



MATERIAL SAFETY DATA SHEET

Product Name: Ram Spa Cartridge Filter Cleaner

(Part 1)

4949 Greenhouse Road Houston, TX 77084-2205

281/856-7600 - 800/456-3459 - Fax 281/856-7015

For Emergency Assistance involving chemicals call - CHEMTREC (800) 424-9300

The Version Date and Number for this MSDS is : 01/13/2006 - #011

PRODUCT NAME: UNIFLO(R) 26 - SODIUM METASILICATE PENTAHYDRATE (Part 1)

MSDS NUMBER: OC5854

DATE ISSUED: 11/30/2005

SUPERSEDES: 02/19/2003

ISSUED BY: 008730

MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Occidental Chemical Corporation
 5005 LBJ Freeway
 P.O. Box 809050
 Dallas, Texas 75380-9050

24 HOUR EMERGENCY TELEPHONE: 1-800-733-3665 or 1-972-404-3228 (U.S.);
 32.3.575.55.55 (Europe);
 1800-033-111 (Australia)

TO REQUEST AN MSDS: MSDS@oxy.com or 1-972-404-3245
 CUSTOMER SERVICE: 1-800-752-5151 or 1-972-404-3700

MSDS NUMBER: M5854
 SUBSTANCE: UNIFLO(R) 26 - SODIUM METASILICATE PENTAHYDRATE

PRODUCT USE: cleaner, detergent/soap

2. HAZARDS IDENTIFICATION

NFPA RATINGS (SCALE 0-4): HEALTH-3 FIRE-0 REACTIVITY-0
 HMIS RATINGS (SCALE 0-4): HEALTH-3 FLAMMABILITY-0 REACTIVITY-0

EMERGENCY OVERVIEW:

COLOR: white
 PHYSICAL FORM: solid
 ODOR: odorless
 SIGNAL WORD: DANGER

MAJOR HEALTH HAZARDS: CORROSIVE. CAUSES BURNS TO THE RESPIRATORY TRACT, SKIN, EYES AND GASTROINTESTINAL TRACT. MAY CAUSE PERMANENT EYE DAMAGE.

PRECAUTIONARY STATEMENTS: Do not breathe dust. Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Keep container tightly closed. Wash thoroughly after handling. Use only with adequate ventilation.

POTENTIAL HEALTH EFFECTS:

INHALATION:

SHORT TERM EXPOSURE: irritation (possibly severe), burns

LONG TERM EXPOSURE: ulcers

SKIN CONTACT:

SHORT TERM EXPOSURE: irritation (possibly severe), burns

LONG TERM EXPOSURE: dermatitis

EYE CONTACT:

SHORT TERM EXPOSURE: irritation (possibly severe), burns, eye damage, blindness

LONG TERM EXPOSURE: eye damage, blindness

INGESTION:

SHORT TERM EXPOSURE: irritation (possibly severe), burns, nausea, vomiting

LONG TERM EXPOSURE: irritation, possible ulcers

CARCINOGEN STATUS: OSHA: No

NTP: No

IARC: No

3. COMPOSITION, INFORMATION ON INGREDIENTS

COMPONENT: SODIUM METASILICATE

CAS NUMBER: 68434-92-0

PERCENTAGE: 56-59

COMPONENT: WATER

CAS NUMBER: 7732-18-5

PERCENTAGE: 41-44

4. FIRST AID MEASURES

INHALATION: If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. If breathing is difficult, oxygen should be administered by qualified personnel. If respiration or pulse has stopped, have a trained person administer Basic Life Support (Cardio-Pulmonary Resuscitation/Automatic External Defibrillator) and CALL FOR EMERGENCY SERVICES IMMEDIATELY.

SKIN CONTACT: Immediately flush contaminated areas with water. Remove contaminated clothing, jewelry and shoes immediately. Wash contaminated areas with soap and water. Thoroughly clean and dry contaminated clothing and shoes before reuse. GET MEDICAL ATTENTION IMMEDIATELY.

EYE CONTACT: Immediately flush eyes with a directed stream of water for at least 15 minutes, forcibly holding eyelids apart to ensure complete irrigation of all eye and lid tissues. Washing eyes within several seconds is essential to achieve maximum effectiveness. GET MEDICAL ATTENTION IMMEDIATELY.

INGESTION: Never give anything by mouth to an unconscious or convulsive person. If swallowed, do not induce vomiting. Give large amounts of water. If vomiting occurs spontaneously, keep airway clear. Give more water when vomiting stops. GET MEDICAL ATTENTION IMMEDIATELY.

NOTE TO PHYSICIAN: The absence of visible signs or symptoms of burns does NOT reliably exclude the presence of actual tissue damage.

FIRE AND EXPLOSION HAZARDS: Negligible fire hazard.

EXTINGUISHING MEDIA: Use extinguishing agents appropriate for surrounding fire.

FIRE FIGHTING: Move container from fire area if it can be done without risk. Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas. Wear appropriate personal protective equipment recommended in Section 8 of the MSDS.

