

ERG UNIVERSAL FLUSHING AGENT
PROCEDURES

- ERG UFA is a high quality flushing 'fluid' that will remove old oil, oxide particles, acids, solids. The additives in UFA coat the tubes during flushing eliminating the white oxides that were experienced with R11, R141b etc.
- It should be noted that ERG UFA will NOT remove water from systems – water should be removed by cracking joints, disconnecting components (at the low points in the system).
- Gloves and goggles should be worn when using ANY flush.
- Flushing using ERG UFA – Split Systems. It is always advisable with split systems to separate the components – especially if the system has a hermetic compressor, these would have to be removed from the system and hand flushed, pouring fluid flush into the suction and discharge ports, manually agitating, pouring out and vacuuming.
- Flushing using ERG UFA – Auto Air Conditioning. To properly flush car airconditioning the system should be partially dismantled, the compressor should be disconnected, the filter drier must be removed (do not re-use the filter drier – always fit a new one). The expansion device should also be removed.
- Flushing using ERG UFA – Larger Units/Chillers etc.
- Compressors should have all the old oil removed before flushing, and filled with new oil after the initial flush and vacuum.
- TX valves, Filter driers, oil separators, liquid receivers and suction accumulators should all be removed and flushed separately.
- Gloves and goggles should be worn.

HEALTH & SAFETY

Based on available toxicology information, ERG 1000 and ERG UFA has little potential adverse health effects when properly handled and used. No special precautions are suggested for ERG 1000 beyond attention to good personal hygiene, including avoiding prolonged repeated skin contact. ERG UFA is a moderate eye and skin irritant, therefore impervious gloves and chemical goggles should be worn. Approved respiratory equipment must be used when high vapour or mist concentrations exceed applicable standards. For additional health and safety information on these products, including Material Safety Data Sheets, please refer to our website or contact us.

QUALITY ASSURANCE

All ERG products are manufactured, packed and labelled to comply with stringent quality and safety standards. They are guaranteed to perform it's designed task to the highest standards. ERG 1000 is also manufactured to international ISO 9002 standards and are reliable and trouble free with an extended service life unequalled by any other product.

WARRANTY

All ERG products mentioned within this product brochure are guaranteed, subject to correct use and application from the date of purchase. Please refer to the Material Safety Data Sheets for each product.

VISIT OUR WEBSITE

Visit www.erg1000.com for full technical documentation on all our products including safety test reports, miscibility reports, Test Data and Material Safety Data Sheets.

For more information, contact us on +61 3 9732 0265 or via email on info@erg1000.com



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PRODUCT RANGE

ERG 1000

ERG UFA



Energy Resources Group
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Available from:

DISCLAIMER: Whilst the utmost care has been taken in the compilation and production of this manual, ERG take no responsibility for any errors or inaccuracies incurred during the arrangement of the information contained in this manual.

ERG 1000

COMPATIBILITY

ERG 1000 is the ideal lubricant for maximum efficiency in all applications. They can also be safely used in all systems, with all refrigerants including: R11, R12, R13b, HCFC-22, R123a, HFC-134a, R404A, R401a, R502, R22, R400+, R717 (ammonia), R600a (isobutane) and R290 (propane).

VIRTUALLY NON-HYGROSCOPIC

Moisture reduces lubrication performance, and ice may form at low pressure points. Moisture also reacts with the refrigerant gas creating acid which attacks components, motor windings and generally shortens the life of the compressor. ERG 1000 is virtually non-hygroscopic, which means parts will have longer life and need fewer oil changes.

NON-TOXIC

Unlike other oils, ERG 1000 is non-toxic.

This makes the product easy to handle and either re-cycle or dispose of. With an international movement to making the workplace safer - it has to be common sense to use safe non-toxic products.

OUTSTANDING BENEFITS & ADVANTAGES

- Improved wear protection
- Virtually non-hygroscopic
- Improved system efficiency
- Non toxic
- Ideal vacuum pump oil
- Prevents oil deposit formation in low temperature systems
- Reduces discharge valve deposits and improves compressor efficiency
- Very low pour point, zero wax content
- High viscosity index and high temperature stability
- Greater chemical stability in the presence of refrigerants
- Low volatility and low solubility for refrigerants such as R12 & ammonia.
- Compatible with all commonly used refrigerants
- Compatible with most refrigeration and air conditioning applications
- Miscible with all other refrigerant oils
- Does not affect commonly used O Rings, Gaskets or Seals
- Does not combine with moisture to cause internal corrosion in fluorocarbon systems



ERG 1000 Synthetic Refrigerant Oil is fully supported by laboratory analysis services in the event of system or oil contamination causing system failure. The security of this feature is a valuable resource for production line research and development, with particular emphasis in Quality Assurance.

SUITABLE FOR ALL APPLICATIONS

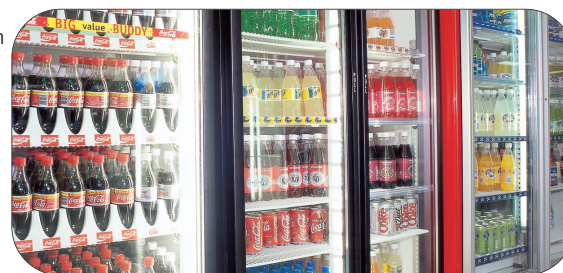
ERG Synthetic Refrigerant Oils are suitable for reciprocating compressors with very high operating temperatures, suitable for screw compressors, and for use with systems incorporating very low evaporator temperatures. They are compatible with other synthetic and mineral oils and are compatible with all commonly used refrigerants, including ammonia.

