HURST *CHEMICAL COMPANY*

Date Prepared: November 1993
Revised: December 2008

MATERIAL SAFETY DATA SHEET

I. PRODUCT INFORMATION

Trade Name: No. 116 Rubber Rejuvenator
Chemical names, common names: Complex Chlorinated Hydrocarbon Mixture
Manufacturer's Name: Hurst Chemical Company.
Address: 231 W. Pedregosa St. , Santa Barbara, CA 93101
For Product Information, call: (800) 723-2004
For Emergency, Call CHEMTREC, 24 Hour: (800) 424-9300
DOT Information: Combustible liquid, n.o.s., combustible liquid
NA 1993,PG III,(contains naphtha, petroleum) 173.150

II. HAZARDOUS INGREDIENTS

CAS	Chemical	ACGIH TLV (ppm)	OSHA PEL (ppm)	OSHA IDLH (ppm)	Oral Rat LD50 (mg/kg)	Weight Percent Range
100-41-4	Ethylbenzene	100	100	2000	3500	<0.01%
108-10-1	Methyl Isobutyl Ketone	50	100	3000	--	5-10%
108-38-3	m-Xylene	100, A4	100	10000	--	<0.1%
108-88-3	Toluene	50, A4*	200	2000	5000	5-10%
111-65-9	Octane	300	300	5000	--	<1%
1330-20-7	Xylenes	100, A4	100	1000	4300	<0.1%
142-82-5	n-Heptane	400	500	5000	--	<1%
628-63-7	amyl acetate	100*	100	1000	7400 (rab) IPR	<0.1%
67-63-0	Isopropanol	400	400	12000	4710	1-5%
71-43-2	Benzene	0.5, A1*	1	500	930	<0.01%
75-09-2	Methylene Chloride	50, A3	500	5000	2100	30-50%

* Skin

Remaining component is primarily non-hazardous light aliphatic petroleum naphtha solvent (CAS 64742-89-8).

- Benzene is classified by IARC as carcinogenic to humans (Group 1), by NTP as a known human carcinogen, and by USEPA IRIS as a human carcinogen (Class A).

- Ethylbenzene is classified as carcinogenic in animals by IARC, but evidence for carcinogenicity humans is considered inadequate (Group 2B). It is not classifiable as to human carcinogenicity (Class D) by USEPA.

- Methylene Chloride is classified as carcinogenic in animals by IARC, but the evidence for carcinogenicity is inadequate in humans (Group 2B). The USEPA IRIS database considers the evidence for carcinogenicity to be sufficient in animals, but inadequate or lacking evidence in humans (Class B2). Methylene chloride may reasonably be anticipated to be a human carcinogen by the NTP (Category 2).
- Benzene is listed by California Proposition 65 as a chemical known to

cause cancer in humans and developmental defects in males by the state of California

- Ethylbenzene is listed by California Proposition 65 as a chemical known to cause cancer in humans by the state of California.
- Toluene is listed by California Proposition 65 as a chemical known to cause developmental defects by the state of California.
- Methylene Chloride is listed by California Proposition 65 as a chemical known to cause cancer in humans by the state of California.

Section IIA -This product contains the following chemicals listed in the subject regulations:

CAS	Chemical	302	304	CERCLA	355	313	RCRA	CAA212	CAA602	CWA	HAP	Prop65
100-41-4	Ethylbenzene	No	No	Yes	Yes	Yes	No	No	No	Yes	Yes	Yes
108-10-1	Methyl Isobutyl Ketone	No	No	Yes	Yes	Yes	Yes	No	No	No	Yes	No
108-38-3	m-Xylene	No	No	Yes	Yes	Yes	Yes	No	No	No	Yes	No
108-88-3	Toluene	No	No	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes
1330-20-7	Xylenes	No	No	Yes	Yes	Yes	Yes	No	No	No	Yes	No
628-63-7	amyl acetate	No	No	Yes	Yes	No	No	No	No	No	No	No
71-43-2	Benzene	No	No	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes
75-09-2	Methylene Chloride	No	No	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes

302	Section 302 of the Emergency Planning and Community Right-to-Know Act (EPCRA)
304	Section 304 of the Emergency Planning and Community Right-to-Know Act (EPCRA)
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act ("SUPERFUND")
355	The List of Extremely Hazardous Substances Under SARA
313	Toxic Release Inventory (TRI) Reporting Under SARA
RCRA	Resource Conservation and Recovery Act
CAA212	Clean Air Act Section 212
CAA602	Clean Air Act Section 602
CWA	Clean Water Act
HAP	Hazardous Air Pollutant
Prop65	California Proposition 65

All ingredients are listed under the Toxic Substance Control Act (TSCA).

