



VACUUM TECHNOLOGIES, INC.

MATERIAL SAFETY DATA SHEET

Scale-eX

Descaling compound for water-sealed liquid ring pumps and systems

PRODUCT INFORMATION:

DEKKER PART No's: 5235-0010-000 (1 gal) - 5235-0050-000 (5 gal) - 5235-0550-000(55 gal)

CHEMICAL NAME: Hydrogen chloride, aqueous. CHEMICAL FAMILY: water scale solvent.

FORMULA: proprietary.

COMPONENTS AND HAZARD STATEMENT:

This product is an aqueous organic salt solution and as such should **not** be considered **hazardous** under normal use conditions. This product is considered **non-hazardous** under OSHA 29CFR 1910.1200-1500.

Note: Laboratory tests indicate material to be **bio-degradable**. **USDA approved** for use in **beverage, pharmaceutical, bottling, poultry and other food processing plants**. USFDA has no jurisdiction over this product, since it never comes in direct contact with food.

HANDLING, PROTECTION, HEALTH HAZARD DATA AND FIRST AID:

TOXICITY: Should **not** be considered **hazardous** when used as directed.. Material is an aqueous organic salt solution and as such has little vapor pressure and **no noxious fumes** (threshold limit value: none for total).Use in **well ventilated area** with local exhaust. Adverse effects on human health are not expected from the Scale-eX solution, based upon 60+ years of use without reported adverse health incidence in diverse population groups, including extensive use in the U.S. Armed Forces.

DO NOT TAKE INTERNALLY. If ingested: DO NOT INDUCE VOMITING, drink milk, egg whites, etc. as directed by physician.

AVOID CONTACT WITH SKIN AND EYES. Protective **gloves recommended**, such as neoprene gloves, especially for prolonged exposure. **Upon contact with skin, wash with lots of water. Eye/face protection: goggles or safety glasses recommended. In case of contamination: flush eyes with water for 15 minutes and consult physician.** Wear apron to protect clothing.

OTHER PRECAUTIONS: do not circulate material for more than a 6 hour period without consulting the manufacturer. Most Scale-eX **cleaning can be accomplished in 2 - 4 hours.** Please **use material only as directed. Do not heat. Use Sale-eX at an ambient temperature. Vent circulating solution to atmosphere. Do not pressurize circulating solution or elevate temperature above 180°F.**

STORAGE, SPILL OR LEAK PROCEDURES AND WASTE DISPOSAL METHOD:

STORAGE: Preserve integrity of container and keep container tightly sealed when not in use. Maintain temperature of material between **10° - 180°F.** Material is not affected by freezing.

IN CASE OF SPILL: Rinse with copious amounts of water to dilute; sodium bicarbonate may also be used to soak up and neutralize liquid if necessary.

DISPOSAL: Expended or used material may be **disposed of down sewer system** with water flush. Material is **bio-degradable**, even as received.

PHYSICAL DATA:

Appearance: dark liquid. **Odor:** roasted almonds. **Boiling point:** 214°F. **pH:** unreadable, generally below 3

Vapor pressure: 30 Torr. **Vapor density (air = 1):** greater than 1 **Specific gravity (water = 1):** 1.045.

Volatiles: 99.6% by volume. **Solubility in water:** miscible. **Evaporation rate (butyl acetate = 1):** slow.

REACTIVITY DATA:

Stability: stable. **Hazardous polymerization:** will not occur. **Incompatible materials:** strong caustics.

Conditions to avoid: excessive heat.

Hazardous decomposition products: none.

FIRE AND EXPLOSION HAZARDS:

Flash point: no flashpoint, extinguishes flame.

HMIS ratings: Health: 0 - Flammability: 0 - Reactivity : 0. - Personal protection: B.

Extinguishing media: does not support combustion.

Unusual fire and explosion hazards: non-combustible or explosive, breathing apparatus recommended.

Special fire fighting techniques: none, water will control, as will CO₂ and dry chemicals.

The information in this material safety data sheet should be provided to all who use, handle, store, transport, or are otherwise exposed to this product. DEKKER VACUUM TECHNOLOGIES, INC. believes the information in this document to be reliable and up to date as of the date of publication, but makes no guarantee that it is.