ERG 1000 is universally suitable for almost every type of refrigeration and air conditioning system. Suitable for use with all known refrigerant types and all temperature ranges. ERG 1000's versatility is therefore seen as a major benefit in plant rooms where several different types of plant operate at different temperature ranges or on different gases, as it eliminates the possibility of incorrect oil choice and the resultant damage to equipment.

ERG 1000 is suitable for use in all motor vehicle air conditioning applications. Compatible with all commonly used lubricants and refrigerant types, also with all modern seal, gasket and hose materials; ERG 1000 is the ideal oil for service applications. ERG 1000 is non-hygroscopic giving you confidence that it will not carry moisture into systems where it can combine with fluorocarbon molecules to cause rapid corrosion. ERG 1000 also prevents seal deterioration which is often a factor in R134a systems.

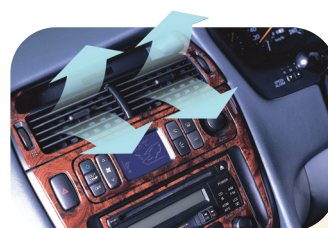
ECONOMICAL

ERG UFA and ERG 1000 have a unique formula to minimise oil logging of heat exchangers, maximising heat rejection, improving system efficiency and reducing energy costs.



The World's Most Advanced Refrigerant Oil

ERG 1000 Premium Synthetic Refrigerant Oil is an advanced synthetic lubricant developed specifically for refrigeration and air conditioning compressors. It is specifically formulated to optimise system efficiency and service life under conditions that are beyond the capabilities of other synthetic or mineral oils. ERG 1000 is labelled "The Worlds Most Advanced Refrigerant Oil" and is a unique product with distinct advantages when compared with any other oil.



A Superior Synthetic Refrigeration Oil

ERG 1000 Synthetic Refrigerant Oil is a fully synthetic industrial lubricant developed specifically for auto air conditioning compressors. It is especially formulated for severe service under conditions that are beyond the capabilities of conventional mineral oils. It is compatible with all commonly used refrigerants, and does not absorb moisture. Ideal replacement for Polyolester (POE) and Polyalkyleneglycol (PAG) lubricant, and superior to both.

Available in 1, 4 and 10 litre containers.



UNIVERSAL FLUSHING AGENT

SUITABLE FOR ALL APPLICATIONS

ERG UFA is used for internally cleaning all refrigeration or air conditioning system components or pipe work. It may also be used as a fluid for cleaning of parts by immersion. This product replaces toxic and environmentally unacceptable products such as HCFC 141B, CFC R11 and other commercial solvents. Also suitable for flushing auto trans coolers, hydraulic systems and other industrial flushing or cleaning applications.

COMPATIBLE WITH ALL REFRIGERANTS

ERG UFA is compatible with modern O ring and seal materials. It is compatible with all refrigerants and lubricants commonly in use and has no effect on motor winding varnishes or hermetic assembly lacquers. As no residue is left inside the system after the system has been on high vacuum for one hour, no dilution of refrigerant oil can occur. There are, consequently, no residues to contaminate refrigerants.

BENEFITS & ADVANTAGES

ERG UFA is compatible with all refrigerants and commonly used lubricants, modern O Ring and Seal materials. ERG UFA does not leave residue inside system, therefore preventing dilution of refrigerants and oils. ERG UFA is simple and clean to use. UFA can be delivered into systems using hand pumps suitable for use with solvents, agitated and pushed through systems using dry air or dry nitrogen. This process assists with evaporating residue prior to re-assembly.

SPECIFICATIONS

ERG UFA is a fast evaporating, light aliphatic petroleum fluid with specific additives. It is blended to a precise formula, which makes it a perfect flushing solvent suitable for all applications.

FLUSHING SYSTEMS

Used 100% by volume under pressure through the heat exchangers and pipework of air conditioning or refrigeration plant with TX Valve, orifice, or Capillary bypassed, and with filter receiver drier removed. The compressor should be flushed separately to the rest of the system. Each of the above components should be isolated or replaced with flushing blocks.

SERVICING PLANT BY FLUSHING

Usually required after compressor failure, system contamination through ingress of moisture, the use of incorrect lubricating oil, or the need to change from one lubricant to another if required by change of refrigerant type.

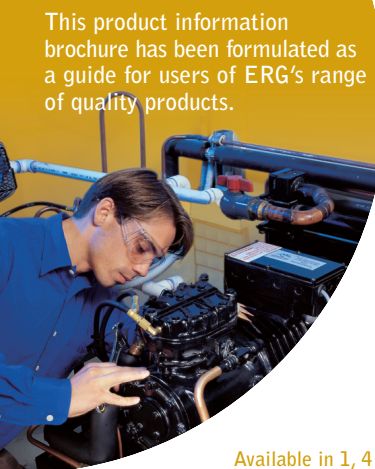
It should be noted that in the event of major service on refrigeration or air conditioning plant, the plant manufacturer may recommend flushing all components after a recommended number of hours or years of service. At which time, the manufacturer may require replacement filters, receivers, seals, bearings, valves or control components. The system manufacturer's recommendations should always be considered.

ERG UFA

The World's Most Advanced Flushing Agent

ERG UFA is a liquid flushing agent, which dissolves gummy oil oxidation products and loosens insoluble materials in refrigeration and air-conditioning systems and compressors. It is non-corrosive and acts as an effective corrosion inhibitor to protect bare metal surfaces. Flammability precautions are recommended; boiling temperature of 55°C, it is a fast evaporating solvent, which evacuates from systems quickly under vacuum. It's low viscosity and solvency increases the effectiveness of the flushing procedure. The principle additive is designed to increase the products ability to dissolve gummy oil oxidation products and loosen insoluble materials inside heat exchangers, pipes and housing.

Available in 5 and 20 litre containers.



Available in 1, 4 and 10 litre containers.

