MATERIAL SAFETY DATA SHEET for

TECHNOLOGIES, INC.

LiquiSmoke

This Material Safety Data contains at least the information required by the Federal OSHA Hazard Communication Rule, 29 CFR 1910.1200(g) (2).

SECTION I: Product Identification

TRADE NAME: Hurco LiquiSmoke

> GENERAL OR GENERIC ID: Aliphatic Hydrocarbon

DOT HAZARD CLASSIFICATION:

N/A

CHEMICAL FORMULA: Proprietary

This material is in compliance with the Toxic Substances Control Act (15 USC 2601 - 2629).

SECTION II: Components

INGREDIENT:

Aliphatic Petroleum Distillates

CAS #: 64742-30-9

% (by WT):

>95

PERMISSIBLE EXPOSURE LEVEL (PEL): 5 Mg/M3

THRESHOLD LIMIT VALUE (TLV): 5 Mg/M3

SECTION III: Physical Data

BOILING POINT:

390.00 - 520.00°F (198.88 - 217.11°C)

@ 760.00 mg HG

VAPOR PRESSURE: < 0.01 MM Hg @ 68.00°F (20.00°C)

SPECIFIC VAPOR DENSITY:

Heavier than air

SPECIFIC GRAVITY:

.840 - .816 @ 60.00°F (15,55°C)

PERCENT VOLATILES:

Not applicable

EVAPORATION RATE:

(N-Butyl Acetate = 1)

SECTION IV: Fire and Explosion Information

FLASH POINT (COC):

240.0 - 275.0°F. (115.6 - 135.0° C)

EXPLOSIVE LIMIT: Lower - .9%

EXTINGUISHING MEDIA:

Regular foam, water fog, carbon dioxide or dry chemical.

HAZARDOUS DECOMPOSITION PRODUCTS:

May form toxic materials carbon dioxide and carbon monoxide. various hydrocarbons, etc.

FIRE FIGHTING PROCEDURES:

Wear self-contained breathing apparatus with a full face piece operated in the positive pressure demand mode when fighting fires.

SPECIAL FIRE & EXPLOSION HAZARDS:

Never use welding or cutting torch on or near container (even empty) because product (even residue) can ignite explosively.

NFPS CODES:

Health-0, Flammability-2, Reactivity-0

SECTION V: Health Hazard Data

PERMISSIBLE EXPOSURE LEVEL (PEL): 5 Ma/M3

THRESHOLD LIMIT VALUE (TLV): 5 Ma/M3

EFFECTS OF ACUTE OVEREXPOSURE:

Eyes - May cause irritation

Skin - Prolonged or repeated contact can cause moderate irritation, defatting, dermatitis. Breathing of mist can cause irritation of nasal and respiratory passages.

Swallowing can cause gastro-intestinal irritation, nausea, vomiting and diarrhea. Aspiration of material into the lungs can cause chemical pneumonitis which can be fatel.

FIRST AID:

If on skin: Thoroughly wash exposed area with soap and water. Remove contaminated clothing. Launder contaminated clothing before re-use.

If in eyes: Flush with large amounts of water, lifting upper and lower lids occasionally. Get medical attention.

If swallowed: Do not induce vomiting, keep person warm, quiet, and get medical attention. Aspiration of material into the lungs due to vomiting can cause chemical pneumonitis which can be fatal.

If breathed: If affected, remove individual to fresh air. If breathing is difficult, administer oxygen. If breathing has stopped give artificial respiration. Keep person warm, quiet, and get medical attention.

PRIMARY ROUTE OF ENTRY: Skin contact

EFFECTS OF CHRONIC OVEREXPOSURE:

This product is a paraffinic petroleum product similar in nature to the one which Exxon Company reported to the EPA under Section 8(E) of the Toxic Substances Control Act. The report was submitted based on an ongoing mouse skin painting study which showed eight of an original fifty animals developed observable skin tumors.

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SECTION VI: Reactivity Data

HAZARDOUS POLYMERIZATION:

Cannot occur STABILITY: Stable

INCOMPATIBILITY:

Avoid contact with strong oxidizing agents.

SECTION VII: Spill or Leak Procedures

STEPS TO BE TAKEN:

Small spill – Absorb liquid on vermiculite, floor absorbent, or other absorbent material and transfer to hood.

Large spill – Eliminate all ignition sources (flares, flames, including pilot lights, electrical sparks). Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.

Stop spill at source, Prevent from entering drains, sewers, streams or other bodies of water. Prevent from spreading. If runoff occurs, notify authorities as required. Pump or vacuum transfer spilled product to clean containers for recovery. Absorb unrecoverable product. Transfer contaminated absorbent, soil and other materials to containers for disposal.

WASTE DISPOSAL METHOD:

Dispose of in accordance with all local, state, and federal regulations.

SECTION VIII: Protective Equipment To Be Used

RESPIRATORY PROTECTION:

If workplace exposure limit(s) of product or any componer is exceeded (See Section II), a NIOSH/MSHA approved air supplied respirator is advised in absence of proper enviror mental control. OSHA regulations also permit other NIOSH MSHA respirators (negative pressure type) under specified conditions. Engineering or administrative controls should be implemented to reduce exposure.

VENTILATION:

Provide sufficient mechanical ventilation to maintain exposure below TLV(s).

PROTECTIVE GLOVES:

Wear resistant gloves such as polyethylene.

EYE PROTECTION:

Chemical splash goggles in compliance with OSHA Regulations are advised; however, OSHA Regulations also permit other type safety glasses

OTHER PROTECTIVE EQUIPMENT:

To prevent repeated or prolonged skin contact, wear impervious clothing and boots.

SECTION IX: Special Precaution

Containers of this material may be hazardous when empty since emptied containers retain product residues (vapors, liquid, and/or solid).

All hazard precautions given in this data brochure must be observed.

LAST ISSUE DATE: 9/24/92

24-HOUR EMERGENCY TELEPHONE:

1-800-274-5263

FOR ADDITIONAL NON-EMERGENCY MSDS INFORMATION CONTACT:



4604 West 39th Street, Sloux Falls, SD 57106

1-800-888-1436