

1. CHEMICAL NAME AND COMPANY IDENTIFICATION

Formulated/Manufactured By: Tower Products, Inc.
2703 Freemansburg Avenue
Easton, PA 18045

Information Telephone Number: 1-800-527-8626 or 610-253-6206

For Chemical Spill Emergency Call: CHEMTREC: 1-800-424-9300

Product Name: 228-R SOLVENT (Flexographic Ink Solvent)

CAS Number: Mixture - Not Established

2. HAZARD(S) IDENTIFICATION**GHS Classification**

Flammable Liquids (Category 2)
Specific Target Organ Toxicity - Single Exposure (Category 3)
Skin Irritation (Category 2)
Eye Irritation (Category 2A)

GHS label elements, including hazard and precautionary statements

Pictogram(s) 

Signal Word DANGER!

Hazard statement(s)

H225 HIGHLY FLAMMABLE LIQUID & VAPOR.
H335: MAY CAUSE RESPIRATORY IRRITATION.
H336: MAY CAUSE DIZZINESS OR DROWSINESS.
H315: CAUSES SKIN IRRITATION.
H319: CAUSES SERIOUS EYE IRRITATION.

Precautionary statement(s)

P210: KEEP AWAY FROM HEAT/SPARKS/OPEN FLAMES/HOT SURFACES AND OTHER IGNITION SOURCES.
NO SMOKING.
P261: AVOID BREATHING FUME/MIST/GAS/DUST/VAPORS/SPRAY.
P280: WEAR PROTECTIVE GLOVES/PROTECTIVE CLOTHING/FACE PROTECTION/EYE PROTECTION.
P264: WASH SKIN THOROUGHLY AFTER HANDLING.

Response:

P370+P378: IN CASE OF FIRE: USE DRY CHEMICAL OR CARBON DIOXIDE TO EXTINGUISH.
P304+P340: IF INHALED: REMOVE PERSON TO FRESH AIR AND KEEP COMFORTABLE FOR BREATHING.
P303+P361+P353 IF ON SKIN (or hair): TAKE OFF IMMEDIATELY ALL CONTAMINATED CLOTHING. RINSE SKIN WITH WATER (OR SHOWER).
P305+P351+P338: IF IN EYES: RINSE CAUTIOUSLY WITH WATER FOR SEVERAL MINUTES. REMOVE CONTACT LENSES, IF PRESENT AND EASY TO DO. CONTINUE RINSING.

Storage:

P403+P233+P405: STORE IN A WELL-VENTILATED PLACE. KEEP CONTAINER TIGHTLY CLOSED. STORE LOCKED UP.

Disposal:

P501: DISPOSE OF CONTENTS/CONTAINER IN ACCORDANCE WITH LOCAL/REGIONAL/NATIONAL REGULATIONS.

HMIS Classification

Health Hazard: 2

Flammability: 3

Physical Hazard: 0

Personal Protection: H

3. COMPOSITION / INFORMATION ON INGREDIENTS

<u>Component(s)</u>	<u>CAS Number</u>	<u>*Concentration (weight)</u>
Ethanol 95%	64-17-5	75-85%
N-Propyl Acetate	109-60-4	15-25%

* In accordance with paragraph (i) of §1910.1200, exact chemical percentages (concentration) of composition have been withheld as a trade secret.

4. FIRST AID MEASURES

Exposure Routes: Inhalation, Ingestion, Skin and Eye

Eye Contact: Flush with large volume of water for at least 15 minutes. Get immediate medical attention.

Inhalation: Remove to fresh air. Get immediate medical attention.

Ingestion: Get immediate medical attention. Do not induce vomiting.

Skin Contact: Flush area with large amounts of water for at least 15 minutes. Get immediate medical attention.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Use dry chemical or carbon dioxide.

Specific Hazards: Extremely flammable liquid. Upon combustion, the product may form carbon monoxide and other organic compounds. Product containers may rupture from vapor pressure when exposed to heat from fire.

Special protective equipment for fire-fighters: Use self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES**Personal precautions and protective equipment:**

Respiratory Protection: Use supplied air equipment or respirators with proper NIOSH approved cartridges.

Protective Gloves: Impervious or chemical resistant gloves (consult safety equipment supplier).

Eye Protection: Chemical splash goggles recommended against potential eye contact.

Other Protective Clothing and Equipment: Safety shoes and aprons recommended.

Methods for Clean-Up:

Minor Spills: Absorb material with ground clay, vermiculite, sand, or similar absorbent material and place into containers for disposal according to local and/or state regulations.

Major Spills: Dike and contain spill. Eliminate potential sources of ignition, and shut off source of spill if possible.

Remove liquid by chemical vacuum, absorbent material, or other safe and approved methods, and place into containers for disposal according to local and/or state regulations. Flush area with water to remove residue, and remove flushed solutions as above.

7. HANDLING AND STORAGE

Handling: Flammable Liquid - empty containers can be hazardous and contain explosive vapors. Do not reuse containers. Ground fixed equipment. Bond and ground transfer equipment and containers.

