



Dagger

DESCRIPTION

Black Swan's Dagger is a scientifically blended formulation of hydrochloric acid, metal corrosion inhibitors and a strong anti-foam suppressant. Can be used to dissolve rust, scale and lime deposits on equipment, and piping of plumbing, heating, processing, airconditioning and water systems. **Dagger** can also be used to remove deposits of carbonates, sulphates, phosphates, oxides, urinary units, plaster and other inorganic deposits.

Dagger can be used on iron, copper, brass, bronze, steel, lead, plastic, china and acid resistant enamelware.

Do not use on aluminum, enamelware that is not acid resistant, magnesium, tin, nickel, chrome or galvanized metals. Where it is difficult to prevent **Dagger** from coming into contact with these materials, coat surfaces with a thick coating of heavy grease or Vaseline.

Dagger can be used to clear obstructions of plaster and concrete. **Dagger** can also be used in HVAC systems as an anti-freeze pre-flush.

DIRECTIONS

- 1. Always wear protective clothing. Rubber gloves and plastic safety glasses are strongly recommended.
- 2. Carefully open cap to avoid splashing.
- 3. Determine what concentration of **Dagger** to use by examining Table A.
- 4. When diluting **Dagger** always pour acid into cold water and avoid splashing. Only use plastic container for mixing.
- 5. Flush thoroughly with water immediately after use.

RECOMMENDED CONCENTRATION OF MURIATIC ACID

TABLE A

USES	RECOMMENDED DOSAGE
BOILERS	10 - 12 PARTS WATER TO 1 PART DAGGER
GAS HOT WATER HEATERS	4 GALLONS WATER TO 1 GALLON DAGGER FOR EACH 25 GALLONS OF HEATER CAPACITY
COOLING TOWERS, CONDENSERS & HEAT EXCHANGES	1 GALLON DAGGER FOR EACH 20 GALLONS OF WATER IN THE SYSTEM

HOT WATER COILS	2 PARTS WATER TO 1 PART DAGGER
UNIT HEATERS	2 PARTS WATER TO 1 PART DAGGER . IF CIRCULATING PUMP IS USED, REDUCE STRENGTH TO 4 PARTS WATER 1 PART DAGGER
URINALS & TOILET BOWLS (SANITARY MAINTENANCE)	UNDILUTED DAGGER AS NEEDED.
CONCRETE & PLASTER OBSTRUCTIONS	UNDILUTED DAGGER AS NEEDED.
CHINA & ACID- RESISTING ENAMEL (STAINS)	UNDILUTED. DILUTED DEPENDING ON DEGREE OF STAIN.

PRECAUTIONS

Causes severe eye and skin irritation. Harmful if swallowed or absorbed through the skin. Avoid breathing mist or dust and contact with skin, eyes or clothing. Causes substantial but temporary eye injury. May cause skin sensitization reactions in certain individuals. Protective clothing, including goggles should be worn.

FIRST AID

EXTERNAL: Wipe off acid gently, immediately flood surface with water, using soap freely, then cover with moist magnesia or baking soda.

INTERNAL: Drink a teaspoonful or more of magnesia, chalk, whiting or small pieces of soap softened with water, In milk, mucilage, or raw egg whites.

EYES: Flush with water for at least 15 minutes. Call a physician immediately.

UPC Number and Carton Information

STOCK NO.	SIZE	UPC NUMBER	CARTON CUBIC FEET
09010	qt.	0 54647 09010 8	.837
09015	gal.	0 54647 09015 3	1.196