

SAFETY DATA SHEET

Christy's® Clear Primer Low VOC Primer for PVC Plastic Pipe Cement Christy's® Purple Primer Low VOC Primer for PVC Plastic Pipe Cement Date Revised: MAY 2016 Supersedes: AUG 2015

SECTION I - PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Christy's® Clear Primer

Christy's® Purple Primer

SYNONYMS

PRODUCT USE: Low VOC Primer for PVC Plastic Pipe/ CPVC Pipe

SUPPLIER and MANUFACTURER T Christy Enterprises, Inc.

655 East Ball Road, Anaheim, CA 92805-5910

Tel. 1-714-507-3300 (North America) Tel. 1-714-507-3300 (International)

EMERGENCY: Transportation/Medical issues: Tel. 800.535.5053 INFOTRAC

SECTION 2 - HAZARDS IDENTIFICATION

	SHS	CLASSIFICATION:	
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Health		Env	rironmental	Physical					
Acute Toxicity:	Category 4	Acute Toxicity:	None Known	Flammable Liquid/Aerosol/Gas:	Category 2				
Skin Corrosion/Irritation:	Category 3	Chronic Toxicity:	None Known						
Carcinogenicity	Category 2								
Eye:	Category 2A								

Signal Word: DANGER

GHS LABEL



WHMIS CLASSIFICATION: CLASS B. DIVISION 2

Precautionary Statements (See Section 15 for all advisory and required precautions)

CONTROLLED PRODUCT CLASS D. DIVISION 2B

Hazard Statements H225 Highly flammable liquid and vapor

P201 Obtain special instructions before use. H302 Harmful if swallowed P202 Do not handle until all safety precautions have been read and understood H319 Causes serious eye irritation

P210 Keep away from heat, hot surfaces, open flames and other ignition sources. No smoking H332 Harmful if inhaled P261 Avoid breathing fumes/gas/vapours

H335 May cause respiratory irritation H336 May cause drowsiness or dizziness P271 Use only outdoors or in a well-ventilated area

H351 Suspected of causing cancer

P264 Wash hands thoroughly after handling. P270 Do not eat, drink or smoke when using this product.

P280 Wear protective gloves/ protective/ clothing/ eye protection/ face protection P330 Rinse Mouth

P304 + P340 IF INHALED: remove person to fresh air and keep comfortable for breathing.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes Remove contact lenses, if present and easy to do. Continue rinsing.

P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. P308+P313 IF exposed or concerned: Get medical adivce/attention P403+P233 Store in a well-ventilated place. Keep container tightly closed

P405 Store locked up

P501 Dispose of contents/container in accordance with local regulations.

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

	CAS#	EINECS #	REACH	CONCENTRATION
			Pre-registration Number	% by Weight
Tetrahydrofuran (THF)** (Stabilized)	109-99-9	203-726-8	05-2116297729-22-0000	30-60
Methyl Ethyl Ketone (MEK)*	78-93-3	201-159-0	05-2116297728-24-0000	5-20
Cyclohexanone	108-94-1	203-631-1	05-2116297718-25-0000	5-15
Acetone	67-64-1	200-662-2	05-2116297713-35-0000	20-40

All of the constituents of this adhesive product are listed on the TSCA inventory of chemical substances maintained by the US EPA, or are exempt from that listing *This chemical is subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (40CFR372).

SECTION 4 - FIRST AID MEASURES

Flush eyes immediately with plenty of water for 15 minutes and seek medical advice immediately.

Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water. If irritation develops, seek medical advice. Contact with eyes: Skin contact: Remove to fresh air. If breathing is stopped, give artificial respiration. If breathing is difficult, give oxygen. Seek medical advice. Inhalation: Ingestion: Rinse mouth with water. Give 1 or 2 glasses of water or milk to dilute. Do not induce vomiting. Seek medical advice immediately

SECTION 5 - FIREFIGHTING MEASURES

Suitable Extinguishing Media:	Dry chemical powder, carbon dioxide gas, foam, Halon, water fog.		HMIS	NFPA	0-Minimal
Unsuitable Extinguishing Media:	Water spray or stream.	Health	2	2	1-Slight
Exposure Hazards:	Carbon monoxide, carbon dioxide, hydrogen chloride and smoke	Flammability	3	3	2-Moderate
Combustion Products:	Carbon monoxide, carbon dioxide, hydrogen chloride and smoke	Reactivity	1	1	3-Serious
Protection for Firefighters:	Self-contained breathing apparatus or full-face positive pressure air			4-Severe	

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personal precautions:

Provide sufficient ventilation, use explosion-proof exhaust ventilation equipment or wear suitable respiratory protective equipment.

Prevent contact with skin or eyes (see section 8).

Environmental Precautions: Prevent product or liquids contaminated with product from entering sewers, drains, soil or open water course.

Methods for Cleaning up: Clean up with sand or other inert absorbent material. Transfer to a closable metal container Materials not to be used for clean up: Aluminum or plastic containers

SECTION 7 - HANDLING AND STORAGE

Handling: Avoid breathing of vapor, avoid contact with eyes, skin and clothing.

Keep away from ignition sources, use only electrically grounded handling equipment and ensure adequate ventilation/fume exhaust hoods

Do not eat; drink or smoke while handling.

Store in ventilated room or shade below 27°C (80°F) and away from direct sunlight. Storage:

Keep away from ignition sources and incompatible materials: caustics, ammonia, inorganic acids, chlorinated compounds, strong oxidizers and isocyanates.

Follow all precautionary information on container label, product bulletins and solvent cementing literature.

SECTION 8 - PRECAUTIONS TO CONTROL EXPOSURE / PERSONAL PROTECTION									
EXPOSURE LIMITS:	Component	ACGIH TLV	ACGIH STEL	OSHA PEL	OSHA STEL:				
	Tetrahydrofuran (THF) #,##	50 ppm skin	100 ppm	200 ppm	250 ppm	# Mfg. Recommended Allowable Exposure Limit (AEL): 25 ppm			
	Methyl Ethyl Ketone (MEK)	200 ppm	300 ppm	200 ppm	300 ppm	## Mfg. Recommended STEL: 75 ppm			
	Cyclohexanone	20 ppm skin		50 ppm					
	Acetone	500 ppm skin	750 ppm	750 ppm	1000 ppm				
	<u> </u>								

Engineering Controls: If ventilated cabinet, enclosure or fume hood is necessary, average airflow should be at least 100 FPM (50.8 cm/sec).

Monitoring: Maintain breathing zone airborne concentrations below exposure limits.

Personal Protective Equipment (PPE):

Eve Protection: Avoid contact with eyes, wear splash proof chemical goggles, face shield, safety glasses (spectacles) with brow guards and side shields, etc. as may be appropriate for the exposure.

Skin Protection: Prevent contact with the skin as much as possible. Polyethylene or PVA coated rubber gloves should be used for frequent immersion. Use of latex/nitrile surgical gloves or solvent-resistant barrier cream should provide adequate protection when normal adhesive application

practices and procedures are used for making structural bonds.

Respiratory Protection: Prevent inhalation of the solvents. Use in a well-ventilated room. 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 above. With normal use, the Exposure Limit Value will not usually be reached. When limits approached, use respiratory protection equipment.

FileName: RH CPRIM PURP Page 1 of 2

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Clear or Purple, thin liquid Appearance:

Odor: Ethereal, similar to Acetone Odor Threshold:

Not Available

P.H. Not Applicable

Melting/Freezing Point: -95°C (-139°F) Based on first freezing component: Acetone **Boiling Point:**

57°C (133°F) Based on first boiling component: Acetone -14°C (7°F) T.C.C. based on THF Evaporation Rate: 6-11 (BUAC = 1) Flash Point: Flammability: Category I LEL: 2% UEL: 11.8% Specific Gravity @23°C \pm 2° (73°F \pm 3.6°) Typical 0.844 \pm 0.01 Flammability Limits: Solubility: Solvent portion completely soluble in water.

