

MSDS Document

1. Chemical Product and Company Identification

Trade Name of the Product

Christy's™ Red Hot Blue Glue® Low VOC

Solvent cement for PVC plastic pipe. Mixture of PVC resin and organic solvents.

Manufacturer

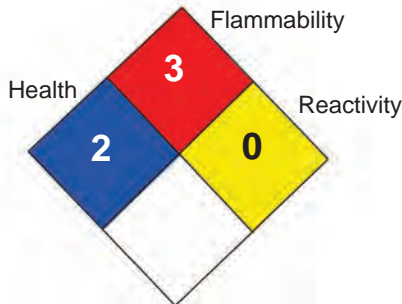
T. Christy Enterprises, Inc.
655 E. Ball Rd.
Anaheim, CA 92805-5910
(714) 507-3300

Transportation Emergency Phone

INFOTRAC (800) 535-5053

Hazard Rating

- 0 - Minimal
- 1 - Slight
- 2 - Moderate
- 3 - Serious
- 4 - Severe



2. Composition and Information on Ingredients

	CAS#	APPROX%	ACGIH-TLV	ACGIH-STEL	OSHA-PEL	OSHA-STEL	A(AEL)	B(STEL)
Cyclohexanone	108-94-1	6-20	20 PPM Skin		50 PPM Skin			
Methyl Ethyl Ketone (MEK)	78-93-3	5-16**	200 PPM	300 PPM	200 PPM	300 PPM		
Tetrahydrofuran (THF)** (see#13)	109-99-9	38-50	500 PPM	750 PPM	750 PPM	1000 PPM	50 PPM	75 PPM
Polyvinyl Chloride Resin (PVC)	Non/Haz		N/A		N/A			
Acetone	67-64-1	2-11	500 PPM	750 PPM	750 PPM	1000 PPM		

None of the ingredients above are listed as carcinogens by IARC, NTP or OSHA

* Title III Section 313 Supplier Notification: This product contains toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 and of 40CFR372. This information must be included in all MSDS's that are copied and distributed for this material.

(A) Dupont Mfg's acceptable Exposure Limit (AEL) guidelines for 8 hour and 12 hour TWA, (B) Dupont's recommended STEL for 15 minute TWA.

3. Hazard Identification

Eye Contact

Overexposure may result in severe eye injury with corneal or conjunctival inflammation on contact with the liquid. Vapors slightly uncomfortable.

Ingestion

Moderately toxic. May cause nausea, vomiting, diarrhea. May cause mental sluggishness.

Skin Contact/Absorption

Skin irritant. Liquid contact may remove natural skin oils resulting in skin irritation. Prolonged or widespread exposure may result in the absorption of harmful amounts of material.

Inhalation

Severe overexposure may result in nausea, dizziness, headache. Can cause drowsiness, irritation of eyes and nasal passages.

Chronic

In animal studies in rats and mice, N-MP was embryotoxic by the oral and intraperitoneal routes at very high dose levels. In a dermal exposure study with rats, N-MP was only embryotoxic at the high dose levels. This effect was attributed to maternal toxicity.

4. First Aid Information

Eye Contact

Flush eyes with plenty of water for 15 minutes and call a physician.

Ingestion

Give 1 or 2 glasses of water or milk. **Do not induce vomiting.** Call physician or poison control center immediately.

Skin Contact/Absorption

Remove contaminated clothing and shoes. Wash skin with plenty of soap and water for at least 15 minutes. If irritation develops, get medical attention.

Inhalation

If overcome by vapors, remove to fresh air. If breathing is difficult, give oxygen. If breathing stops, give artificial respiration.

5. Fire Fighting Measures

Flash Point

-6°F (-21°C) T.C.C. Based on Acetone

Extinguishing Media

Ansul "Purple K" potassium bicarbonate dry chemical, carbon dioxide, National Aer-O-Foam universal alcohol resistant foam, water spray.

Flammability Limits (Percent by Volume)

LEL - 2.0 UEL - 11.8

Special Fire Fighting Procedures

Evacuate enclosed areas, stay upwind. Confined spaces require self-contained breathing apparatus or positive pressure mask. Use water spray to cool containers, flush spills from source of ignition and to disperse vapors.

Unusual Fire and Explosion Hazards

Fire Hazard because of low flash point and high volatility. Vapors are heavier than air and may travel to source(s) of ignition at or near ground or lower level(s) and may flash back.