SENSITIVITY TO MECHANICAL IMPACT: Not sensitive

SENSITIVITY TO STATIC DISCHARGE: Not sensitive

FLASH POINT: not flammable

6. ACCIDENTAL RELEASE MEASURES

OCCUPATIONAL RELEASE:

Shovel dry material into suitable container. Wear appropriate personal protective equipment recommended in Section 8 of the MSDS. Flush spill area with water, if appropriate. Liquid material may be removed with a vacuum truck. Wet material is slippery under foot. Keep out of water supplies and sewers. This material is alkaline and may raise the pH of surface waters with low buffering capacity. Releases should be reported, if required, to appropriate agencies.

7. HANDLING AND STORAGE

STORAGE: Store and handle in accordance with all current regulations and standards. Keep container tightly closed and properly labeled. Material may cake with prolonged storage in humid conditions. Do not store in aluminum container or use aluminum fittings or transfer lines, as flammable hydrogen gas may be generated. Keep separated from incompatible substances (see Section 10 of the MSDS).

HANDLING: Use methods to minimize dust. Avoid breathing dust. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling.

8. EXPOSURE CONTROLS, PERSONAL PROTECTION

EXPOSURE LIMITS:

UNIFLO(R) 26 - SODIUM METASILICATE PENTAHYDRATE:

5 mg/m³ ceiling (internal Occupational Exposure Limit based on data from analogous chemicals)

VENTILATION: Provide local exhaust ventilation where dust or mist may be generated. Ensure compliance with applicable exposure limits.

EYE PROTECTION: Wear safety glasses with side shields. If eye contact is likely, wear chemical resistant safety goggles. When wet mixing, wear splash resistant safety goggles with a faceshield. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

CLOTHING: Wear protective clothing to minimize skin contact. When potential for contact with wet material exists, wear Tychem(R) SL or a similar chemical protective suit. When potential for contact with dry material exists, wear disposable coveralls such as Tyvek(R).

GLOVES: Wear suitable gloves. Discard contaminated leather goods. When wet mixing, wear chemical resistant gloves such as butyl rubber, natural rubber, neoprene or nitrile.

PROTECTIVE MATERIAL TYPES: canvas, leather, butyl rubber, natural rubber, neoprene, nitrile, Tychem (R) SL, Tyvek(R)

RESPIRATOR: A NIOSH approved respirator with N95 (dust, fume, mist) filters may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits, or when symptom have been observed that are indicative of overexposure. A respiratory protection program that meets 29 CFR 1910.134 must be followed whenever workplace conditions warrant use of a respirator.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: solid
COLOR: white
TEXTURE: granular
ODOR: odorless
MOLECULAR FORMULA: Na₂SiO₃/5H₂O
BOILING POINT: Not applicable
MELTING POINT: 162 F (72.2 C)
VAPOR PRESSURE: Not applicable
VAPOR DENSITY: Not applicable
SPECIFIC GRAVITY (water=1): Not applicable
BULK DENSITY: 54-60 lbs/ft³ (loose)
WATER SOLUBILITY: 28%
PH: 12.4 (1% aqueous solution)
VOLATILITY: Not applicable
ODOR THRESHOLD: Not available
EVAPORATION RATE: Not applicable
COEFFICIENT OF WATER/OIL DISTRIBUTION: Not available

10. STABILITY AND REACTIVITY

REACTIVITY: Stable at normal temperatures and pressure. Prolonged contact with incompatible metals may produce flammable hydrogen gas.

CONDITIONS TO AVOID: Contact with acids will cause evolution of heat. Carbon monoxide gas may form, upon contact with reducing sugars or food and beverage products in enclosed spaces.

INCOMPATIBILITIES: acids, prolonged contact with aluminum, brass, bronze, copper, lead, tin, zinc or other alkali sensitive metals or alloys

HAZARDOUS DECOMPOSITION:

Thermal decomposition products: None known.

POLYMERIZATION: Will not polymerize.

11. TOXICOLOGICAL INFORMATION

SODIUM METASILICATE:

IRRITATION DATA:

250 mg/24 hour(s) skin-human severe; 250 mg/24 hour(s) skin-rabbit severe;
250 mg/24 hour(s) skin-guinea pig moderate

TOXICITY DATA:

1153 mg/kg oral-rat LD₅₀; 770 mg/kg oral-mouse LD₅₀

LOCAL EFFECTS:

Corrosive: inhalation, skin, eye, ingestion

ACUTE TOXICITY LEVEL:

Moderately Toxic: ingestion

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: respiratory disorders, skin disorders and allergies

ADDITIONAL DATA: Cited toxicity data is for sodium metasilicate anhydrous.

HEALTH EFFECTS:

INHALATION:

ACUTE EXPOSURE:

Inhalation of dusts may cause irritation of the upper respiratory tract with sore throat, coughing and shortness of breath. Upon contact with moist mucous membranes, sodium metasilicate is highly alkaline and may cause corrosive damage. May cause severe irritation of the respiratory tract with coughing, choking, pain and possibly burns of the mucous membranes. In some cases,

pulmonary edema and/or pneumonia may develop, either immediately or more often within 72 hours. The symptoms may include tightness in the chest, dyspnea, frothy sputum, cyanosis and dizziness. Physical findings may include moist rales, low blood pressure and high pulse pressure.