321°C (609.8°F): THF **Auto-ignition Temperature:** Vapor Density: 2.00 (Air = 1)

Water Thin **Decomposition Temperature:** Not Applicable Other Data: Viscosity:

When applied as directed, per SCAQMD Rule 1168, Test Method 316A,VOC content is: ≤550 g/l. VOC Content

SECTION 10 - STABILITY AND REACTIVITY

Partition Coefficient n-octanol/water:

Stability: Stable

Hazardous decomposition products: None in normal use. When forced to burn, this product gives off carbon monoxide (CO), carbon dioxide (CO2).

Boiling Range:

Vapor Pressure:

57°C (133°F) to 67°C (151°F)

190 mm Hg @ 20°C (68°F): Acetone

hydrogen chloride (HCI) and smoke.

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

Incompatible Materials: Caustics, ammonia, inorganic acids, chlorinated compounds, strong oxidizers and isocyanates.

SECTION 11 - TOXICOLOGICAL INFORMATION

Likely Routes of Exposure: Inhalation, Eye and Skin Contact

Acute symptoms and effects:

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

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

Skin Contact: Liquid contact may remove natural skin oils resulting in skin irritation. Dermatitis may occur with prolonged contact.

Ingestion: May cause nausea, vomiting, diarrhea and mental sluggishness.

Chronic (long-term) effects: None known to humans

Carinogenicity:

Tetrahydrofuran (109-99-9)

ACGIH: A3- Confirmed Animal Carcinogen with Unknow Relevance to Humans

Cyclohexanone (108-94-1)

ACGIH: A3- Confirmed Animal Carcinogen with Unknow Relevance to Humans

LD₅₀ Toxicity:

Tetrahydrofuran (THF) Oral: 2880 mg/kg (rat) Inhalation 3 hrs. 21,000 PPM (rat) Methyl Ethyl Ketone (MEK)_ Oral: 3.98 g/kg (rat), Dermal: 8-10 mg/kg (rabbit) Inhalation 4 hrs. 4,000 PPM (rat) Cyclohexanone Oral: 1900 mg/kg (rat), Dermal: 1.0 g/kg (rabbit) Inhalation LCLO, 4 hrs, 2,000 PPM (rat) Inhalation LCLO, 4 hrs, 16,000 PPM (rat) Acetone Oral: 9.75 g/kg (rat), Dermal: 20 g/kg (rabbit)

Reproductive Effects Teratogenicity Mutagenicity Embryotyxicity Sensitization to Product Synergistic Products May cause embryofetal toxicity Not Applicable Not Available Not Applicable Not Applicable Not Available

LC₅₀

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity Category IV

In normal use, emission of volatile organic compounds (VOC's) to the air takes place. Typically at a rate of ≤ 550 Grams/Liter. Mobility:

Minimal other adverse effects include possible ground water contamination from release to soil, sewers, drains or water course.

Degradability: Biodegradable BioAccumulation: Minimal to none

SECTION 13 - WASTE DISPOSAL CONSIDERATIONS

Follow local and national regulations. Consult disposal expert. Can be disposed of by controlled incineration. May be allowed to dry and disposed of as trash.

Excessive quantities should not be permitted to enter drains, sewers or water courses. Empty containers should be air dried before disposing.

SECTION 14 - TRANSPORT INFORMATION

DOT, IATA, ADR, IMO/IMDG SHIPPING INFORMATION
Proper Shipping Name: Flammable Liqui

DOT/IMDG EXCEPTION: Case quantities of cement in containers of less than one liter may be Flammable Liquid, n.o.s. shipped as LIMITED QUANTITY when properly labeled and marked. Hazard Class (Tetrahydrofuran, Acetone) Secondary Risk None ICAO/IATA May be shipped by air as CONSUMER COMMODITY, ID 8000 when

Identification Number: UN 1993 properly packaged, labeled and marked.