III. PHYSICAL PROPERTIES

Vapor density (air = 1): >1
Specific Gravity: 0.965
Density lb/gal: 8.05
Solubility in water: Nil
VOC Composite Partial Pressure, mm Hg at 20°C: 4.2
Evaporation rate (Bu Ac = 1): >1
Boiling Range: 104-301^{o}F
Appearance and odor: Clear red liquid with mild chlorinated solvent odor.
Photochemical Reactivity Rule-102: Non-Photochemically= 16% vol
Volatile Organic Content (VOC, EPA Method 24): 557 gm/l or 4.65 lb/gal

IV. FIRE AND EXPLOSION

HMIS	Health Hazard = 2
HAZARD	Flammability = 2
CLASS	Reactivity = 0

0 = Least	3 = High
1 = Slight	4= Extreme
2 = Moderate	

Other= Safety glasses and gloves

Flash Point: 101°F TCC

Flammable limits in air, volume%: lower 1% upper 7%

Flammable class: II

Fire extinguishing materials:

Water Spray: No
Carbon Dioxide: Yes
Foam: Yes
Dry Chemical: Yes
Other: No

Special firefighting procedures The use of SCBA is recommended for fire fighters. Water spray may be useful in minimizing vapors and cooling containers exposed to heat and flame. Avoid spreading burning liquid with water it's used for cooling purposes.

Unusual fire and explosion hazards: This material is combustible and may be ignited by heat or flame, sparks or static electricity. If container is not properly cooled it may explode in heat of fire. Blends containing chlorinated products may exhibit reduced flash point as the non-volatile chlorinate evaporates.

V. HEALTH HAZARD INFORMATION

SYMPTOMS OF OVEREXPOSURE FOR EACH POTENTIAL ROUTE OF EXPOSURE

Inhaled: While this material has a low degree of toxicity, breathing, high concentrations of vapors or mists may cause irritation of the nose and throat, signs of nervous system depression. Respiratory symptoms associated with pre-existing lung disorders (e.g. asthma-like condition) may be aggravated by exposure to this material.

Contact with skin or eyes: One or more components of this product is an eye and skin irritant. Direct contact with the liquid or exposure to vapor and mists may cause stinging, tearing, redness and swelling of eyes and redness, burning, drying and cracking of skin.

Absorbed through skin: Contact may result in skin absorption but symptoms of toxicity are not anticipated by this route alone. Under normal conditions of use, persons with pre-existing skin disorders may be more susceptible to the effects of this material.

Swallowed: Ingestion of excessive quantities may cause signs of nervous system depression, irritation of the digestive tract and vomiting, abdominal pain, convulsions, coma, and death.

Aspiration Hazard-one or more components of this material can enter lungs during swallowing or vomiting and cause lung inflammation and damage.

HEALTH EFFECTS OR RISKS FROM EXPOSURE

Acute: Irritation of nose and throat, irritation of the digestive tract. Abdominal pain.

Chronic: Permanent brain and nervous system damage, abdominal pain, convulsions, coma.

FIRST AID: EMERGENCY PROCEDURES

Eye Contact: Move victim away from exposure to vapors and into fresh air. For direct contact, hold eyelids apart and flush the affected eye(s) with clean water for at least 15 minutes. Seek medical attention.

Skin Contact: Remove contaminated clothing. Cleanse affected area(s) thoroughly by washing with mild soap and water. If irritation or redness develops and persists, seek medical attention. Inhaled: Move victim away from source of exposure and into fresh air. If symptoms persist, seek medical attention. If victim is not breathing, artificial respiration should be administered. If breathing difficulties develop, oxygen should be administered by qualified personnel. Seek immediate medical attention.

Swallowed: Seek emergency medical attention. This product is slightly toxic by ingestion and an aspiration hazard. If victim is drowsy or unconscious, place on the left side with the head down and do not give anything by mouth. If victim is conscious, alert and not spontaneously vomiting, then vomiting should be induced for ingestions of large amounts, preferably with syrup of ipecac under direction from a physician or poison center. If possible do not leave victim unattended.

COMMENTS: A component of this product, Benzene, has been identified as a carcinogen by NTP, IARC, USEPA, or OSHA. Toluene in this product can cause irreversible changes in the genetic material (DNA) of a cell. Intentional misuse by deliberate inhalation of Toluene has been shown to cause liver, kidney and brain damage. Xylene an ingredient in this product has been found to cause harm to the fetus in the laboratory animal studies. The relevance of these findings to humans is uncertain. Pre-existing blood, kidney, and liver disorders may be aggravated by exposure to this material. Methylene chloride, a component of this product, is a possible human cancer hazard based on tests with laboratory animals. It has been identified as a possible carcinogen by IARC, USEPA, and NTP. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage (sometimes referred to as solvent or painters' syndrome). Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. Overexposure to this material or its component has been found to cause the following in laboratory animals; anemia, liver abnormalities, kidney damage, eye damage, and overexposure to this material or its components have also been suggested as a cause of human cardiac abnormality.

