

MATERIAL SAFETY DATA SHEET

(COMPLIES WITH 29CFR 1910.1200)

SECTION I - CHEMICAL PRODUCT & COMPANY IDENTIFICATION

Identity (As Used on Label and List): Multi-Clean Vehicle Cleaner

Product Class: General purpose water-based cleaner

Emergency Telephone Number: 800-255-3924

Telephone Number for Information: 612-481-1900

Manufacturer's Name and Address:

Multi-Clean®, A Division of Minuteman International, Inc.

300 Cardigan Road

Shoreview, MN 55126

SECTION II - COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Components (Specific Chemical Identity):

Chemical	Common Name(s)	%
A	Tetrasodium EDTA, tetrahydrate CAS #64-02-8	<1
B	Ethanolamine CAS #141-43-5	3 - 7
C	Dodecylbenzene sulfonic acid CAS #27176-87-0	10 - 30
D	Nonylphenol ethoxylates CAS #9016-45-9	3 - 7
E	Water CAS #7732-18-5	60 - 100

SECTION III - HAZARDS IDENTIFICATION

Emergency Overview

Appearance and Odor: Light amber, odorless liquid.

Primary Hazards: Non-hazardous in normal use.

Potential Health Hazards

Route(s) of Entry: Skin Absorption: Ingestion: X Inhalation:

Eye: May cause irritation on contact.

Skin: May cause irritation on contact.

Ingestion: May be harmful if swallowed.

Inhalation: No hazardous vapors.

Signs and Symptoms of Exposure: May cause irritation on direct contact.

Carcinogenicity: NTP? No IARC Monographs? No

OSHA Regulated? No

Target Organ (s): No additional data

Medical Conditions Generally Aggravated by Exposure: N. Av.

Health Hazards, Chronic: N. Av.

SECTION IV - FIRST AID MEASURES

Emergency and First Aid Procedures:

If Swallowed: Drink water in large amounts and call a physician immediately. Never give anything by mouth to an unconscious person. Eye Contact: Flush eyes with running water for at least 15 minutes. If irritation persists, obtain medical attention. Skin Contact:

Flush thoroughly with cool water. Remove and wash contaminated clothing before reuse.

Sources Used: Raw material data, general toxicology from the trade for similar products.

SECTION V - FIRE FIGHTING MEASURES

Flammability: No Autoignition Temperature: N. Av.

Flash Point (method used): None

Flammable Limits: N. Av.

Extinguishing Media: N. Av.

Water? Foam? Water Fog?
Alcohol Foam? CO2? Dry Chemical?
Vaporizing Liquid? Other?

Special Fire Fighting Procedures: N. Av.

Unusual Fire and Explosion Hazards: N. Av.

TDG Flammability Classification: Non-flammable

Sensitivity to Mechanical Impact: None

Sensitivity to Static Discharge: None

SECTION VI - ACCIDENTAL RELEASE MEASURES

Steps to be Taken in Case Material is Released or Spilled:

Dike and contain spill with inert material (sand, earth, etc). Collect spill with mop, absorbent material (example: floor-dri) or vacuum. Thoroughly rinse affected area with water.

SECTION VII - HANDLING AND STORAGE

Precautions to be Taken in Handling and Storing:

Normal care in handling and storage.

Other Precautions: Keep out of reach of children. Keep from freezing.

SECTION VIII - EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory Protection (Specify Types): Not required

Ventilation: Local Exhaust: Not required Special: Not required

Mechanical (General): Normal good ventilation sufficient.

Other: Not required

Protective Gloves: Natural rubber or synthetic.

Eye Protection: Approved safety goggles or glasses. Footwear: Not required

Other Protective Clothing or Equipment: Not required

Work/Hygienic Practices: Do not contaminate food or beverages with cleaning chemicals.

SECTION IX - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point: Approximately 212°F

pH: 9 - 10

Specific Gravity (H2O) = 1: 1.028

% Volatile: 60 - 100

Vapor Density (Air = 1): < 1

Odor Threshold: N. Av.

Evaporation Rate (Butyl Acetate = 1): N. Av.

Oil/Water Distribution

Solubility in Water: Complete

Coefficient: N. Av.

Vapor Pressure (MM HG): N. Av.

Melting Point: N. Av.

SECTION X - STABILITY AND REACTIVITY

Stability: Unstable:

Stable: X

Conditions to Avoid: N. Av.