TDG INFORMATION Packing Group:

FLAMMABLE LIQUID 3 Label Required: Flammable Liquid TDG CLASS:

SHIPPING NAME: FLAMMABLE LIQUID, n.o.s. (Tetrahydrofuran) Marine Pollutant: NO UN NUMBER: 1993, PG II

SECTION 15 - REGULATORY INFORMATION

Ingredient Listings: USA TSCA, Europe EINECS, Canada DSL, Australia AICS, Korea ECL/TCCL, Japan MITI (ENCS) Precautionary Label Information: Highly Flammable, Irritant

Symbols: F. Xi

R-11 Highly Flammable Risk Phrases: R-20 Harmful by inhalation R-36/37/38 Irritating to eyes, respiratory system and skin. R-21 Harmful in contact with skin R67 Vapours may cause drowsiness and dizziness

Safety Phrases: S-2 Keep out of reach of children. S-24/25 Avoid contact with skin and eyes

S-7 Keep container tightly closed when not in use. S-29 Do not empty into drains. S-9 Keep container in a well-ventilated place S-37 Wear suitable gloves.

S-15/16 Keep away from heat and sources of ignition. No smoking. S-45 If seeking medical advice show physician label or SDS. S-46 Use only in well ventilated areas.

S-23 Do not breathe vapor.

R-22 Harmful if swallowed.

SECTION 16 - OTHER INFORMATION

Specification Information:

Department issuing data sheet: Environmental Health & Safety All ingredients are compliant with the requirements of the European e-mail address: <EHSinfo@tchristv.com> Directive on RoHS (Restriction of Hazardous Substances).

Training necessary: Yes, training in practices and procedures contained in product literature

Reissue date / reason for reissue: MAY 2016/ Updated Information

Adhesive welding primer for cementing PVC and CPVC plastic pipe and fittings Intended Use of Product:

This product is intended for use by skilled individuals at their own risk. The information contained herein is based on data considered accurate based on current state of knowledge and experience. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof.

FileName: RH CPRIM PURP Page 2 of 2



SAFETY DATA SHEET

Christy's® WET or DRY Low VOC PVC Plastic Pipe Cement

SECTION I - PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Christy's® WET or DRY Low VOC Plastic Pipe Cement SYNONYMS:

PRODUCT USE: Low VOC Solvent Cement for PVC Plastic Pipe suitable for use under wet or dry conditions SUPPLIER and MANUFACTUREFT Christy Enterprises, Inc.

655 East Ball Road, Anaheim, CA 92805-5910 Tel. 1-714-507-3300 (North America) Tel. 1-714-507-3300 (International)

EMERGENCY: Transportation/Medical issues: Tel. 800.535.5053 INFOTRAC

SECTION 2 - HAZARDS IDENTIFICATION

GHS CLASSIFICATION:

Health		En	vironmental	Physical	
Acute Toxicity: Skin Corrosion/Irritation:	Category 4 Category 3	Acute Toxicity: Chronic Toxicity:	None Known None Known	Flammable Liquid/Aerosol/Gas:	Category 2
Carcinogenicity	Category 2	Childric Toxicity.	None Known		
Eye:	Category 2B				

GHS LABEL



CLASS B, DIVISION 2

Precautionary Statements (See Section 15 for all advisory and required precautions)

CONTROLLED PRODUCT WHMIS CLASSIFICATION: CLASS D, DIVISION 2B

Date Revised: MAY 2016

Supersedes: MAR 2015

DANGER Signal Word:

Hazard Statements

H225 Highly flammable liquid and vapor H302 Harmful if swallowed

H319 Causes serious eye irritation H332 Harmful if inhaled

H335 May cause respiratory irritation H336 May cause drowsiness or dizziness H351 Suspected of causing cancer

P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood P210 Keep away from heat, hot surfaces, open flames and other ignition sources. No smoking P261 Avoid breathing fumes/gas/vapours P264 Wash hands thoroughly after handling.

