Date Prepared

Replaces

Jan 07, 2003

None

MATERIAL SAFETY DATA SHEET

SECTION 1 CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Name: Hydro-Balance Internal Coil Cleaner

Product Number(s): H-CF01

Product Use: A/C-Refr. Coil flushing solvent

Company Name: North American Research Corporation

P.O. Box 1318 Lewisville, TX 75067

Telephone Numbers: (972) 492-1800, (800) 527-7520, Fax (972) 394-6755 Transportation Emergencies: Infotrac (800) 535-5053 (24 hours, everyday)

SECTION 2 COMPOSITION / INFORMATION ON INGREDIENTS

OSHA Hazardous Components (29 CFR 1910.1200):

CAS
Registry # OSHA PEL ACGIH TLV
Rec. (Optional)

34590-94-8 100 ppm 100 ppm 150 ppm STEL

111-90-0 Not established Not established None known

SECTION 3 HAZARDS IDENTIFICATION

Dipropylene glycol monomethyl ether

Diethylene glycol monoethyl ether

POTENTIAL HEALTH EFFECTS

EYE CONTACT: Causes eye irritation and redness.

SKIN CONTACT: Brief contact is not irritating. Prolonged contact may cause mild to moderate local redness and swelling.

INHALATION: Short-term harmful effects are not expected from vapor generated at ambient temperature. Excessive exposure may cause irritation to upper respiratory tract. Signs and symptoms of excessive exposure may be anesthetic or narcotic effects.

INGESTION: Small amounts swallowed incidental to normal handling operations are not likely to cause injury; swallowing large amounts may produce signs of intoxication and may cause injury.

CARCINOGENICITY: NTP? No IARC Monographs? No OSHA Regulated? No

SECTION 4 FIRST-AID MEASURES

EYE CONTACT: Flush eyes with large amounts of water until irritation subsides. If irritation persists, get medical attention.

SKIN CONTACT: Flush with large amounts of water; use soap if available. Remove contaminated clothing, including shoes, and launder before reuse.

INHALATION: Remove to fresh air. Obtain medical attention if symptoms persist.

INGESTION: If patient is fully conscious, give 2 glasses of water. Seek medical attention. Do not induce vomiting unless directed to do so by medical personnel.

NOTE TO PHYSICIAN: There is no specific antidote. Treatment of overexposure should be directed at the control of symptoms and the clinical condition of the patient.

SECTION 5 FIRE-FIGHTING MEASURES

FLASHPOINT: 180°F METHOD: TCC

FLAMMABLE LIMITS: LEL: 1.2%@275°F UEL: 24% @ 360°F NOTE: Approximate

AUTOIGNITION TEMP: No test data available

FIRE-FIGHTING: Use self-contained breathing apparatus and protective clothing. Use water spray to cool fire-exposed surfaces and to protect personnel. Use foam, dry chemical, or water spray to extinguish fire.

DECOMPOSITION PRODUCTS UNDER FIRE CONDITIONS:

Carbon monoxide and/or carbon dioxide.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Small spills can be flushed with large amounts of water. Large spills should be contained and collected with noncombustible absorbent for proper disposal. Large spills are not likely as product is sold in small containers.

SECTION 7 STORAGE AND HANDLING

HANDLING: FOR INDUSTRY USE ONLY. KEEP OUT OF REACH OF CHILDREN. Avoid eye contact. Keep containers closed. Use with adequate ventilation. Wash thoroughly after handling.

STORAGE: Keep tightly closed in original containers. Keep away from excessive heat. Do not deface label.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE CONTROLS:

General room ventilation is expected to be satisfactory. Use of mechanical ventilation as needed to maintain levels below TLV.

PERSONAL PROTECTION:

Safety glasses with side shields or monogoggles, long sleeves, long pants, and PVC coated gloves for prolonged exposure. Use NIOSH / MSHA approved respirator if concentrations are above exposure limits.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Clear, colorless liquid ODOR: Slight ether.

SPECIFIC GRAVITY: 0.95

VAPOR PRESSURE: Not determined VAPOR DENSITY: 5
SOLUBILITY IN WATER: Complete pH: Not applicable

BOILING POINT: 375°F (approximate) FREEZING / MELTING POINT: Not determined

EVAPORATION RATE (Butyl Acetate = 1): Not determined

SECTION 10 STABILITY AND REACTIVITY

STABILITY: Stable

HAZARDOUS POLYMERIZATION: Will not occur INCOMPATIBILITY (Materials to Avoid): Strong oxidizers

HAZARDOUS DECOMPOSITION PRODUCTS: Burning may produce carbon monoxide and/or carbon dioxide.

SECTION 11 TOXICOLOGICAL INFORMATION

No specific data available.

SECTION 12 ECOLOGICAL INFORMATION

Product is readily biodegradable. Passes OECD tests for Biodegradability. Bioconcentration potential is low.

SECTION 13 DISPOSAL CONSIDERATIONS

Dispose of in accordance with all federal, state, and local regulations. The preferred options include sending to a licensed, permitted: recycler, reclaimer, incinerator or other thermal destruction device.

SECTION 14 TRANSPORT INFORMATION

U.S. Department of Transportation:

Not regulated as packaged.

SECTION 15 REGULATORY INFORMATION

TSCA: All components of this product are listed on the TSCA inventory.

CERCLA: No special reporting requirements.

SARA TITLE III:

Section 311/312 Hazard Category: Fire (Combustible Liquid)

Section 313 Reportable Ingredients: None

SECTION 16 OTHER INFORMATION

NFPA RATING: Health -1, Flammability -2, Reactivity -0 HMIS[®] RATING: Health -1, Flammability -2, Reactivity -0

HMIS[®] ratings are to be used with a fully implemented HMIS[®] program. HMIS[®] is a registered mark of the National Paint and Coatings Association (NPCA).

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