

CHEVRON VARTECH[™] INDUSTRIAL System Cleaner

PRODUCT DESCRIPTION

Chevron VartechTM Industrial System Cleaner (ISC) is a deposit cleaning product added directly to the oil in use during operation in order to clean a system of varnish and sludge deposits before a scheduled oil change. It helps prepare the system for optimum performance prior to a new, fresh oil change.

CUSTOMER BENEFITS

Chevron Vartech ISCTM delivers value through:

- Stabilizes varnish and sludge surface deposits in the oil to enable their efficient removal through a scheduled oil change, restoring system operational efficiency
- Being solvent free, reducing volatility and seal compatibility concerns.
- Minimal filter plugging
- Excellent compatibility with many compressor and turbine oil products (mineral and synthetic hydrocarbon based)
- Retains oxidation control performance
- Excellent seal compatibility
- Extended cleaning duration times are possible
- Minimal flushing

INSTRUCTIONS FOR USE

Chevron Vartech ISC is added directly to the in-service lubricating oil. If the current oil is severely deteriorated, it is recommended the degraded oil be drained, and the cleaner added to a new fill of recommended oil.

- 1. Determine the amount of cleaner required and the proper duration (see chart below).
- 2. Install a fresh set of filters to maximize varnish and deposit collection.

- 3. Ensure additional filters are available for the system as filter changes may be required due to release of varnish and deposits.
- Ensure system does not exceed maximum fill levels when adding the system cleaner; if needed, drain adequate volume of oil to maintain proper operating volume.
- Add Chevron Vartech ISC to the system, up to the chosen concentration (by Vol %). Ideally while oil is circulating.
- 6. Operate the equipment as normal for the chosen duration and monitor filters for increased differential pressure; replace as required.
- Drain the oil/cleaner mixture from the system while the oil is still warm (safe handling temperatures) and recently circulated. When possible, drain as many locations in the system where oil may get trapped (i.e. filter housings, coolers, piping, de-gassing tanks, etc.).
- 8. When possible, manually clean any accessible settled deposits and oil from reservoir after drain.
- 9. System rinse* is recommended when any of the following exist:
 - Complete drain is not possible (approx. < 10% remains)
 - Extremely degraded in-service oil
 - Severe deposits in the system
- 10. Replace filters.
- 11. Refill the system with Chevron lubricant per OEM specifications.

*Rinse oil should be compatible with final fill oil. Contact your Chevron representative with any additional questions or concerns.

Product(s) manufactured in the USA.

Always confirm that the product selected is consistent with the original equipment manufacturer's recommendation for the equipment operating conditions and customer's maintenance practices.

A Chevron company product

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FEATURES

Chevron VartechTM Industrial System Cleaner (ISC) is ideal for use in concentrations between 5% to 20% of the total oil volume in the system. It is designed to be effective under normal operating temperatures, not to exceed 120°C (250° F).

System condition	Recommended Concentration (Vol %)	Recommended Duration*#
Reconditioning Maintenance	5% - 10%	1 - 7 days
Heavy Deposit Removal / Deeper System Cleaning	10% - 20%	7 - 30 days

*Extended times beyond times listed above are possible. Contact your Chevron representative for additional guidance and information.

#Lower operating temperatures generally benefit from longer circulation times.

TYPICAL TEST DATA

ISO Grade	Test Method	
Product Number		223000
SDS Number U.S.		51900
API Gravity	ASTM D4052	29.2
Density at 15°C, kg/L	ASTM D4052	0.8803
Viscosity, Kinematic cSt at 40°C cSt at 100°C	ASTM D445	53 7.7
Viscosity Index	ASTM D2270	110
Flash Point, COC, °C(°F)	ASTM D92	146(295)
Fire Point, COC, °C(°F)	ASTM D92	264(507)
Pour Point, COC, °C(°F)	ASTM D5950	-17(-1)
Color	ASTM D1500	<1

Minor variations in product typical test data are to be expected in normal manufacturing.

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