P270 Do not eat, drink or smoke when using this product. P271 Use only outdoors or in a well-ventilated area

P280 Wear protective gloves/ protective/ clothing/ eye protection/ face protection P330 Rinse Mouth

P304 + P340 IF INHALED: remove person to fresh air and keep comfortable for breathing P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P301+P312 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. P308+P313 IF exposed or concerned: Get medical adivce/attention

P403+P233 Store in a well-ventilated place. Keep container tightly closed P405 Store locked up

P501 Dispose of contents/container in accordance with local regulations

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

CECTION 3 - COMIN CONTINUE OR MAN CONTINUE CONTI									
CAS#	EINECS #	REACH	CONCENTRATION						
		Pre-registration Number	% by Weight						
NON/HAZ									
109-99-9	203-726-8	05-2116297729-22-0000	41-69						
78-93-3	201-159-0	05-2116297728-24-0000	3-19						
67-64-1	200-662-2	05-2116297713-35-0000	15-30						
	CAS# NON/HAZ 109-99-9 78-93-3	CAS# EINECS # NON/HAZ 109-99-9 203-726-8 78-93-3 201-159-0	CAS# EINECS # Pre-registration Number NON/HAZ 109-99-9 203-726-8 05-2116297729-22-0000 78-93-3 201-159-0 05-2116297728-24-0000						

All of the constituents of this adhesive product are listed on the TSCA inventory of chemical substances maintained by the US EPA, or are exempt from that listing. *This chemical is subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (40CFR372).

SECTION 4 - FIRST AID MEASURES

Contact with eyes: Flush eyes immediately with plenty of water for 15 minutes and seek medical advice immediately.

Skin contact: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water. If irritation develops, seek medical advice. Inhalation: Remove to fresh air. If breathing is stopped, give artificial respiration. If breathing is difficult, give oxygen. Seek medical advice. Rinse mouth with water. Give 1 or 2 glasses of water or milk to dilute. Do not induce vomiting. Seek medical advice immediately, Ingestion:

SECTION 5 - FIREFIGHTING MEASURES

Suitable Extinguishing Media: Dry chemical powder, carbon dioxide gas, foam, Halon, water fog. **HMIS NFPA** 0-Minimal Unsuitable Extinguishing Media: Water spray or stream. 1-Slight Health 2 3 **Exposure Hazards:** Carbon monoxide, carbon dioxide, hydrogen chloride and smoke Flammability 2-Moderate Combustion Products: Carbon monoxide, carbon dioxide, hydrogen chloride and smoke Reactivity 3-Serious Protection for Firefighters: Self-contained breathing apparatus or full-face positive pressure airline masks 4-Severe

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personal precautions: Keep away from heat, sparks and open flame.

Provide sufficient ventilation, use explosion-proof exhaust ventilation equipment or wear suitable respiratory protective equipment.

Prevent contact with skin or eyes (see section 8)

Environmental Precautions: Prevent product or liquids contaminated with product from entering sewers, drains, soil or open water course

Methods for Cleaning up: Clean up with sand or other inert absorbent material. Transfer to a closable metal container

Materials not to be used for clean up: Aluminum or plastic containers **SECTION 7 - HANDLING AND STORAGE**

Handling: Avoid breathing of vapor, avoid contact with eyes, skin and clothing.

Keep away from ignition sources, use only electrically grounded handling equipment and ensure adequate ventilation/fume exhaust hoods.

Do not eat; drink or smoke while handling.

Store in ventilated room or shade below 27°C (80°F) and away from direct sunlight.

Keep away from ignition sources and incompatible materials: caustics, ammonia, inorganic acids, chlorinated compounds, strong oxidizers and isocyanates.

