

**MATERIAL SAFETY DATA SHEET
REVISED MAY 2008**

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For Chemical Emergency, Spill, Leak, Fire Exposure or Accident
Call CHEMTREC Day or Night
DOMESTIC NORTH AMERICA 800-424-9300
INTERNATIONAL, CALL 703-527-3887 (collect calls accepted)

PRODUCT INFORMATION

| | |
|--------------------------|---------------------------------------|
| TRADE NAMES OR SYNONYMS: | FLOW-AIDE |
| FORMULA: | PROPRIETARY, CONFIDENTIALITY REQUIRED |
| CHEMICAL FAMILY: | WATER SCALE CLEANER |

HAZARDOUS INGREDIENTS

| MATERIAL OR COMPONENT | TLV (p.p.m.) | PEL (p.p.m.) | APPROXIMATE % |
|----------------------------|--------------|--------------|---------------|
| HYDROGEN CHLORIDE, AQUEOUS | 5 | 5 | LESS THAN 10 |

NOTE: Laboratory tests indicate material to be **BIODEGRADABLE**. Certified to NSF/ANSI 60. NSF Registered for use in beverage, pharmaceutical, bottling, poultry, and other food processing plants. USFDA has no jurisdiction over the product, since it does not come in direct contact with food. Non-reportable under Sara Title 3: Section 311/312/313 Categorization. Not reportable under CERCLA.

PHYSICAL DATA

| | |
|------------------------------|--------------------------|
| BOILING POINT: | 213° F / 101° C. |
| FREEZING POINT: | 0° F / -18° C |
| SOLUBILITY IN WATER: | MISCIBLE |
| SPECIFIC GRAVITY, (WATER=1): | 1.045 |
| VAPOR PRESSURE: | 30 TORR. |
| VAPOR DENSITY, (AIR=1): | GREATER THAN 1 |
| PERCENT VOLATILE BY VOLUME: | 99.6 |
| APPEARANCE: | DARK LIQUID |
| ODOR: | ROASTED ALMONDS |
| pH: | UNREADABLE, GENERALLY <3 |
| EVAPORATION RATE, (WATER=1): | SLOW |
| PHYSICAL STATE: | LIQUID |

FIRE AND EXPLOSION HAZARD DATA

| | |
|-----------------------------------|---|
| FLASH POINT: | NO FLASH POINT, EXTINGUISHES FLAME |
| EXTINGUISHING MEDIA: | DOES NOT SUPPORT COMBUSTION |
| SPECIAL FIRE FIGHTING PROCEDURES: | NONE-WATER WILL CONTROL, OR CO2/DRY CHEMICALS |
| UNUSUAL FIRE & EXPLOSION HAZARDS: | NON-COMBUSTIBLE OR EXPLOSIVE. BREATHING APPARATUS RECOMMENDED |

HMIS

| | |
|----------------------|---|
| HEALTH: | 0 |
| FLAMMABILITY: | 0 |
| REACTIVITY: | 0 |
| PERSONAL PROTECTION: | B |

HEALTH HAZARD DATA

**EFFECTS OF OVER EXPOSURE:
EMERGENCY & FIRST AID:**

SHOULD NOT BE CONSIDERED HAZARDOUS WHEN USED AS DIRECTED.
IF EYE/SKIN CONTACT, COPIOUS WATER RINSE. CONSULT PHYSICIAN.
NOT TO BE TAKEN INTERNALLY. IF INGESTED-DO NOT INDUCE VOMITING-
DRINK MILK, EGG WHITES, ETC. AS DIRECTED BY PHYSICIAN.

NOTE:

ADVERSE EFFECTS ON HUMAN HEALTH ARE NOT EXPECTED FROM THE
FLOW-AIDE 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.

REACTIVITY DATA

**STABILITY:
INCOMPATIBILITIES:
HAZARDOUS DECOMPOSITION PRODUCTS:
HAZARDOUS POLYMERIZATION:
CONDITIONS TO AVOID:**

STABLE
STRONG CAUSTICS
NONE
WILL NOT OCCUR
EXCESSIVE HEATING

SPILL AND DISPOSAL PROCEDURES

ACTION TO TAKE FOR SPILLS:

RINSE WITH COPIOUS AMOUNTS OF WATER TO DILUTE: SODIUM
BICARBONATE MAY ALSO BE USED TO SOAK UP AND NEUTRALIZE LIQUID,
IF NECESSARY.

DISPOSAL METHOD:

EXPENDED OR USED MATERIAL MAY BE DISPOSED OF DOWN SEWER WITH
WATER FLUSH. MATERIAL IS **BIODEGRADABLE**-EVEN IN AS RECEIVED
FORM.

SPECIAL HANDLING INFORMATION

**VENTILATION:
RESPIRATORY:
PROTECTIVE GLOVES:
EYE PROTECTION:
OTHER PROTECTIVE EQUIPMENT:**

NORMAL (MECHANICAL)
NONE
RECOMMENDED, SUCH AS NEOPRENE GLOVES.
RECOMMENDED, SUCH AS CHEMICAL GOGGLES.
AS RECOMMENDED BY PLANT SAFETY DEPARTMENT. TO PREVENT
STAINING OF CLOTHES, WEAR AN APRON.

SPECIAL PRECAUTIONS

**HANDLING AND STORING:
CAN MATERIAL BE STORED OUTSIDE?
OTHER PRECAUTIONS:**

PRESERVE INTEGRITY OF CONTAINER.
YES, MAINTAIN TEMPERATURE BETWEEN 10°-180° F.

Do not circulate material for more than a six hour period without consulting the manufacturer. Most **FLOW-AIDE** cleanings can be accomplished within an average of two-four hours. Please use material only as directed. If procedures are not published for your particular application, please call for assistance. Furthermore, **FLOW-AIDE** is designed to be used by itself or diluted with water and water only. Do not heat. Use **FLOW-AIDE** at an ambient temperature. Vent circulating solution to atmosphere. Some adverse reactions may occur with some alloys of aluminum, magnesium, and/or zinc. Please consult your **FLOW-AIDE** representative.

CAUTION: **FLOW-AIDE** is non-corrosive, but the application of **FLOW-AIDE** may expose pre-existing under deposit corrosion (pitting, holes or similar damage) that can result in leaks in pipes, equipment or systems.

**FOR ADDITIONAL INFORMATION, PLEASE REVIEW THE FLOW-AIDE SPECIFICATIONS OR CONTACT
OUR FACILITY AT 330-334-2524.**

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