MEDICAL CONDITION AGGRAVATED BY EXPOSURE: Respiratory symptoms associated with pre-existing lung disorders, pre-existing blood, kidney, and liver disorders, and persons with pre-existing skin disorders may be aggravated by exposure to this material.

RECOMMENDATIONS TO PHYSICIAN: Pre-existing cardiovascular disorders may be aggravated by exposure to methylene chloride. Carboxyhemoglobin levels should be measured in patients symptomatic (headache, nausea, vomiting, malaise, shortness of breath, chest pain, sweating) after exposure to methylene chloride. A large intentional ingestion produced small bowel ulcerations and these patients should be examined and followed for the development of those sequences. Epinephrine and other sympathomimetic drugs may potentiate cardiac arrhythmias in persons exposed to Toluene. These drugs should be used cautiously, if at all, and only with cardiac monitoring.

VI. REACTIVITY DATA

Stability: Stable under ordinary conditions of use and storage.

Incompatibility (materials to avoid): Avoid contact with oxygen, nitrogen peroxide, oxidizers, selected amines, strong acids and bases and reactive metals (i.e. aluminum, potassium, sodium, etc.).

Hazardous Decomposition products (including combustion products): Thermal decomposition in the presence of air may yield carbon monoxide, carbon dioxide, phosgene/or HCL.

Hazardous polymerization: Will not occur.

VII. SPILL, LEAK, AND DISPOSAL PROCEDURES

Spill response procedures: Stay upwind and away from spill. Keep all sources of ignition and hot metal surfaces away from spill. If spill is indoors ventilate area of spill. A universal type foam can be used to suppress vapors. Keep spill out of drains, sewers or waterways. Use sand or other inert materials to dam and contain spill. Do not flush with water; use absorbent pads. For small spills do not flush with water; use absorbent pads. Call a spill response team if there is a large spill. Notify appropriate state and local agencies.

Reportable Quantities DOT/CERCLA:

Chemical	RQ
Amyl Acetate	5,000
Benzene	10
Ethylbenzene	1,000
Methyl Isobutyl Ketone	5,000
Methylene Chloride	1,000
m-Xylene	1,000
Toluene	1,000
Xylenes	100

Preparing wastes for disposal: Dispose of product in accordance with local, county, state, federal regulations.

VIII. SPECIAL HANDLING INFORMATION

Ventilation and engineering controls: If current ventilation practices are not adequate to maintain airborne concentration below established exposure limits, additional ventilation or exhaust systems may be required. Where explosive mixtures may be present, electrical systems safe for such locations may be used.

Respiratory Protection: The use of respiratory protection is advised when concentrations exceed the established exposure limits. Depending on the airborne concentration, use a respirator or gas mask with appropriate cartridges and canisters (NIOSH Approved, if available) or supplied air equipment.

Eye Protection: Use safety goggles where solvent splashes are expected.

Gloves: Use of gloves impermeable to specific material handled is advised to prevent skin contact & possible irritation.

Other clothing and equipment: It is suggested that a source of clear water be available in work area for flushing eyes and skin. Impervious clothing should be worn as needed.

Work practices, hygienic practices: Practice personal cleanliness by prompt removal of solvent in contact with skin. Remove contaminated clothing promptly. Train all employees on special handling procedures prior to working with this product.

OTHER HANDLING AND STORAGE REQUIREMENTS:
Keep containers tightly closed. Keep containers cool, dry and away from sources of ignition. Use and store this product with adequate ventilation. Avoid inhalation of vapors and personal contact with the product. Use good personal hygiene practice. "Empty" containers retain residue (liquid and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind or expose such containers to heat, flame, sparks or other sources of ignition; they may explode and cause injury or death. "Empty" drums should be completely drained, properly bunged and promptly shipped to the supplier or a drum reconditioner. All other containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations.

Hurst Chemical Company furnishes Material Safety Data Sheets based upon information from raw material suppliers. This information is provided in compliance with Federal Regulation 29CFR 1910. HOWEVER, NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE OR ANY OTHER WARRANTY IS EXPRESSED OR IS TO BE IMPLIED REGARDING THE ACCURACY OR COMPLETENESS OF THIS INFORMATION, THE RESULTS TO BE OBTAINED FROM THE USE OF THIS INFORMATION OR THE PRODUCT, THE SAFETY OF THIS PRODUCT, OR THE HAZARDS RELATED TO ITS USE. This information and product are furnished on the condition that the person receiving them shall make his own determination as to the suitability of the product for his particular purpose and on the condition that he assumes the risk of his use thereof.