METHYLCELLULOSE

REPORT NUMBER: 703 MSDS NO: DW53633

VAN WATERS & ROGERS INC. MATERIAL SAFETY DATA SHEET

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METHOCEL (R) 240-8 HYDROXYPROPYL ME EFFECTIVE DATE: 08/08/91

17 2002

ORDER NO: 235847 PROD NO : 298580

DANIEL SMITH INC. 4150 IST AVENUE SOUTH

SEATTLE

,WA 98134

VAN WATERS & ROGERS 6100 CARILLON POINT , KIRKLAND

, SUBSIDIARY OF UNIVAR

(206)889-3400

, WA 98033:

-----EMERGENCY ASSISTANCE -----

FOR EMERGENCY ASSISTANCE INVOLVING CHEMICALS CALL - CHEMIREC (800)424-9300

CONTACT YOUR LOCAL, VAN WATERS & ROGERS BRANCH OFFICE AT VW&R KENT OFFICE 206-872-5000 KENT , WA

INGREDIENTS: (% ω/ω, unless otherwise noted)

Hydroxypropyl methylcellulose Water

Sodium chloride

Proprietary polyglycol, carboxylic acid, and aldehyde

CAS# 009004-65-3 85-99%

CAS# 007732-18-5 1-10%

CAS# 007647-14-5 0.5-5%

50 LB WT/GAL= 5.57 LBS/GAL

< 3%

This document is prepared pursuant to the OSHA Hazard Communication Standard (29 CFR 1910.1200). In addition, other substances not 'Hazardous' per this OSHA Standard may be listed. Where proprietary ingredient shows, the identity may be made available as provided in this standard,

2. PHYSICAL DATA:

BOILING POINT: Not applicable.

VAP, PRESS: Not applicable,

VAP. DENSITY: Not applicable.

SOL. IN WATER: See section 9,

SP. GRAVITY: Not applicable.

APPEARANCE: White to slightly off-white free flowing powder.

ODOR: Not available.

3. FIRE AND EXPLOSION HAZARD DATA:

FLASH POINT: N/A

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METHOD USED: N/A

FLAMMABLE LIMITS
LFL: Not deter.
UFL: Not deter.

EXTINGUISHING MEDIA: Water fog.

FIRE & EXPLOSION HAZARDS: Minimum explosive dust concentration is 0.03 oz/cu ft. Similar to flour or grain dusts; keep clouds of such dust away from possible ignition sources.

FIRE-FIGHTING EQUIPMENT: Use positive-pressure, self-contained breathing apparatus.

4. REACTIVITY DATA:

STABILITY: (CONDITIONS TO AVOID) Avoid dust clouds or layers.

INCOMPATIBILITY $\hat{\mathcal{F}}$ (SPECIFIC MATERIALS TO AVDID) Oxidizing material.

HAZARDOUS DECOMPOSITION PRODUCTS: Same as wood or paper.

HAZARDOUS POLYMERIZATION: Will not occur,

5. ENVIRONMENTAL AND DISPOSAL INFORMATION:

ACTION TO TAKE FOR SPILLS/LEAKS: Sweep up and use if possible, or discard using disposal method listed below.

DISPOSAL METHOD: Preferable method is to dispose in landfill. Disposal can also be accomplished by incineration under controlled conditions to eliminate dust explosions. In both methods, disposal techniques should be in compliance with applicable federal, state, and local laws and regulations regarding management, use, handling, treatment, storage, disposal, and transportation of used chemicals.

. HEALTH HAZARD DATA:

EYE: Solid or dust may cause irritation or corneal injury due to mechanical action.

SKIN CONTACT: Essentially nonirritating to skin.

SKIN ABSORPTION: A single prolonged exposure is not likely to result in the material being absorbed through skin in harmful

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amounts.

INGESTION: Single dose oral toxicity is low. No hazards anticipated from ingestion incidental to industrial exposure. The oral LD50 for rats is >10,000 mg/kg.

INHALATION: Single exposure to dust is not likely to be hazardous.

SYSTEMIC & OTHER EFFECTS: Based on available data, repeated exposures are not anticipated to cause any significant adverse effects. Birth defects are unlikely. Exposures having no adverse effects on the mother should have no effect on the fetus.

7. FIRST AID:

EYES: Irrigate immediately with water for at least five minutes. Mechanical effects only.

SKIN: No adverse effects anticipated by this route of exposure.

INGESTION: No adverse effects anticipated by this route of exposure.

INHALATION: No adverse effects anticipated by this route of exposure.

8. HANDLING PRECAUTIONS:

EXPOSURE GUIDELINE(S): Dow Industrial Hygiene Guide is 10 mg/m3.

VENTILATION: Provide general and/or local exhaust ventilation to control airborne levels below the exposure guidelines.

RESPIRATORY PROTECTION: In dusty atmospheres, use an approved dust respirator.

SKIN PROTECTION: No precautions other than clean body-covering clothing should be needed.

EYE PROTECTION: Use safety glasses. If there is a potential for exposure to particles which could cause mechanical injury to the eye, wear chemical goggles.

9. ADDITIONAL INFORMATION:

SPECIAL PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: Use

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reasonable caution and personal cleanliness. Cellulose ethers are water-soluble polymers which form aqueous dispersions by swelling and by successful hydration of their structural layers. There is no sharp solubility limit. CAUTION:

(1) Under certain conditions a fine dust of this material in air may cause a dust explosion when exposed to heat, sparks, and open flame. (2) If material spills and gets wet, could cause slipping hazard.

MSDS STATUS: Revised sections 1 and 5.

REGULATORY INFORMATION: (Not meant to be all-inclusive--selected regulations represented).

NOTICE: The information herein is presented in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ from one location to another; it is the buyer's responsibility to ensure that its ivities comply with federal, state or provincial, and local laws. The following specific information is made for the purpose of complying with numerous federal, state or provincial, and local laws and regulations. See MSD Sheet for health and safety information.

J.S. REGULATIONS

SARA HAZARD CATEGORY: This product has been reviewed according to the IPA "Hazard Categories" promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

\ fire hazard

dazard categories are listed solely to assist with federal reporting under Title III. They are not intended and are not appropriate for avaluating safe product handling and use. To review health and safety information, refer to the body of this material safety data sheet.

R) INDICATES A TRADEMARK OF THE DOW CHEMICAL COMPANY

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-----FOR ADDITIONAL INFORMATION ------

CONTACT: MSDS COORDINATOR

VW&R KENT OFFICE

OURING BUSINESS HOURS, PACIFIC TIME (206)989-3400

10/30/91 09:18 PRODUCT: 298580 CUST NO: 101189 ORDER NO: 235847

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* * * END OF MSDS * * *