SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Lares One Step Handpiece Conditioner
SYNONYMS: Handpiece Lube; Handpiece Conditioner; Handpiece Spray; One Step Spray
PRODUCT CODES:

MANUFACTURER: Lares Research Inc.
ADDRESS: 295 Lockheed Ave, Chico, CA 95973

CHEMICAL NAME: Petroleum Distillates
CHEMICAL FAMILY: Hydrocarbon fluid mixture
CHEMICAL FORMULA: C_{8}H_{18} + C_{3}H_{8} + C_{4}H_{10}

PRODUCT USE: Dental Handpiece Conditioner
PREPARED BY: Jason Orgain, Lares Research

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

Liquid
Component INGREDIENT: % WT CAS NO. EC Number (EINECS) Exposure Limit
White Mineral Oil (petroleum) 20-30 8042-47-5 232-455-8 5 mg/m^3 (oil mist) TWA
Benzenepropanoic acid 0-1 41484-35-9 232-455-8 255-392-8
Alkylated diphenylamines 0-1 68411-46-1 232-455-8 270-128-1
Triphenyl phosphorothionate 0-1 597-82-0 232-455-8 209-909-9
Amines 0-1 80939-62-4 232-455-8 279-632-6
Propyl paraben 0-1 94-13-3 232-455-8 202-307-7
Dimethylpolysiloxane 0-1 63149-62-9 Not Assigned
Hydrocarbon Fluid (Isopar C) 30-40 64741-66-8 232-455-8 265-068-8 400 ppm (1800 mg/m^3) TWA
2,2,4 –Trimethylpentane 25-35 540-84-1 232-455-8 208-759-1 400 ppm (1800 mg/m^3) TWA

Propellant
Component INGREDIENT: % WT CAS NO. EC Number (EINECS) Exposure Limit
Liquefied Petroleum Gas (A80) 35-45 68476-86-8 232-455-8 270-705-8 1000 ppm

SECTION 2 NOTES:
The IP 346 value for mineral oil is less than 3%.

SECTION 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Danger! Extremely Flammable
Health studies have shown that many petroleum hydrocarbons and synthetic lubricants pose potential human health risks which vary from person to person. As a precaution, exposure to liquids, vapors, mists or fumes should be minimized.
Hazardous Material Identification System (HMIS): Health – 1  Flammability – 4  Reactivity - 0

ROUTES OF ENTRY: eye contact, skin contact, ingestion, inhalation,

POTENTIAL HEALTH EFFECTS

EYES:
Short Term Exposure: Irritation
Long Term Exposure: No information available.

SKIN:
Short Term Exposure: Irritation
Long Term Exposure: Irritation, skin disorders (dermatitis).

INGESTION:
Short Term Exposure: Diarrhea, difficulty breathing
Long Term Exposure: No information on significant adverse effects.

INHALATION:
Short Term Exposure: ACGIH – listed as simple asphyxiant. Effects of over exposure: Inhalation is the most likely method of exposure. Minimal effects are expected at levels below the TLV of components. Dizziness, drowsiness, coughing, nasal or throat irritations at higher levels. Propane may act as a simple asphyxiant without other significant physiologic effects if the oxygen content is low.
Long Term Exposure: Lung damage.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:
Breathing disorders (asthma, emphysema); Skin disorders (eczema, psoriasis, open wounds)
CARCINOGENICITY
OTHER: No information available

SECTION 3 NOTES:
Not a controlled product under (WHMIS) - Canada. Special protection see section 8. Health – 1  Flammability – 4  Reactivity - 0

SECTION 4: FIRST AID MEASURES

EYES: Flush eyes with clear water for 15 minutes or until irritation subsides. If irritation persists, consult a physician.

SKIN: Remove any contaminated clothing and wash affected skin area with soap and warm water. Launder or dry clean clothing before reuse. If injected under the skin, regardless of the appearance of the wound or its size, the individual should be evaluated by a physician as a surgical emergency. Even though the initial symptoms from the high pressure injection may be minimal or absent, early surgical treatment within the first few hours may significantly reduce the ultimate extent of injury.

