i>types of hydrocarbons and A2L-refrigerants, characteristics of the hydrocarbons and A2L-refrigerants, flammability, behaviour of hydrocarbons in air, comparison of hydrocarbons and A2L-refrigerants, installation instructions, comparison of capacity and efficiency with synthetical refrigerants, oil-solubility, foaming-behaviour of oils, optimized superheat, crankcase heater, applications</i></p>
10:00	Coffee break	
10:10	N.N.	<p>Continuation</p> <p>Applications and characteristics of different flammable refrigerants, safety-related basics</p> <p>Hazard potential of refrigerants and refrigeration systems <i>pressures, frostbite, risk of explosion, flammability, toxicity, suffocation, EN 378 - safety-groups of refrigerants, critical gas concentrations, gas detectors, ventilation, toxic degradation/fission products, personal protective equipment, respiratory protection, first aid measures, handling and storage of refrigerant containers</i></p>
11:00	Coffee break	
11:10	N.N.	<p>Continuation</p> <p>Hazard potential of refrigerants and refrigeration systems</p>
12:00	Lunch break	
12:45	N.N.	<p>Continuation</p> <p>Hazard potential of refrigerants and refrigeration systems</p> <p>Handling of flammable refrigerants <i>safety precaution, decommissioning of a system, procedure of refrigerant recovery, draining of refrigerant, flushing the system, opening the system and related safety measures, tightness test, evacuation, charging refrigerant, equipment for maintenance, special components and their features</i></p>
13:50	Coffee break	
14:00	N.N.	<p>Continuation</p> <p>Handling of flammable refrigerants</p> <p>Legislation and standards <i>risk assessment, hazard assessment, ATEX, refrigerant charge and room size, EN 378 etc.</i></p>
15:10	Coffee break	
15:20	N.N.	<p>Continuation</p> <p>Legislation and standards</p>
16:15	N.N.	<p>Open questions, farewell</p>
16:30	End of training	