

WELDGRADE OXIDATION INHIBITOR

High-Efficiency Anti-Oxidation Agent for Copper Pipe Brazing

1. PRODUCT OVERVIEW

FUKKOL WELDGRADE Oxidation Inhibitor (No. 11883) is a high-performance, non-alcohol oxidation prevention agent specifically formulated for HVAC and refrigeration technicians. During copper pipe welding and brazing, high temperatures cause rapid oxidation inside the pipe walls, creating scale that damages compressors and valves. FUKKOL WELDGRADE utilizes a heat-induced chemical formulation that generates an inert protective gas barrier inside the pipe during heating. This effectively prevents internal oxidation, replaces traditional bulky nitrogen purging setups, and guarantees high-quality solder joints.

2. KEY BENEFITS & FEATURES

- Non-Alcohol Advanced Formula:** Safe, high-purity formulation that resists severe internal copper oxidation under intense torch heating without leaving harmful residue.
- Heat-Activated Gas Protection:** Converts under heat to produce an internal protective gas shield that completely displaces oxygen during soldering.
- Nitrogen Purging Replacement:** Eliminates the need for nitrogen gas tanks, regulators, and purging equipment during field installations and repairs.
- Formicary & Pitting Corrosion Defense:** Formulated with anti-corrosion chemistry to safeguard copper tube walls against pitting and formicary corrosion.
- Precision 4-Way Metering Nozzle:** Equipped with a 4-way spray nozzle and metering valve for precise application, controlled viscosity, and optimal agent delivery.

3. REFRIGERANT COMPATIBILITY

Tested and verified 100% safe and compatible with all modern HFC, HCFC, and natural refrigerants:

R-22 R-32 R-407C R-410A R-404A
R-134a R-600a R-290 R-1234yf

CERTIFICATIONS & COMPLIANCE

RoHS Compliant No CFCs / ODP Free
MSDS Available GB/T8132-2015

4. TECHNICAL SPECIFICATIONS

Product Code	No. 11883
Chemical Type	Non-Alcohol Heat-Activated Anti-Oxidation Agent
Net Volume / Weight	300 ML (6.36 fl. oz / 180g)
Dispensing System	Metering Valve with 4-Way Spray Nozzle
Executive Standard	GB/T8132-2015
Shelf Life	5 Years (Unopened)
Origin & Quality	Japan Formula Formulated & Distributed under license by Kalen International Ltd.

SAFETY PRECAUTIONS & HANDLING GUIDELINES

- **Flammable Aerosol Warning:** Pressurized container. Do not expose to heat, sparks, open flame, or temperatures exceeding 120°F (49°C). Do not puncture or incinerate container.
- **First Aid (Eye/Skin):** Avoid contact with eyes and skin. In case of eye contact, flush with water immediately for 15 minutes and seek medical attention. Wash skin with soap and water.
- **Inhalation & Ingestion:** Use in well-ventilated areas. If swallowed, **do not induce vomiting** — call a physician or poison control center immediately. Keep out of reach of children.
- **Storage:** Store upright in a cool, well-ventilated area. Do not leave inside vehicle interiors under direct sunlight.

KALEN FINE CHEMICAL (THAILAND) LTD. / KALEN INTERNATIONAL LTD.

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Industrial Lubricants & Precision Chemical Specialties

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