Follow all precautionary information on container label, product bulletins and solvent cementing literature. - PRECAUTIONS TO CONTROL EXPOSURE / PERSONAL PROTECTION

SECTION 8 - FREGAUTIONS TO CONTROL EXPOSORE/FERSONAL FROTECTION									
EXPOSURE LIMITS:	Component	ACGIH TLV	ACGIH STEL	OSHA PEL	OSHA STEL:				
	Tetrahydrofuran (THF) #,##	50 ppm skin	100 ppm	200 ppm	250 ppm	# Mfg. Recommended Allowable Exposure Limit (AEL): 25 ppm			
	Methyl Ethyl Ketone (MEK)	200 ppm	300 ppm	200 ppm	300 ppm	## Mfg. Recommended STEL: 75 ppm			
	Acetone	500 ppm	750 ppm	750 ppm	1000 ppm				

Engineering Controls: If ventilated cabinet, enclosure or fume hood is necessary, average airflow should be at least 100 FPM (50.8 cm/sec).

Monitoring: Maintain breathing zone airborne concentrations below exposure limits

Personal Protective Equipment (PPE):

Eye Protection: Avoid contact with eyes, wear splash proof chemical goggles, face shield, safety glasses (spectacles) with brow guards and side shields,

etc. as may be appropriate for the exposure

Skin Protection: Prevent contact with the skin as much as possible. Polyethylene or PVA coated rubber gloves should be used for frequent immersion. Use of latex/nitrile surgical gloves or solvent-resistant barrier cream should provide adequate protection when normal adhesive application

practices and procedures are used for making structural bonds.

Respiratory Protection: Prevent inhalation of the solvents. Use in a well-ventilated room. 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 above. With normal use, the Exposure Limit Value will not usually be reached. When limits approached, use respiratory protection equipment.

FileName: RH WET Page 1 of 2

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Blue, medium syrupy liquid

Odor: Ethereal Odor Threshold: N/D

P.H. Melting/Freezing Point: Not Applicable

-95°C (-139°F) Based on first freezing component: Acetone 57°C (133°F) to 67°C (151°F) Boiling Range: > 1.0 (BUAC = 1) **Boiling Point:** 57°C (133°F) Based on first boiling component: Acetone Evaporation Rate: Flash Point: -14°C (7°F) T.C.C. based on THF Flammability: Category I @23°C \pm 2° (73°F \pm 3.6°) Typical 0.924 \pm 0.01 Specific Gravity Flammability Limits:

LEL: 2% UEL: 11.8% Solvent portion completely soluble in water. Resin portion separates out. Solubility:

Not Available 143 mm Hg @ 20°C (68°F): THF Partition Coefficient n-octanol/v Vapor Pressure: 321°C (609.8°F): THF Auto-ignition Temperature: Vapor Density: 2.49 (Air = 1)

Decomposition Temperature: Not Applicable Other Data: Viscosity: Medium bodied VOC Content : When applied as directed, per SCAQMD Rule 1168, Test Method 316A, VOC content is: ≤510 g/l.

SECTION 10 - STABILITY AND REACTIVITY

Stability: Hazardous decomposition products: None in normal use. When forced to burn, this product gives off carbon monoxide (CO), carbon dioxide (CO2),

hydrogen chloride (HCI) and smoke

Conditions to avoid: Keep away from heat, sparks, open flame and other ignition sources

Incompatible Materials: Caustics, ammonia, inorganic acids, chlorinated compounds, strong oxidizers and isocyanates

SECTION 11 - TOXICOLOGICAL INFORMATION

Likely Routes of Exposure: Inhalation, Eye and Skin Contact

Acute symptoms and effects:

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

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

Skin Contact: Liquid contact may remove natural skin oils resulting in skin irritation. Dermatitis may occur with prolonged contact.