CHRONIC EXPOSURE:

Depending on concentration and duration of exposure, repeated or prolonged exposure to corrosive substances may cause inflammatory and ulcerative changes in the nose, sinuses and bronchial regions.

SKIN CONTACT:

ACUTE EXPOSURE:

Dusts may cause skin irritation. Upon contact with moist skin, material may cause strong irritation with erythema, pain and blistering.

CHRONIC EXPOSURE:

Effects depend on concentration and duration of exposure. Dermatitis may occur.

EYE CONTACT:

ACUTE EXPOSURE:

Dust may cause severe irritation, pain and corneal burns (possibly leading to blindness). The full extent of the injury may not be immediately apparent.

CHRONIC EXPOSURE:

Effects depend on concentration and duration of exposure. Repeated or prolonged contact may result in conjunctivitis, lens damage or other effects including blindness.

INGESTION:

ACUTE EXPOSURE:

May cause immediate pain and severe burns of the esophagus and gastrointestinal tract with vomiting, nausea, and diarrhea. Edema of the epiglottis and shock may occur.

CHRONIC EXPOSURE:

Repeated or prolonged ingestion may result in chronic irritation and possible ulcers.

12. ECOLOGICAL INFORMATION

ECOTOXICITY DATA:

FISH TOXICITY: This material has exhibited moderate toxicity to aquatic organisms.

FATE AND TRANSPORT:

BIODEGRADATION: This material is inorganic and not subject to biodegradation.

PERSISTENCE: This material is believed to persist in the environment.

BIOCONCENTRATION: This material is believed not to bioaccumulate.

OTHER ECOLOGICAL INFORMATION: This material has exhibited slight toxicity to terrestrial organisms.

13. DISPOSAL CONSIDERATIONS

Reuse or reprocess if possible. Dispose in accordance with all applicable regulations. Subject to disposal regulations: U.S. EPA 40 CFR 262. Hazardous Waste Number(s): D002 (Corrosive).

14. TRANSPORT INFORMATION

U.S. DOT 49 CFR 172.101:

PROPER SHIPPING NAME: Disodium trioxosilicate

ID NUMBER: UN3253

HAZARD CLASS OR DIVISION: 8

PACKING GROUP: III
LABELING REQUIREMENTS: 8

CANADIAN TRANSPORTATION OF DANGEROUS GOODS:
SHIPPING NAME: Disodium trioxosilicate
UN NUMBER: UN3253
CLASS: 8
PACKING GROUP/RISK GROUP: III

15. REGULATORY INFORMATION

U.S. REGULATIONS:
CERCLA SECTIONS 102a/103 HAZARDOUS SUBSTANCES (40 CFR 302.4): Not regulated.

SARA TITLE III SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355.30):
Not regulated.

SARA TITLE HI SARA SECTIONS 311/312 HAZARDOUS CATEGORIES (40 CFR 370.21):
ACUTE: Yes
CHRONIC: No
FIRE: No
REACTIVE: No
SUDDEN RELEASE: No

SARA TITLE III SECTION 313 (40 CFR 372.65): Not regulated.

OSHA PROCESS SAFETY (29CFR1910.119): Not regulated.

FDA: Sodium Silicates have Generally Recognized as Safe (GRAS) status under specific FDA regulations. Refer to the Code of Federal Register 21 CFR 173, 175, 176, 177, 182, and 184, which is accessible on the FDA's website.

STATE REGULATIONS:
California Proposition 65: This product is not listed, but it may contain contaminants known to the State of California to cause cancer or reproductive toxicity as listed under Proposition 65 State Drinking Water and Toxic Enforcement Act. For additional information, contact OxyChem Customer Service.

NEW JERSEY WORKER AND COMMUNITY RIGHT TO KNOW:
REPORTING REQUIREMENT:
SODIUM METASILICATE 6834-92-0 56-59%

RIGHT TO KNOW HAZARDOUS SUBSTANCE LIST: Not regulated.

SPECIAL HEALTH HAZARD SUBSTANCE LIST: Not regulated.

PENNSYLVANIA RIGHT TO KNOW:
REPORTING REQUIREMENT:
SODIUM METASILICATE 6834-92-0 56-59%
WATER 7732-18-5 41-44%

HAZARDOUS SUBSTANCE LIST: Not regulated.

ENVIRONMENTAL HAZARDOUS SUBSTANCE LIST: Not regulated.

SPECIAL HAZARDOUS SUBSTANCE LIST: Not regulated.

CANADIAN REGULATIONS:
CONTROLLED PRODUCTS REGULATIONS (CPR): This product has been classified in accordance with the criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

WHMIS CLASSIFICATION: E.

NATIONAL INVENTORY STATUS:
U.S. INVENTORY (TSCA): Listed on inventory.

TSCA 12(b) EXPORT NOTIFICATION: Not listed.

CANADA INVENTORY (DSL/NDSL): All components of this product are listed on the DSL.

For Additional Information:

Contact: MSDS Coordinator - Univar USA

During business hours, Pacific Time - (425) 889-3400

NOTICE

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END OF MSDS