

# MATERIAL SAFETY DATA SHEET

Date Prepared: 2-24-02 By Charles D. Werner

## SECTION 1 - PRODUCT IDENTIFICATION

Manufacturer Name: Formula Corporation	Emergency Phone No: 1-800-228-5635 ext. 059
Address: 7901 Second Ave. South Seattle, WA 98108	
Trade Name: 50/50 Punch Cleaner	Product Type: cleaner degreaser
Formula Code: FLCIDDXX	Formula:

## SECTION 2 - HAZARDOUS INGREDIENTS

Chemical Name/Common Name:	CAS NO.	PERCENT (optional)	TLV (Source)
d-Limonene	5989-27-5	50	none established
Petroleum solvent	64742-48-9	45	100 (ACGIH)

## SECTION 3 - PHYSICAL DATA

Boiling Point: (F) 340 - 348	Specific Gravity: (H <sub>2</sub> O = 1.0) 0.8	pH: N/A
Vapor Pressure: (mmHg) Not Determined	Vapor Density: Heavier than air	
Solubility In Water: Emulsifiable (or dispersible)		
Evaporation Rate (Vs ether) Slower		
Appearance and Odor: liquid, non-viscous, water white color and orange fragrance		

## SECTION 4 - FIRE AND EXPLOSION HAZARD DATA

Flash Point (T.C.C.): 115 F	Flammable Limits	Lower 0.7%	Upper: 7.0%
Extinguishing Media: Foam, Alcohol Foam, CO <sub>2</sub> , dry chemical, water Fog			
Special Fire Fighting Procedures: Fire fighters should wear self-contained breathing apparatus and full protective clothing. Use Water spray to cool nearby containers and structures exposed to fire.			
Unusual Fire and Explosion Hazards: Extinguish all nearby sources of ignition because vapors may be moved by air currents.			

## SECTION 5 - REACTIVE DATA

Stability: Stable	Incompatibility: Strong oxidizers
Hazardous Decomposition Products: may liberate carbon dioxide or carbon monoxide.	

## SECTION 6 - HEALTH HAZARDS

Threshold Limit Value - Product (See Section 2 for Ingredient TLV)	None Established			
Primary Routes of Exposure: Eye - yes	Skin-Not Established	Oral-yes	Inhalation-yes	Other
Signs and Symptoms of Over-exposure (Acute): EYES: Vapors and mists may irritate the eyes. Inhalation of higher concentration may cause headaches.				
Signs and Symptoms of Over-exposure (Chronic): No specific information available.				
Medical Conditions Aggravated by Over-exposure: Persons with pre-existing skin disorders, eye problems, impaired respiratory function may more susceptible to effects.				
Carcinogen or Suspect Carcinogen Ingredients: NTP - NO	IARC - NO	OSHA - NO	NONE	

## SECTION 7 - EMERGENCY AND FIRST AID PROCEDURES

Eyes: Flush with immediately with lots of running water for at least 15 minutes holding eyelids open. Get medical attention.
Skin: Wash skin with soap and water. Remove contaminated clothing & shoes.
Ingestion: DO NOT INDUCE VOMITING If vomiting occurs spontaneously, keep victims head below his hips to prevent his breathing vomitus into his lungs. Call physician or poison control center immediately, Treat symptomatically.
Inhalation: Get to fresh air.

## SECTION 8 - SPECIAL PROTECTION INFORMATION

Respiratory Protection: not normally required	Ventilation Requirements: Adequate ventilation required. Mechanical required if necessary to maintain exposure below PEL.
Protective Gloves: Wear resistant gloves if excessive exposure is anticipated.	Eye Protection: Not normally required. Recommended if used overhead or misting or spraying.
Other Protective Clothing: Where gross eye and skin contact may occur use and wear appropriate protective clothing, including resistant clothing, rubber boots with pants on the outside, and rubber gloves.	

## SECTION 9 - SPILL OR LEAK PROCEDURES

Steps to be Taken if Released or Spilled: EXTINGUISH ALL IGNITION SOURCES. For small spills, mop or wipe up and contain. For large spills, contain by diking with absorbent material and contain. Keep material out of sewers, storms drains, surface waters, & soils.
Waste Disposal Methods: Note that the contaminants of the product must be consider when disposing . consult appropriate Federal, State and Local regulatory agencies to ascertain proper disposal procedures and comply with them.

## SECTION 10 - STORAGE AND HANDLING INFORMATION

Precautions to be Taken in Handling and Storage: KEEP AWAY FROM HEAT, SPARKS AND FLAMES. Store in a cool dry, well ventilated place away from incompatible materials. Keep container tightly closed when not in use. Do not use pressure to empty container.
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