

SAFETY DATA SHEET

Section 1: IDENTIFICATION

Product Name: 00H1 €Q\Ä^*!æ^}c

Product Code: %)!,% %

MSDS Date: May 14, 2014

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St. Louis, MO 63FFÍ

General Information: 314-' , &!' '\$\$

CHEMTREC: 800-424-9300

Section 2: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

GHS Classification:

Flammable liquids (Category 3)

Skin irritation (Category 2)

Serious eye damage (Category 1)

Skin sensitization (Category 1)

Reproductive toxicity (Category 1B)

Specific target organ toxicity - single exposure (Category 3), Respiratory system

GHS Labeling



Symbol:

Signal Word: Danger

Hazard Statements:

Flammable liquid and vapor

Causes skin irritation.

Causes serious eye damage.

May cause an allergic skin reaction

May damage fertility or the unborn child

May cause respiratory irritation

Precautionary Statements:

Prevention:

Avoid breathing mist/vapors/spray.

Contaminated work clothing must not be allowed out of the workplace.

Do not handle until all safety precautions have been read and understood.

Ground/bond container and receiving equipment.

Keep away from heat/sparks/open flames/hot surfaces-no smoking.

Keep container tightly closed.

Obtain special instructions before use.

Take precautionary measure against static discharge.

Use only non-sparking tools.

Use only outdoors or in a well-ventilated area.
 Wash thoroughly after handling.
 Wear protective gloves/protective clothing/eye protection/face protection.

Response:

Call a poison center/doctor if you feel unwell.
 If exposed or concerned: Get medical advice/attention.
 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 If inhaled: Remove person to fresh air and keep comfortable for breathing.
 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water shower.
 If on skin: Wash with plenty of water.
 If skin irritation or rash occurs: Get medical advice/attention.
 In case of fire: Use water fog or fine spray, dry chemical fire extinguishers, carbon dioxide fire extinguishers and foam to extinguish.
 Take off contaminated clothing and wash it before reuse.
 Wash contaminated clothing before reuse.

Storage:

Store in a well-ventilated place. Keep cool. Keep container tightly closed.
 Store locked up.

Disposal:

Dispose of contents/container in accordance with local/regional/national/international regulations.

Potential Health Effects: See Section 11 for more information.

This product does not contain carcinogens or potential carcinogens as listed by OSHA, IARC, or NTP.

This material contains components that are considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Potential Environmental Effects: See Section 12 for more information.

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

No.	Component CAS REG. NO.	Amount %	OSHA		ACGIH	
			TWA	STEL	TWA	STEL
1	Benzyl Alcohol CAS #100-51-6	1-30	Not Avail	Not Avail	Not Avail	Not Avail
2	Dimethyl Glutarate CAS #1119-40-0	1-30	Not avail	Not avail	Not avail	Not avail
3	Dimethyl Succinate CAS #106-65-0	1-30	Not avail	Not avail	Not avail	Not avail
4	Dimethyl Adipate CAS #627-93-0	1-30	Not avail	Not avail	Not avail	Not avail
5	Limonene, D- CAS#5989-27-5	1-30	Not avail	Not avail	30 ppm	Not avail
6	Ethoxylated Nonylphenol CAS #9016-45-9	1-10	Not avail	Not avail	Not avail	Not avail
7	N-Methy-2-Pyrrolidone CAS #872-50-4	1-30	Not Avail	Not Avail	Not Avail	Not Avail

Section 4: FIRST AID MEASURES

Emergency first aid procedures by route of exposure:

Inhalation: Move victim away from source of exposure and into fresh air. Inhalation may produce nausea and irritation of the upper respiratory tract. If symptoms persist, seek medical attention. If victim is not breathing, immediately begin artificial respiration. Qualified personnel should administer oxygen if breathing difficulties develop. Seek immediate medical attention.

