



SERVICE BULLETIN

Title: Synthetic Oil

Models Affected: 17 and 19 Series Centrifugals

Number: C9304

Date: 2/9/93

Supersedes: None

Date:

Purpose:

This bulletin includes information on a synthetic oil that can be used in place of the mineral oils that have been used in 17/19 DK, CB, EB, FA type chillers operating with CFC-11, 113, 114, 12 and CFC/HFC-500.

File: Compressor, Motor, Gears

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Information:

An inhibited alkali-benzene based synthetic oil has been qualified to replace certain mineral oils. This oil can operate for longer periods and in more extreme conditions than mineral oils before breaking down. It has operated for three to four years in a group of test chillers doing water chilling duty with no deterioration.

Recommendation:

This synthetic oil may be used to extend the time between oil changes or if severe operating conditions are causing break down of mineral oils.

When this oil is used in conjunction with 'Oil Sense,' and checked annually by a laboratory to make sure it is within specs, it is possible to leave the oil in a clean and dry compressor for three to four years.

It is available from RCD in 5 gallon cans, p/n PP23BZ105. This oil can be used in place of mineral oils p/n PP23BB-005 and PP23BB-006 in both gear driven and direct drive compressors.

Note: Do Not Use This Oil In HCFC-22 Or HFC-134a Chillers.

*Tables For Synthetic Oil Production and Performance Requirements on Next Page.

Table 1 — Synthetic Oil

CARRIER P/N (5 GALS.)	PP23BZ-105
CARRIER SPEC. NO.	PP49-8 (1)

Note: (1) This specification covers an inhibited alkali-benzene based synthetic compressor oil.

The synthetic compressor oils are hygroscopic so containers should be kept tightly sealed in a clean and dry environment to prevent moisture absorption from air.

Table 2 — Performance Requirement

ISO VISCOSITY GRADE		68
SPECIFIC GRAVITY,API		.865-.882
VISCOSITY	SUS at 100F	275-325
	SUS at 210F	42-50
	cST at 40F	52-62
	cST at 100F	5.3-6.3
FLOC POINT, F (C)		-60 (-51.1)
POUR POINT, AMX. F (C)		-30 (-34.4)
FLASH POINT, MIN, F (C)		347 (175)
MOISTURE CONT. MX. PPM		45