6. Accidental Release Measures

Steps to be Taken in Case of Spill or Release

Eliminate all ignition sources. Avoid breathing of vapors. Keep liquid out of eyes. Flush with large amounts of water. Contain liquid with sand or earth. Absorb with sand or non-flammable material and transfer into steel drums for recovery or disposal. Prevent liquid from entering drains.

7. Handling and Storage

Storage

Store in the shade between 40°F -110°F (5°C - 43.7°C). Keep away from heat, sparks, open flame and other sources of ignition. Avoid prolonged breathing of vapor and use adequate ventilation. Avoid contact with eyes, skin and clothing. Train all employees on handling procedures before they work with this product.

8. Exposure Controls and Personal Protection

Eye Protection

Splashproof chemical goggles, face shield, safety glasses with brow guards and side shields, etc as appropriate for exposure.

Respiratory

Atmospheric levels should be maintained below established exposure limits contained in Section II. If airborne concentrations exceed those limits, use of a NIOSH approved organic vapor cartridge respirator with full face-piece is recommended. The effectiveness of an air purifying respirator is limited. For emergency and other conditions where short-term exposure guidelines may be exceeded, use an approved positive pressure self-contained breathing apparatus.

Ventilation

Use only with adequate ventilation. Open doors and/or windows to ensure airflow and air changes. Use local exhaust ventilation to remove airborne contaminants from employee breathing zone and to keep contaminants below levels listed in Section 9. Use only explosion-proof ventilation equipment.

Protective Gloves

PVA coated rubber gloves for frequent dipping/immersion.

Other Protective Equipment

Impervious apron and a source of running water to flush or wash the eyes and skin in case of contact.

9. Physical and Chemical Properties

Appearance	Blue medium syrupy liquid
Specific Gravity(@73°F ± 3.6°F(23°C ± 2°)	Typical 0.990 ± 0.040
Vapor Density (Air= 1)	2.49
Vapor Pressure (mm Hg)	193 mm Hg. based on first boiling component, Acetone @ 68°F (20°C)
Odor	Ethereal
Boiling Point	151°F (67°C) based on first boiling component: THF
Percent Volatile by Volume (%)	Approx: 80 - 90%
Evaporation Rate (BUAC = 1)	>1.0
Solubility in Water	Solvent portion completely soluble in water. Resin portion separates out.

VOC STATEMENT: VOC as manufactured: 730 Grams/Liter (g/l). Maximum VOC emission when applied and tested per SCAQMD Rule 1168, Test Method 316A: 510 g/l.

10. Stability and Reactivity

Chemical Stability

Product is stable, but keep away from heat, sparks, open flame and other sources of ignition.

Hazardous Polymerization

Will not occur.

Conditions to Avoid: Keep away from heat, sparks, open flame and other sources of ignition.

Hazardous Decomposition

When forced to burn, product gives out carbon monoxide, carbon dioxide, hydrogen chloride and smoke.

Materials to Avoid

Strong acids and oxidizing agents.

Conditions to Avoid

Keep away from heat, sparks, open flame and other sources of ignition. Moisture - compound is hygroscopic.

11. Disposal Considerations

Waste Disposal Method

Follow Local, State and Federal regulations. Consult disposal expert. Can be disposed of by incineration. Excessive quantities should not be permitted to enter drains. Empty containers should be air dried before disposing. Hazardous Waste Code (CA): 214.

12. Transportation Information

DOT Shipping Name:

Adhesive

DOT Hazard Class:

3

Identification Number:

UN 1133

Packaging Group:

II

Label Required:

Flammable Liquid

Shipping Information for Containers Less Than One Liter

DOT Shipping Name:

Consumer Commodity

DOT Hazard Class:

ORM-D

13. Other Information

Information on this form is furnished solely for the purpose of compliance with the Occupational Safety and Health Act and shall not be used for any other purpose. Christy's urges the customers receiving this Material Safety Data Sheet to study it carefully to become aware of the hazards, if any, of the product involved. In the interest of safety you should notify your employees, agents, and contractors of the information on this sheet. The information contained is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof.

**Information found in a report from the National Toxicology Program (NTP) on an inhalation study in rats and mice suggests that Tetrahydrofuran (THF) can cause tumors in animals. In the study the rats and mice were exposed to THF vapor levels up to 1800 PPM for two years (their lifetime), 6 hours/day, 5 days/week. Test results showed evidence of liver tumors in female mice and kidney tumors in male rats. No evidence of tumors was seen in female rats and male mice. There is no data linking Tetrahydrofuran exposure with cancer in humans.