Ingestion: Do not induce vomiting. If the material is swallowed, get medical attention or advice.
Skin: Immediately remove contaminated clothing. Wash skin thoroughly with mild soap and water. Flush with lukewarm water for 15 minutes. If sticky, use waterless cleaner first. Seek medical attention if ill effect or irritation develops.
Eyes: If irritation or redness develops from exposure move victim away from exposure and into fresh air. Flush eyes with clean, flowing water for at least 15 minutes. If irritation or redness persists, seek medical attention. For contact with molten material, gently open eyelids and flush affected eye(s) with clean, flowing water for at least 15 minutes. Seek immediate medical attention.

Section 5: FIRE FIGHTING MEASURES

Flash Point (Limonene, D) 48.88°C (120°F) Pensky Martens closed cup
LEL (Limonene, D): 0.7% (V)
UEL (Limonene, D): 6.1% (V)
Auto Ignition Temperature: 458°F / 237°C
NFPA Classification: Combustible Liquid Class II

Conditions to Avoid: When heated above the flash point, releases flammable vapors. When mixed with air and exposed to ignition source, vapors can burn in open or explode if confined. Vapors may be heavier than air. May travel long distances along the ground before igniting and flashing back to vapor source. Fine sprays/mists may be combustible at temperatures below normal flash point.

Suitable Extinguishing Media: Water fog or fine spray, dry chemical fire extinguishers, carbon dioxide fire extinguishers and foam. Alcohol resistant foams are preferred. General purpose synthetic foams or protein foams may function, but will be less effective.

Products of Combustion: During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include and are not limited to nitrogen oxides, carbon monoxide and carbon dioxide.

Fire Fighting Equipment/Instructions: Keep people away. Isolate fire and deny unnecessary entry. Use water spray to cool fire exposed container and fire affected zone until fire is out and danger of re-ignition has passed. Fight fire from protected location or safe distance. Consider use of unmanned hose holder or monitor nozzles. Immediately withdraw all personnel from area in case of ring round from venting safety devise or discoloration of the container. Burning liquids may be extinguished by dilution with water. Do Not Use Direct Water Stream as this may spread the fire. Move container from fire area if this is possible without hazard. Burning liquids may be moved by flushing with water to protect personnel and minimize property damage.

Protective Equipment for Fighting Fire: Wear positive-pressure, self-contained breathing apparatus (SCBA) and protective fire fighting clothing. Avoid contact with this material during fire fighting operations. If contact is likely, change to full chemical resistant clothing with SCBA. If this is not available, fight fire from a protected location.

HAZARD	HMIS	NFPA
Toxicity	2	2
Fire	2	2
Reactivity	0	0

Section 6: ACCIDENTAL RELEASE MEASURES

Personal Protection: For large spills wear gloves, Tyvek suits, safety glasses, and appropriate NIOSH approved respiratory protection. Keep unnecessary personnel away. Eliminate all sources of ignition or flammables that may come into contact with a spill of this material.

Environmental Precautions: Prevent discharge to open bodies of water, municipal sewers, and watercourses.

Method for Containment: Absorb spilled liquid in suitable non-flammable inert material such as clay, vermiculite or diatomaceous earth.

Methods for Clean-up: Ventilate area of leak or spill. Use spark-proof tools to sweep or scrape up and containerize in approved chemical waste container. Wash spill area with water.

Section 7: HANDLING AND STORAGE

Handling:

Keep away from heat, sparks and flame. Use only with adequate ventilation. Wash hands before eating, drinking, or smoking. Avoid contact with eyes, skin and clothing. Avoid breathing vapors. Containers, even those that have been emptied, can contain vapors. Do not cut, drill, grind, weld, or perform similar operations on or near empty containers. Spills of these organic materials on hot fibrous insulations may lead to lowering of the autoignition temperatures possible resulting in spontaneous combustion.

Storage:

Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame). Do not store in aluminum, copper, copper alloys or galvanized containers.