Incompatibility (materials to avoid): N. Av.

Hazardous Decomposition or By-products: N. Av.

Hazardous Polymerization: May occur:

Will not occur: X

Conditions to Avoid: N. Av.

SECTION XI - TOXICOLOGICAL INFORMATION

Chemical	OSHA PEL	ACGIH TLV	Recom.	LD50	LC50
A	None	None	N. Av.	> 2,000 mg/kg (rat, oral)	N. Av.
B	3 ppm	3 ppm	3 ppm	N. Av.	N. Av.
C	N. Av.	N. Av.	N. Av.	1300 mg/K (rat, oral)	> 200 mg/L (rat, 1 hour)
D	N. Av.	N. Av.	N. Av.	2100 mg/K (rat, oral)	> 200 mg/L (rat, 1 hour)
E	None	None	N. Av.	N. Av.	N. Av.

Teratogen, Mutagen, Reproductive Toxin Status: No

Toxicologically Synergistic Products: N. Av.

SECTION XII - ECOLOGICAL INFORMATION

Biodegradation Properties: N. Av.

Ecotoxicological Information: N. Av.

Chemical Fate Information: N. Av.

SECTION XIII - DISPOSAL CONSIDERATIONS

Waste Disposal Method:

Dispose of spilled material in accordance with local, state and federal regulations. Waste from normal cleaning procedures may be sewered, depending on the materials and/or contaminants being cleaned as well as state, federal and local sewer commission regulations.

RCRA Hazard Class: None

SECTION XIV - TRANSPORT INFORMATION

Shipping Classification: Compound, cleaning liquid, N.O.I.

UN Number: N. Av.

Packing Group: N. Av.

SECTION XV - PREPARATION DATA

Prepared By: James Tracy

Telephone Number: 612-481-1900

Date: 1/98

SECTION XVI - REGULATORY INFORMATION

US Federal Regulations

TSCA Status: All ingredients listed.

CERCLA Reportable Quality: None

SARA Title III

Section 302 Extremely Hazardous Chemicals: None

Section 311/312 Hazard Category: None

Section 313 Toxic Chemicals: None

State Regulations

NOTICE STATE OF CALIFORNIA

Warning: This product may contain chemicals known to the State of California to cause cancer or reproductive defects as trace impurities in the standard industrial materials used in the manufacture of this product.

International Regulations

WHMIS Controlled Product Hazard Class: N. Av.

SECTION XVII - OTHER INFORMATION

None

N. Av. - Not Applicable; N. Av. - Not Available

NFPA SYSTEM

1 A. Health Hazard 0 A. Fire Hazard 0 A. Reactivity Hazard

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Multi-Clean®

PROVEN FLOOR CARE SYSTEMS SINCE 1946

Vehicle Cleaner

Highly Concentrated Foaming Car/Truck/Bus Wash

VEHICLE CLEANER is a highly concentrated formulation that effectively removes normal soils such as road film, dirt, bugs and tree sap from cars, trucks, buses and recreational vehicles. When used according to dilution instructions, VEHICLE CLEANER will not harm the waxes used on vehicles. The foam generated during the vehicle-washing process is very stable and helps to protect the surface against potential harm caused by normal brush action.

VEHICLE CLEANER is formulated with excellent hard water tolerance and surface wetting characteristics. These properties make VEHICLE CLEANER easy to rinse for streak free cleaning. It also contains a corrosion inhibitor for metal protection. Neither the concentrate nor diluted solutions will attack rubber moldings or plastic parts commonly used on vehicles.

VEHICLE CLEANER is biodegradable, phosphate free and very inexpensive to use at less than 2 cents per gallon in-use-cost.

SPECIFICATIONS FOR VEHICLE CLEANER

Appearance	Light Amber
pH	9.4 ± .1
Specific Gravity	1.025 - 1.033
Flashpoint	None
Dilution	Automatic, 1 gallon per 700-800 gallons of water. Manual, 1/2 - 2/3 ounce per 1 gallon of water.
Foamability	Excellent
Hardwater Tolerance	Yes
Biodegradable	Yes
Phosphate-Free	Yes
Storage Stability	Excellent, 1 year under normal conditions
Freeze-Thaw Stability	Will freeze--usable after thawing with no change in performance. Agitate after thawing and before use.

Packaging

55 gallon, #910957
5 gallon, #910955
1 gallon, #910953