Ingestion: May cause nausea, vomiting, diarrhea and mental sluggishness. None known to humans

Chronic (long-term) effects: Carinogenicity:

Tetrahydrofuran (109-99-9) ACGIH: A3- Confirmed Animal Carcinogen with Unknow Relevance to Humans

Cyclohexanone (108-94-1)

ACGIH: A3- Confirmed Animal Carcinogen with Unknow Relevance to Humans

LC₅₀ Toxicity: LD₅₀

Inhalation 3 hrs. 21,000 PPM (rat) Tetrahydrofuran (THF) Oral: 2880 mg/kg (rat) Methyl Ethyl Ketone (MEK) Inhalation 4 hrs. 4.000 PPM (rat) Oral: 3.98 g/kg (rat), Dermal: 8-10 mg/kg (rabbit) Acetone Oral: 9.75 g/kg (rat), Dermal: 20 g/kg (rabbit) Inhalation LCLO, 4 hrs, 16,000 PPM (rat)

Reproductive Effects Teratogenicity Embryotyxicity Sensitization to Product Synergistic Products Mutagenicity Not Available Not Available May cause embryofetal toxicity Not Applicable Not Applicable Not Applicable

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity: Category IV

Mobility: In normal use, emission of volatile organic compounds (VOC's) to the air takes place. Typically at a rate of ≤ 510 Grams/Liter. Minimal other adverse effects include possible ground water contamination from release to soil, sewers, drains or water course.

Degradability: Biodegradable BioAccumulation: Minimal to none

SECTION 13 - WASTE DISPOSAL CONSIDERATIONS

Follow local and national regulations. Consult disposal expert. Can be disposed of by controlled incineration. May be allowed to dry and disposed of as trash.

Excessive quantities should not be permitted to enter drains, sewers or water courses. Empty containers should be air dried before disposing

SECTION 14 - TRANSPORT INFORMATION

DOT, IATA, ADR, IMO/IMDG SHIPPING INFORMATION

Proper Shipping Name: DOT/IMDG EXCEPTION: Case quantities of cement in containers of less than one liter may be Adhesives Hazard Class:

shipped as LIMITED QUANTITY when properly labeled and marked. ICAO/IATA May be shipped by air as CONSUMER COMMODITY, ID 8000 when Secondary Risk None Identification Number: UN 1133 properly packaged, labeled and marked.

Packing Group TDG INFORMATION

Label Required: Flammable Liquid TDG CLASS FLAMMABLE LIQUID 3

SHIPPING NAME: ADHESIVES (TETRAHYDROFURAN) 1133. PG II

Marine Pollutant: UN NUMBER:

SECTION 15 - REGULATORY INFORMATION

Ingredient Listings: USA TSCA, Europe EINECS, Canada DSL, Australia Precautionary Label Information: Highly Flammable, Irritant

AICS, Korea ECL/TCCL, Japan MITI (ENCS)

Risk Phrases: R-11 Highly Flammable

R-20 Harmful by inhalation R-36/37/38 Irritating to eyes, respiratory system and skin. R-21 Harmful in contact with skin. R67 Vapours may cause drowsiness and dizziness R-22 Harmful if swallowed.

Safety Phrases: S-2 Keep out of reach of children. S-24/25 Avoid contact with skin and eyes.

S-7 Keep container tightly closed when not in use. S-29 Do not empty into drains. S-9 Keep container in a well-ventilated place. S-37 Wear suitable gloves.

S-15/16 Keep away from heat and sources of ignition. No smoking. S-45 If seeking medical advice show physician label or SDS.

S-23 Do not breathe vapor S-46 Use only in well ventilated areas.

SECTION 16 - OTHER INFORMATION

Specification Information:

Environmental Health & Safety All ingredients are compliant with the requirements of the European Department issuing data sheet: <EHSinfo@tchristy.com> Directive on RoHS (Restriction of Hazardous Substances). e-mail address:

Training necessary: Yes, training in practices and procedures contained in product literature.

Reissue date / reason for reissue: MAY 2016/ Updated Information

Intended Use of Product: Adhesive for bonding/cementing PVC plastic pipe and fittings

This product is intended for use by skilled individuals at their own risk. The information contained herein is based on data considered accurate based on current state of knowledge and experience. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof

FileName: RH WET Page 2 of 2