Section 8: EXPOSURE CONTROLS/ PERSONAL PROTECTION

Engineering Controls: Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Personal Protective Equipment (PPE)

Respiratory Protection: When respiratory protection is required for certain operations, use an approved air purifying respirator.

Eye/Face Protection: Use splash goggles and face shield when eye contact may occur.

Hand Protection: Use chemical resistant gloves.

Body: Chemical resistant apron and other impervious clothing to avoid skin contact.

Other Protective Equipment:

Facilities storing or utilizing this material should be equipped with eyewash and safety shower facilities.

See section 3 for exposure limits.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance, State	Clear liquid
Color	Colorless
Odor	Not available
pH (1% soln/water)	Not Available
Vapor Density (N-Methy-2-Pyrrolidone)	1,030 hg/m ³ @ 25°C
Boiling Point (N-Methy-2-Pyrrolidone)	396F/202°C @ 760 mmHg
Vapor Pressure (N-Methy-2-Pyrrolidone)	0.3 mmHg at 20°C
Melting Point (Benzyl Alcohol)	-15.3°C (+4.5°F)
Freezing Point	Not Available
Flash Point (See Section 5)	
Flammability Properties (See section 5)	
Solubility (in water)	Miscible
Specific Gravity (N-Methy-2-Pyrrolidone)	1.03
Density	8.4 lbs/gallon
Evaporation Rate (Benzyl Alcohol)	<0.01 (Butyl acetate = 1)

Octanol/Water partition coefficient (Kow) Not Available
Auto-ignition temperature: Not Available
Decomposition temperature: Not Available
Viscosity: Not Available

Section 10: STABILITY AND REACTIVITY

Stability: This material is considered stable at ambient temperatures 70°C (21°C).

Conditions to Avoid: Severe reducing conditions. In contact with moisture, this material may degrade or become contaminated. Flames, sparks, electrostatic discharge, heat, other ignition sources, and oxidizing conditions.

Incompatible Materials: This product reacts with strong acid, strong bases, and oxidizing agents.

Hazardous Decomposition: Upon decomposition, this product evolves carbon monoxide, carbon dioxide, and/or low weight hydrocarbons.

Hazardous Reactions: This product will not undergo polymerization.

Section 11: TOXICOLOGICAL INFORMATION

ACUTE EFFECTS:

Analysis LD50

Benzyl Alcohol (100-51-6)
Acute oral toxicity (LD50): 1040 mg/kg [Rabbit]
Acute dermal toxicity (LD50): 2000 mg/kg [Rabbit]

N-Methyl-2-pyrrolidone (872-50-4)
Acute Oral LD50 (mg/kg): 4200 [Rat]
Acute Dermal LD50 (mg/kg): 8000 [Rat]
Acute inhalation LC50 (mg/l): >400 ppm [Rat]

Dimethyl Succinate (106-65-0)
Oral LD50 Rat:>5g/kg
Dermal LD50 Rat: 1920 mg/kg
Slightly toxic following oral administration. Practically nontoxic after skin application in animal studies.
Moderately irritating to eyes (rabbit). Practically non irritating to skin (rabbit).

Dimethyl Adipate (627-93-0)
Oral LD50 Rat: 1920 mg/kg
Practically nontoxic following oral administration. Practically nontoxic after skin application in animal studies.
Practically non irritating to skin (rabbit). Moderately irritating to eyes (rabbit).

Dimethyl Glutarate (1119-40-0)
Inhalation LC50 Rat: 6.1 mg/L/4H
Oral LD50 Rat: 8191 mg/kg

Limonene-D (5989-27-5)
Oral LD50 Rat 4400 mg/kg;
Dermal LD50 Rabbit >2000 mg/kg

Ethoxylated Nonylphenol (CAS# 9016-45-9)
LD50 Dermal Rabbit >2000 mg/kg
LD50 Oral Rat 3310 mg/kg

CHRONIC EFFECTS:

Benzyl Alcohol (100-51-6)

Carcinogenic Effects: Not classified as a carcinogen according to IARC, NTP, and OSHA.