Storage: Store in a cool, dry, ventilated area, away from incompatible substances. Keep containers closed when not in use.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Guidelines:	CAS No.	OSHA PEL/TWA	ACGIH TLV/TWA	ACGIH TLV/STEL	OTHER RATING
COMPONENT					
Ethanol 95%	64-17-5	1000ppm	1000ppm		
N-Propyl Acetate	109-60-4	200ppm	200ppm		

Exposure controls: Avoid open electrical sources near product vapor areas.

Personal Protection Equipment:

Eyes: Chemical splash goggles recommended.

Skin and body: Impervious or chemical resistant gloves (consult safety equipment supplier).

Respiratory: Ventilation in work area should be sufficient to maintain atmosphere with vapor level below lowest listed TLV. If TLV's are exceeded, use a respirator with appropriate NIOSH approved cartridges or supplied air equipment.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear liquid

Odor: Alcohol odor

pH: N/A

Melting point: N/A

Boiling Point: > 174° F

Flash Point: < 60° F (CC Method)

Flammable Limits:

LEL: 2%

UEL: 19%

Vapor Pressure: <46 (Estimated)

Vapor Density: (Air = 1) Heavier than air

Specific Gravity: (Water =1) 0.809

Solubility in water: Somewhat soluble

Maximum VOC Content: 6.75 Lb/Gal (823 Gm/L)

Maximum VOC %: 100%

Odor Threshold: N/A

Evaporation Rate: N/A

Relative Density: N/A

Partition Coefficient: N-Octano/Water: N/A

Auto-ignition Temperature: N/A

Decomposition Temperature: N/A

Viscosity: N/A

10. STABILITY AND REACTIVITY

Chemical Stability: Stable

Incompatible Materials: Avoid strong oxidizing agents.

Hazardous Decomposition Products: Carbon monoxide and other compounds during combustion.

Hazardous Polymerization: Will not occur.

Conditions to Avoid: Avoid exposure to high heat sources, electrical and welding arcs, open flame and strong oxidizing agents.

Warning: Spontaneous combustion may occur when solvent soaked combustible materials (paper, cotton etc.) are allowed to stand in confined areas.

11. TOXICOLOGICAL INFORMATION**(ATE) FOR MIXTURE:**

Specific tests have not been conducted on this product. Our evaluations based on information from the ingredients and technical literature. Data for this material has been used to estimate the symptoms and effects of exposure.

Oral LD50:

LD50 Oral - No data available

Dermal LD50:

LD50 Dermal - No data available

Inhalation LC50:

LC50 Inhalation - No data available

Other information on Acute Toxicity:

No data available

Routes of exposure: Inhalation, Ingestion, Skin and Eyes

Acute: Overexposure may lead to central nervous system depression, leading to headaches, nausea and unconsciousness. May cause irritation to skin, eyes, and respiratory tract.

Chronic: Prolonged exposure may cause dermatitis.

Signs and Symptoms of Exposure: Overexposure may lead to dizziness, headaches, dermatitis and eye irritation.

Medical Conditions Aggravated by Exposure: Preexisting eye, skin, liver, heart, nerves, or respiratory disorders may be aggravated by exposure.

Carcinogenicity (NTP, IARC, OSHA): Components of this product have not shown any evidence of carcinogenicity.

12. ECOLOGICAL INFORMATION

Ecotoxicity: No data available

Persistence and degradability: No data available

Bioaccumulative potential: No data available

Mobility in the soil: No data available

Other adverse effects: No data available

13. DISPOSAL CONSIDERATIONS

Waste disposal methods:

Dispose of in accordance with all applicable local, state and federal regulations. Do not discharge this product into lakes, streams, ponds or estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit, and the permitting authority has been notified in writing prior to discharge. Do not discharge this product into sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA.

14. TRANSPORTATION INFORMATION

<u>U.S. D.O.T. DESIGNATION</u>	<u>ID NUMBER</u>	<u>HAZARD CLASS</u>	<u>PACKING GROUP</u>
Flammable Liquids, N.O.S., (contains Ethanol 95%)	UN1993	3	II

U.N. DESIGNATION

Same as D.O.T.

15. REGULATORY INFORMATION

Regulatory Information: This information may be useful in complying with various federal and state regulations: Components present in this product at a level which could require reporting under EPA Regulation 40CFR302 (CERCLA) Section 102 and EPA Regulation 40CFR372 (SARA) 313: None

Product may contain components which are further regulated by state and/or local agencies - Consult Appropriate Agencies.

Notification status:

U.S.: Toxic Substances Control Act (TSCA) Y

Canada: Domestic Substances List (DSL): Y

16. OTHER INFORMATION

For More Information, Consult Tower Products, Inc.

This Information Herein Is Given In Good Faith, But No Warranty, Express Or Implied Is Made.

Date of Preparation: January 1, 2015