

Safety Data Sheet

SECTION I - IDENTIFICATION

PRODUCT NAME: Contact Cleaner
PRODUCT CODE: 54800004-16AR
PRODUCT USE: Electronic Cleaning Agent
COMPANY NAME: Ram Products LTD
COMPANY ADDRESS: P.O. Box 821159, Fort Worth, TX 76182
COMPANY PHONE: 972-988-8031
EMERGENCY PHONE: 800-255-3924

SECTION II - HAZARDS IDENTIFICATION

CLASSIFICATION: Dissolved Gas
Skin Irritant: Category 2
Eye Irritant: Category 2A
Reproductive Toxicity: 1A
Specific Target Organ Toxicity (Single Exposure): Category 3
Specific Target Organ Toxicity (Repeated Exposure): Category 2

HAZARD STATEMENT(S): DANGER: Contains gas under pressure; May explode if heated. Causes skin and serious eye irritation. May damage fertility or the unborn child. May cause drowsiness and dizziness. May cause damage to Central nervous system, Reproductive system, Kidney, and Liver through prolonged or repeated exposure.

This product contains the following percentage of chemicals of unknown toxicity: 10%

PRECAUTIONARY STATEMENTS: Keep away from heat, sparks, open flames, and hot surfaces. -No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Protect from sunlight. Do not expose to temperatures exceeding 50C/122F. Store in a well-ventilated place. Wash hands thoroughly after handling. Wear protective gloves and eye protection. If on skin: Wash with plenty of water. If skin irritation occurs: Get medical attention. Take off contaminated clothing and wash before reuse. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention. Store locked up. Dispose of contents and container in accordance with local, state, and national regulations. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. If exposed or concerned: Get medical attention. Do not breathe fumes, mist, vapors, and spray. Get medical advice or attention if you feel unwell. Use only outdoors or in a well-ventilated area. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center or doctor if you feel unwell.



SYMBOL:

HAZARDS NOT OTHERWISE CLASSIFIED: N/A

SECTION III - COMPOSITION/INFORMATION ON INGREDIENTS

HAZARDOUS INGREDIENT	CAS NUMBER	PERCENT
n-Propyl Bromide	106-94-5	60-100%
Carbon Dioxide	124-38-9	1-5%
Isopropyl Alcohol	67-63-0	1-5%

SECTION IV - FIRST AID MEASURES

EYES: Immediately flush with water for 15 minutes while holding eyelids open. Seek medical attention if irritation persists.

INGESTION: If swallowed: Rinse mouth. Do NOT induce vomiting. Get medical advice or attention.

INHALATION: Move to fresh air. If not breathing, administer artificial respiration.

SKIN: If on skin: Wash with plenty of water. If skin irritation occurs: get medical attention.

ACUTE HEALTH HAZARDS: Inhalation: dizziness, drowsiness, weakness, and fatigue

Eye: stinging, tearing, redness

Oral: Aspiration risk

Skin: Defatting and dermatitis

CHRONIC HEALTH HAZARDS: May cause damage to Central nervous system, Reproductive system, kidneys, and liver.

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

SECTION V – FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA: Dry chemical, carbon dioxide, foam, and water spray or fog.

UNSUITABLE EXTINGUISHING MEDIA: N/A

SPECIAL FIRE FIGHTING PROCEDURES: Wear SCBA in fire situations.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Keep away from sparks, open flames, and hot surfaces. No smoking. Do not spray on an open flame or other ignition source.

HAZARDOUS COMBUSTION PRODUCTS: Oxides of carbon, hydrogen halides, bromides

SECTION VI – ACCIDENTAL RELEASE MEASURES

PERSONAL PROTECTIVE EQUIPMENT: Refer to section VIII for proper Personal Protective Equipment.

SPILL: Absorb spill with non-combustible material such as vermiculite, sand or earth.

WASTE DISPOSAL: Dispose of in accordance with local, state and federal regulations.

RCRA STATUS: Not listed as hazardous waste under RCRA, however product should be fully characterized prior to disposal (40 CFR 261).

SECTION VII – HANDLING AND STORAGE

HANDLING AND STORAGE: Protect from sunlight. Store in a well ventilated place. Do not expose to temperatures exceeding 50°C/122°F. Pressurized container: Do not pierce or burn, even after use. Store locked up.

OTHER PRECAUTIONS: Keep out of the reach of children.

INCOMPATIBILITY: Some plastics, strong mineral acids and strong oxidizers. Avoid prolonged contact with aluminum, magnesium and zinc.

SECTION VIII – EXPOSURE CONTROLS/PERSONAL PROTECTION

HAZARDOUS INGREDIENT	OSHA PEL	ACGIH TLV
n-Propyl Bromide	25 ppm	10 ppm
Carbon Dioxide	5000 ppm	5000 ppm
Isopropyl Alcohol	500 ppm	400 ppm

ENGINEERING CONTROLS / VENTILATION: Use only in well ventilated areas.

RESPIRATORY PROTECTION: Wear NIOSH/MSHA approved organic vapor respiratory protection if used in confined, poorly ventilated areas.

PERSONAL PROTECTIVE EQUIPMENT: Safety glasses and chemical resistant gloves

ADDITIONAL MEASURES: Wash hands thoroughly after handling.

SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Clear colorless to yellow spray

ODOR: Strong solvent odor

ODOR THRESHOLD: N/D

BOILING POINT: N/D

FREEZING POINT: N/D

FLAMMABILITY: Not considered a flammable aerosol or an extremely flammable aerosol by OSHA (29CFR 1910.1200)

FLASH POINT: N/D

AUTOIGNITION TEMPERATURE: N/D

LOWER FLAMMABILITY LIMIT: N/D

UPPER FLAMMABILITY LIMIT: N/D

VAPOR PRESSURE (mm Hg): 110.8 @ 77°F (25°C)

VAPOR DENSITY (AIR=1): > 1 @ 77°F (25°C)

EVAPORATION RATE: 4.7 (Fast)

SPECIFIC GRAVITY (H2O=1): 1.3

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pH: N/A
SOLIDS (%): 0%
SOLUBILITY IN WATER: Non-soluble
PARTITION COEFFICIENT: n-OCTANOL/WATER (K_{ow}): N/D
VOLATILITY INCLUDING WATER (%): 100%
VOLATILE ORGANIC COMPOUNDS (VOC): 85%
DIELECTRIC STRENGTH (Volts): 14,000
DECOMPOSITION TEMPERATURE: N/D
VISCOSITY: N/D

SECTION X – STABILITY AND REACTIVITY DATA

REACTIVITY: Chemically active metals and acids
CHEMICAL STABILITY: Stable
CONDITIONS TO AVOID: Excessive heat. Prolonged contact with free water will result in diminished stabilizer and corrosion.
INCOMPATIBILITY: Some plastics, strong mineral acids and strong oxidizers. Avoid prolonged contact with aluminum, magnesium and zinc.
HAZARDOUS DECOMPOSITION OR BY-PRODUCT: Oxides of carbon, hydrogen halides, bromides
POSSIBLE HAZARDOUS REACTIONS: None Known

SECTION XI – TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION: **n-Propyl Bromide** (106-94-5) LD₅₀ (oral, rat) 3600 mg/kg; LC₅₀ (rat, 0.5hr) 253,000 mg/m³
1, 2 Butylene Oxide (106-88-7) LD₅₀ (Oral, Rat) 1180 mg/kg; LC₅₀ (Inhalation, Rat, 4hr) 4000 ppm. NTP: No IARC: Group 2B OSHA: NO
ROUTES OF ENTRY: Eyes, Ingestion, Inhalation, Skin
EYES: Causes irritation.
INGESTION: Nausea and gastric discomfort.
INHALATION: Harmful if inhaled. Causes irritation to the respiratory tract, dizziness, headaches and nausea. May cause liver damage.
SKIN: Causes mild irritation, dryness, localize defatting.
MEDICAL CONDITION AGGRAVATED: N/A
ACUTE HEALTH HAZARDS: Inhalation: dizziness, drowsiness, weakness, and fatigue
Eye: stinging, tearing, redness
Oral: Aspiration risk
Skin: Defatting and dermatitis
CHRONIC HEALTH HAZARDS: May cause damage to Central nervous system, Reproductive system, kidneys, and liver.
CARCINOGENICITY: OSHA: No ACGIH: No NTP: No IARC: 2B - Possible OTHER: CA Prop 65

SECTION XII – ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: **n-Propyl Bromide** (106-94-5) Not considered to be a bioaccumulator. LC₅₀ (Fathead Minnow, 96hr) 67 mg/L; EC₅₀ (Daphnia, 24hr) 208.9 mg/L
BIODEGRADABILITY: Component or components of this product are not biodegradable.
BIOACCUMULATION: This product is not expected to bioaccumulate.
SOIL MOBILITY: This product is mobile in soil.
OTHER ECOLOGICAL HAZARDS: This material is toxic to aquatic life.

SECTION XIII – DISPOSAL CONSIDERATIONS

WASTE DISPOSAL: Dispose of in accordance with local, state and federal regulations.
RCRA STATUS: Not listed as hazardous waste under RCRA, however product should be fully characterized prior to disposal (40 CFR 261).

SECTION XIV - TRANSPORTATION INFORMATION

PROPER SHIPPING NAME: Aerosols, Ltd. Qty.
HAZARD CLASS/DIVISION: 2.2

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UN/NA NUMBER: UN 1950
PACKAGING GROUP: N/A

AIR SHIPMENT

PROPER SHIPPING NAME: Aerosols, Ltd. Qty.
HAZARD CLASS/DIVISION: 2.2
UN/NA NUMBER: UN 1950

SHIPPING BY WATER:

VESSEL (IMO/IMDG)
PROPER SHIPPING NAME: Aerosols, Ltd. Qty.
HAZARD CLASS/DIVISION: 2.2
UN/NA NUMBER: UN 1950
ENVIRONMENTAL HAZARDS WATER: Marine Pollutant

SECTION XV - REGULATORY INFORMATION

TSCA STATUS: All Chemicals are listed or exempt.

CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT): None

SARA 311/312 HAZARD CATEGORIES: Immediate

SARA 313 REPORTABLE INGREDIENTS: **1, 2-Butylene Oxide** (106-88-7) < 0.6% by weight.

STATE REGULATIONS: **n-Propyl Bromide** (106-94-5) California Prop 65 **1, 2-Butylene Oxide** (106-88-7) RTK - NJ, PA, CA, FL, MN, MA

INTERNATIONAL REGULATIONS: **n-Propyl Bromide** (106-94-5) Canada (DSL): Ingredients listed WHMIS: Class D Division 2B, WHMIS-HC-1

NFPA HEALTH: 2
NFPA FLAMMABILITY: 2
NFPA REACTIVITY: 0
NFPA OTHER: None

HMIS HEALTH: 2
HMIS FLAMMABILITY: 2
HMIS REACTIVITY: 0
HMIS PROTECTION: B

SECTION XVI - ADDITIONAL INFORMATION

PREPARATION BY: Jonathon Jarvis
DATE PREPARED: 12/27/2013
REVISION DATE: 01/03/2013

N/A = Not Applicable; N/D = Not Determined

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