INGESTION: If ingested, call physician immediately. Do not induce vomiting.

INHALATION: Remove to fresh air, if breathing has stopped, administer artificial respiration. Get medical help immediately.

SECTION 5: FIRE-FIGHTING MEASURES

FLAMMABLE LIMITS IN AIR (% BY VOLUME)
Mineral oil (liquid): Lower Flammable Limit: 0.9 % Upper Flammable Limit: 7.0%
Hydrocarbon fluid (liquid): Lower Flammable Limit: 1.5% Upper Flammable Limit: 11.6%
Propellant: Lower Explosion Limit: 1.8 % Upper Explosion Limit: 9.5%

FLASH POINT: AUTOIGNITION TEMPERATURE:
Propellant: 18°F (-7.8°C) ASTM D 2155 Propellant: 750°F (399°C) ASTM D 2155

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NFPA HAZARD CLASSIFICATION: HEALTH: 1  FLAMMABILITY: 4  REACTIVITY: 0
HMIS HAZARD CLASSIFICATION: HEALTH: 1  FLAMMABILITY: 4  REACTIVITY: 0

EXTINGUISHING MEDIA:
Foam, dry chemical, carbon dioxide. “Water may be ineffective”, but water may be used to keep fire-exposed containers cool.

SPECIAL FIRE FIGHTING PROCEDURES:
Keep containers cool. Use air-supplied breathing equipment for enclosed or confined spaces. Use shielding to protect personnel against bursting containers.

UNUSUAL FIRE AND EXPLOSION HAZARDS:
Do not spray near open flame. At elevated temperatures, (over 54 °C); aerosol containers may vent, burst or rupture.

HAZARDOUS DECOMPOSITION PRODUCTS:
Fumes, smoke, carbon monoxide, sulfur oxides, aldehydes and other decomposition products, in the case of incomplete combustion.

SECTION 6: ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE MEASURES:
Remove sources of ignition, ventilate area. Use appropriate safety equipment to enter area. Allow time for vapors to be below their TLV. Add oil absorbent and clean area. Keep petroleum product out of sewers and watercourses. Advise authorities if product has entered or may enter sewers or water courses.

SECTION 7: HANDLING AND STORAGE

HANDLING AND STORAGE:
Store in a cool dry area out of direct sunlight. Do not puncture or incinerate, or heat full or empty containers above 54 °C.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS:

VENTILATION:
Provide local exhaust ventilation system. Ensure compliance with applicable exposure limits. No smoking or use of flame or other ignition sources.

RESPIRATORY PROTECTION:
Consider the need for appropriate protective equipment, such as self-contained breathing apparatus, adequate masks and filters. Need approved organic vapor mask if TLV is exceeded.
EYE PROTECTION:
Wear splash resistant safety goggles. Provide and emergency eyewash fountain and quick drench shower in the immediate work area.

SKIN PROTECTION:
Wear appropriate chemical resistant (nitrile) gloves.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT:
Use chemical-resistant apron or other impervious clothing, if needed, to avoid contaminating regular clothing, which could result in prolonged or repeated skin contact.

WORK HYGIENIC PRACTICES:
Wash hands and any contaminated surfaces with soap and water prior to eating or smoking.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Clear
PHYSICAL STATE: Aerosol
ODOR: Propellant odor (hydrocarbon/propane)
pH AS SUPPLIED: Not available

BOILING POINT: (aerosol) information not available
- Mineral oil (liquid): F: >550° C: >288°
- Hydrocarbon fluid (liquid): F: 207 to 221° C: 95 to 107°
- Propellant: F: -30 to 10.9° C: -34 to -11.7°

MELTING POINT: (aerosol) not applicable
FREEZING POINT: Not available

VAPOR PRESSURE: 7,757 mm Hg (Aerosol mixture)
- Mineral oil (liquid): < 0.01 mm Hg @20° C (68° F)
- Hydrocarbon fluid (liquid): 63 mm Hg @20° C (68° F) ASTM D2879
- Propellant: 4,137 mm Hg @21° C (70° F)