Mutagenic Effects: Mutagenic for bacteria and yeasts

Teratogenic Effects: May cause adverse reproductive effects based on animal data. No human data found at this point.

Developmental Toxicity: Not Available

Target Organs: Prolonged contact may cause defatting of the skin. May be toxic to the liver and central nervous system. **Eye Contact:** Causes eye irritation – is a severe eye irritant. **Inhalation:** Exposure to vapors may cause headache, vertigo, dizziness, and nausea. May irritate the nose and throat. Over exposure may cause central nervous system depression. **Skin Contact:** May cause skin irritation. **Ingestion:** Harmful if swallowed.

N-Methyl-2-pyrrolidone (872-50-4)

Carcinogenic Effects: A4 - Not classifiable for human or animal by ACGIH.

Mutagenic Effects: Non mutagenic

Teratogenic Effects: Not Available

Developmental Toxicity: Not Available

Target Organs: moderate to severe eye irritant. Excess redness of conjunctiva may occur. Eye irritant. Permanent corneal damage is not expected. Skin absorption hazard. Mildly irritating to the skin, not a sensitizer. This material or its emissions may defat skin, cause contact dermatitis, or otherwise aggravate existing skin disease. Signs of respiratory tract irritation (such as nasal discharge and difficulty breathing) may occur after exposure to aerosol or high vapor concentration. Repeated inhalation exposure may cause reversible irritation at the site of initial contact, and transient CNS effects have also been observed. Ingestion may cause discomfort and irritation of the gastrointestinal tract, dizziness and shortness of breath.

Dimethyl Succinate (106-65-0) Dimethyl Adipate (627-93-0) Dimethyl Glutarate (1119-40-0)

Carcinogenicity: Not Available

Neurotoxicity: Not available

Mutagenicity: no genetic effects were observed in standard tests using bacterial cells and whole animals.

Reproductive: Minor changes in male fertility parameters, i.e. hormone measurements, sperm number or reproductive organ weights, observed in the absence of a change in reproductive performance.

Developmental: rate inhalation no effects on offspring observed in laboratory animals in the presence of maternal toxicity.

Target Organs: Causes eye irritation. May cause skin irritation. May cause respiratory tract irritation. May cause blurred vision. Mild skin and moderate eye irritation during primary irritation studies in rabbits.

Limonene-D (5989-27-5)

Carcinogenic Effects NTP: Not listed as a carcinogen by IARC, NTP, or OSHA.

Mutagenic Effects: Not Available.

Teratogenic Effects: Not Available

Developmental Toxicity: This component has been shown to cause harm to the fetus in laboratory animal studies. Harm to the fetus occurs only at exposure levels that harm the pregnant animal. The relevance of these findings to humans is uncertain.

Target Organs: Exposure to this component has been found to cause kidney damage in male rats. The mechanism by which this toxicity occurs specific to the male rat and the kidney effects are not expected to occur in humans. Overexposure to this component has been suggested as a cause of the following effects in laboratory animals: mild, reversible liver effects, mild, reversible, kidney effects. **Eye contact:** May cause mild eye irritation. Symptoms include stinging, tearing, and redness. **Skin contact:** May cause mild skin irritation. Prolonged or repeated contact may dry the skin. Symptoms may include redness, burning, drying and cracking of skin, and skin burns. Additional symptoms of skin contact may include: allergic skin reaction (delayed skin rash which may be followed by blistering, scaling, and other skin effects.) Passage of this material into the body through the skin is possible, but it unlikely that this would result in harmful effects during safe handling and use. **Ingestion:** Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful. **Inhalation:** Breathing of vapor or mist is possible. Breathing small amounts of this material during normal handling is not likely to cause harmful

effects. Breathing large amounts may be harmful. Symptoms are not expected at air concentrations below the recommended exposure limits, if applicable. **Aggravated Medical Condition:** Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: Skin, lung (for example, asthma-like conditions). **Symptoms:** Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: stomach or intestinal upset (nausea, vomiting, diarrhea) irritation (nose, throat, airways).

