



MATERIAL SAFETY DATA SHEET

PRODUCT IDENTIFICATION

PRODUCT NAME: ELECTRIC MOTOR CLEANER
PART #: N4835

(NFPA RATINGS)

HEALTH: 2
FIRE: 0
REACTIVITY: 0

HMS PROTECTIVE EQUIPMENT: X See your supervisor

PRODUCT INFORMATION (800) 262-0012	MEDICAL EMERGENCY (856) 455-4555
TRANSPORTATION EMERGENCY CHEMTREC (800) 424-9300	DISTRIBUTOR / MANUFACTURER NATIONAL REFRIGERANTS, INC. 661 KENYON AVE. ROSENHAYN, NJ

HAZARDOUS INGREDIENTS

OSHA Hazardous Components (29 CFR 1910.1200)

EXPOSURE LIMITS: 8 HR. TWA
OSHA PEL ACGIH TLV

Trichloroethylene (79-01-6)	50	50
Perchloroethylene (127-18-4)	25	25
Acetone (67-64-1)	1000	750
Carbon Dioxide (124-38-9)	5000	5000

HEALTH HAZARD DATA

PRIMARY ROUTES OF ENTRY: INHALATION ; SKIN ABSORPTION

POTENTIAL HEALTH EFFECTS:

INHALATION: Excessive inhalation of vapors can be harmful and may cause headache, dizziness, asphyxia, anesthetic effects and possible unconsciousness.

EYE CONTACT: Irritation.

SKIN CONTACT: Irritation due to defatting of skin.

INGESTION: Possible chemical pneumonitis if aspirated into lungs. Nausea.

CHRONIC Effects: (Effects due to excessive exposure to the raw materials of this mixture) May cause liver abnormalities, kidney, spleen, lung or brain damage, cardiac abnormalities. Perchloroethylene has been shown to increase the rate of spontaneously occurring malignant tumors in certain laboratory rats and mice.

Medical Conditions Generally Aggravated by Exposure: May aggravate existing eye, skin or upper respiratory conditions..

WARNING: This product contains a chemical or chemicals known to the State of California to cause cancer.

CARCINOGEN REFERENCE SOURCE:

TRICHLOROETHYLENE	b
PERCHLOROETHYLENE	a,b
ACETONE	d
CARBON DIOXIDE	d

Chemical listed as carcinogen or potential carcinogen. (a) NTP (b) IARC Monograph (c) OSHA (d) Not Listed (e) Animal data only.



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FIRST AID MEASURES

INHALATION: Remove to fresh air. Resuscitate if necessary. Get medical attention.
EYE CONTACT: Flush with water for 15 minutes. If irritated, seek medical attention.
SKIN CONTACT: Wash with soap and water. If irritated, seek medical attention.
INGESTION: DO NOT INDUCE VOMITING. Drink two large glasses of water. Get immediate medical attention.

FIRE AND EXPLOSION HAZARD DATA

FLAMMABILITY as per USA FLAME PROTECTION TEST (Aerosols): Non-flammable
FLASHPOINT AND METHOD USED (non-aerosols): N/A
FLAMMABILITY LIMITS IN AIR BY % IN VOLUME: % LEL: N/E % UEL: N/E
AUTOIGNITION TEMPERATURE: N/E
UNUSUAL FIRE & EXPLOSION HAZARDS: Do not expose to temperature above 130°F or the container may rupture.
SPECIAL FIRE FIGHTING INSTRUCTIONS: Self contained breathing apparatus.
EXTINGUISHER MEDIA: Foam, dry chemical, carbon dioxide.

PRECAUTIONS FOR SAFE HANDLING & USE

Steps to be taken if Material is Spilled or Released: Absorb with suitable medium. Incinerate or landfill according to local, state or federal regulations. Allow to evaporate if small spill. DO NOT FLUSH TO SEWER.
WASTE DISPOSAL METHODS: Aerosol cans, when vented to atmospheric pressure through normal use, pose no disposal hazard.
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: Do not puncture or incinerate containers. Do not store at temperatures above 130° F.
OTHER PRECAUTIONS AND OR SPECIAL HAZARDS: KEEP OUT OF REACH OF CHILDREN. Avoid food contamination. Avoid inhalation of vapors.

CONTROL AND PROTECTIVE MEASURES

RESPIRATORY PROTECTION (specify type): If vapor concentration exceeds TLV, use respirator approved by US Bureau of Mines for organic vapors.
PROTECTIVE GLOVES: Neoprene gloves recommended.
EYE PROTECTION: Safety glasses recommended.
VENTILATION REQUIREMENTS: Adequate ventilation to keep vapor concentration below TLV.
OTHER PROTECTIVE CLOTHING AND EQUIPMENT: None.
HYGIENIC WORK PRACTICES: Wash with soap and water before handling food. Remove contaminated clothing.

PHYSICAL AND CHEMICAL CHARACTERISTICS

VAPOR PRESSURE: psig @ 70°F (aerosols): 85-100	VAPOR DENSITY (Air=1) : N/E
SPECIFIC GRAVITY: (H ₂ O = 1) Concentrate only = 1.60	FREEZING POINT: Not Applicable
EVAPORATION RATE (N-BUTYL ACETATE=1): 2.1 (concentrate only)	BOILING POINT: Not Applicable
APPEARANCE & ODOR: Clear, colorless spray with chlorinated solvent odor.	SOLUBILITY IN WATER: Insoluble
VAPOR PRESSURE: (non-aerosols)(mm Hg and temperature): N/A	WATER REACTIVE: No



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REACTIVITY HAZARD DATA

STABILITY: Stable

CONDITIONS TO AVOID: Open flame, welding arcs, heat.

INCOMPATIBILITY (MATERIALS TO AVOID): Reactive metals, aluminum, magnesium, strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS: CO₂, CO, HCl, small amounts of phosgene and chlorine.

HAZARDOUS POLYMERIZATION: Will not occur.

TRANSPORTATION INFORMATION

PROPER SHIPPING NAME: Limited Qty

REGULATORY INFORMATION

SARA TITLE III (Superfund Amendments and Reauthorization Act):

TRICHLOROETHYLENE	YES
PERCHLOROETHYLENE	YES
ACETONE	NO
CARBON DIOXIDE	NO

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DATE OF LATEST REVISION/REVIEW:

1/2013

PERSON RESPONSIBLE FOR MSDS:

Matt Callahan