SPECIFIC GRAVITY (H2O = 1):
- Mineral oil (liquid): 0.88
- Hydrocarbon fluid (liquid): 0.70
- Propellant: 0.532

EVAPORATION RATE:
BASIS (butyl acetate=1): 5.6 @ 1 Atm and 25° C (77° F)

SOLUBILITY IN WATER: insoluble (negligible)
PERCENT SOLIDS BY WEIGHT: Not applicable

PERCENT VOLATILE: (hydrocarbon fluid)
50% BY VOL in 1 minute @ 1 atm and 25° C (77° F)

VISCOSITY: (without propellant) 8mm²/s
@ F: 212 C: 100

SECTION 10: STABILITY AND REACTIVITY

STABILITY: Stable at normal temperatures and pressures.

CONDITIONS TO AVOID (STABILITY): Avoid heat, flames, sparks and other sources of ignition. Avoid contact with strong oxidants like liquid chlorine (sodium hypochlorite, calcium chlorite) or concentrated oxygen.

INCOMPATIBILITY (MATERIAL TO AVOID): Oxidizing materials, chlorine.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: Thermal decomposition products or combustion: oxides of carbon, oxides of sulfur.

HAZARDOUS POLYMERIZATION: Will not polymerize.

SECTION 11: TOXICOLOGICAL INFORMATION

White Mineral Oil
TOXICOLOGICAL INFORMATION: Greater than 5000 mg/kg LD50 oral-rat
Benzenepropanoic acid
TOXICOLOGICAL INFORMATION: Greater than 5000 mg/kg LD50 oral-rat

Alkylated diphenylamine
TOXICOLOGICAL INFORMATION: Greater than 5000 mg/kg LD50 oral-rat

Triphenyl phosphorothionate
TOXICOLOGICAL INFORMATION: Greater than 10,000 mg/kg LD50 oral-rat

Amines
TOXICOLOGICAL INFORMATION: Greater than 5000 mg/kg LD50 oral-rat

Propyl paraben
TOXICOLOGICAL INFORMATION: Greater than 8000 mg/kg LD50 oral-rat

Dimethylpolysiloxane
TOXICOLOGICAL INFORMATION: Greater than 34,600 mg/kg LD50 oral-rat

Hydrocarbon liquid: Isopar C
This component is judged to have an acute oral LD50 (rat) greater than 5 g/kg body weight and an acute dermal LD50 (rabbit) greater than 3.16 g/kg body weight.

SECTION 12: ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: No information available

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Do not puncture or incinerate containers. Give empty, leaking or full containers to a disposal service equipped to safely handle and dispose of pressurized containers.

SECTION 14: TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION
PROPER SHIPPING NAME: Aerosols, Flammable
HAZARD CLASS: 2.1
ID NUMBER: UN 1950 ORM-D Consumer Commodity

WATER TRANSPORTATION
PROPER SHIPPING NAME: Aerosols, Flammable
HAZARD CLASS: 2.1, Ems No. F-D, S-U, ERG No. 126
ID NUMBER: UN 1950, Aerosols (limited quantity)

AIR TRANSPORTATION
PROPER SHIPPING NAME: Aerosols, Flammable
HAZARD CLASS: 2.1
ID NUMBER: ID 8000, Consumer Commodity, class 9
PACKING GROUP: Packaging instructions - 910

SECTION 15: REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS
TSCA (TOXIC SUBSTANCE CONTROL ACT): All components listed in TSCA inventory.

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT):
311/312 HAZARD CATEGORIES: EPA Hazard Classification Code: FIRE
313 REPORTABLE INGREDIENTS: No toxic chemical is present greater than 1% or 0.1% (carcinogen)

STATE REGULATIONS: No information

INTERNATIONAL REGULATIONS: EC classification (calculated): Not classified as dangerous.

SECTION 16: OTHER INFORMATION

PREPARATION INFORMATION: The above information id furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of Lares Research Inc. The data on these sheets only relates only to the specific material designated herein.

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