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity: Benzyl Alcohol (100-51-6)

Ecotoxicity in water (LC50):

770 mg/l 48 hours [Fish (Pimephales promelas (Fathead minnow))].
480 mg/l 72 hours [Fish (Pimephales promelas (Fathead minnow))].
460 mg/l 96 hours [Fish (Pimephales promelas (Fathead minnow))].
10 ppm 96 hours [Fish (Lepomis macrochirus (Bluegill sunfish))].
15 ppm 96 hours [Fish (Menidia beryllina (tidewater silverside fish))].

Ecotoxicity: n-Methyl-2-pyrrolidone (872-50-4)

Bluegill (Lepomis Marochirus) LC50 @22°C: 832 mg/l
Fathead Minnow (Pimephales Promelas) LC50 @22°C: 1,072 mg/l
Trout (Salmo Gairdneri) LC50 @12°C: 3,048 mg/l.

Ecotoxicity: Dimethyl Glutarate, Dimethyl Succinate, and Dimethyl Adipate

EC50/48-hour/Daphnia=17 mg/l
EC50/72-hour/Algae=46.9 mg/l
LC50/96-hour/bluegill sunfish = 7.5 mg/l

Ecotoxicity: Limonene-D (CAS#5989-27-5)

96 Hr LC50 Pimephales promelas: 0.619-0.796 mg/L [flow-through];
96 Hr LC50 Oncorhynchus mykiss: 35 mg/L

Ecotoxicity: Ethoxylated Nonylphenol (9016-45-9)

96 hours LC50 Fish 10 mg/L

Section 13: DISPOSAL CONSIDERATIONS

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

Section 14: TRANSPORTATION INFORMATION

Proper Shipping Name: Combustible liquid n.o.s.

Hazard Class: Comb Liq

Identification No.: NA1993

Packing Group: III

Label: Combustible (Bulk Only)

Section 15: REGULATORY INFORMATION

TSCA Inventory This product and/or its components are listed on the Toxic Substances Control Act (TSCA) inventory.

SARA 302/304 The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires facilities subject to Subparts 302 and 304 to submit emergency planning and notification information based on Threshold Planning Quantities (TPQs) and Reportable Quantities (RQs) for "Extremely Hazardous Substances" listed in 40 CFR 302.4 and 40 CFR 355. No components were identified.

SARA 313 n-Methyl-2-pyrrolidone (872-50-4),

CERCLA The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) requires notification of the National Response Center concerning release of quantities of "hazardous substances" equal to or greater than the reportable quantities (RQ's) listed in 40 CFR 302.4. As defined by CERCLA, the term "hazardous substance" does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically designated in 40 CFR 302.4. Chemical substances present in this product or refinery stream that may be subject to this statute are: No components were identified.

SARA 311/312 Hazard The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires facilities subject to this subpart to submit aggregate information on chemicals by "Hazard Category" as defined in 40 CFR 370.2. This material would be classified under the following hazard categories: Acute (Immediate) Health Hazard, Chronic (Delayed) Health Hazard

California Prop 65: N-Methylpyrrolidone developmental Toxicity

Section 16: OTHER SUPPLEMENTAL INFORMATION

Prepared For: Lawson Screen Products, Inc. on 5/14/2014

Disclaimer:

The information and recommendations contained in the Safety Data Sheet (SDS) are supplied pursuant to 29 CFR 1910.1200 of the Occupational Safety and Health Standards Hazard Communication Rule. The information and recommendations set forth herein are presented in good faith and believed to be correct as of this date hereof.

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