



# SAFETY DATA SHEET

According to Safe Work Australia

Printing date 31.03.2015

Revision: 31.03.2015

## 1. IDENTIFICATION: PRODUCT IDENTIFIER AND CHEMICAL IDENTITY

**Product Name:** CHRISTY'S® CLEAR REGULAR BODY LOW VOC PVC SOLVENT CEMENT

**Other Means of Identification:** Mixture

**Recommended Use of the Chemical and Restriction on Use:**

Low VOC solvent cement for PVC plastic pipe

**Details of Manufacturer or Importer:**

HR Products  
207 Bannister Road  
Canning Vale WA 6155

**Phone Number:** 08 9455 1677

**Emergency telephone number:** 0413 700 807

## 2. HAZARDS IDENTIFICATION

**Hazardous Nature:**

Classified as Hazardous according to criteria of National Occupational Health & Safety Commission (NOHSC), Australia.

Classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail (7th edition).



flame

Flam. Liq. 2 H225 Highly flammable liquid and vapour.



health hazard

Carc. 2 H351 Suspected of causing cancer.



Acute Tox. 4 H332 Harmful if inhaled.

Eye Irrit. 2A H319 Causes serious eye irritation.

STOT SE 3 H335-H336 May cause respiratory irritation. May cause drowsiness or dizziness.

**Signal Word** Danger

**Hazard Statements**

H225 Highly flammable liquid and vapour.

H332 Harmful if inhaled.

H319 Causes serious eye irritation.

H351 Suspected of causing cancer.

H335-H336 May cause respiratory irritation. May cause drowsiness or dizziness.

**Precautionary Statements**

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P241 Use explosion-proof electrical/ventilating/lighting/equipment.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P240 Ground/bond container and receiving equipment.

P233 Keep container tightly closed.

P242 Use only non-sparking tools.

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P243	Take precautionary measures against static discharge.
P264	Wash hands thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P303+P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/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.
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P370+P378	In case of fire: Use for extinction: CO <sub>2</sub> , powder or water spray.
P312	Call a POISON CENTER/doctor if you feel unwell.
P405	Store locked up.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P403+P235	Store in a well-ventilated place. Keep cool.
P501	Dispose of contents/container in accordance with local/regional/national regulations.

**Additional Information**

AUH001 Explosive when dry.

AUH019 May form explosive peroxides.

### 3 . COMPOSITION AND INFORMATION ON INGREDIENTS

**Chemical Characterization: Mixtures****Description:** Mixture of substances listed below with nonhazardous additions.**Hazardous Components:**

78-93-3	2-Butanone ⚠ Flam. Liq. 2, H225; ⚠ Eye Irrit. 2, H319; STOT SE 3, H336	20-40%
108-94-1	Cyclohexanone ⚠ Flam. Liq. 3, H226; ⚠ Acute Tox. 4, H332	25-35%
109-99-9	tetrahydrofuran ⚠ Flam. Liq. 2, H225; ⚠ Carc. 2, H351; ⚠ Eye Irrit. 2A, H319; STOT SE 3, H335	10-30%
67-64-1	Acetone ⚠ Flam. Liq. 2, H225; ⚠ Eye Irrit. 2, H319; STOT SE 3, H336	5-20%

### 4 . FIRST AID MEASURES

**Inhalation:**

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention if breathing problems develop.

**Skin Contact:**

In case of skin contact, immediately remove contaminated clothing and wash affected areas with water and soap. Seek medical attention if symptoms occur.

**Eye Contact:**

In case of eye contact, rinse with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek immediate medical attention.

**Ingestion:**

If swallowed, do not induce vomiting. Immediately rinse mouth with water. Give 1 or 2 glasses of water or milk to dilute. Never give anything by mouth to an unconscious person. Seek immediate medical attention.

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**Symptoms Caused by Exposure:**

Inhalation: Harmful if inhaled. May cause respiratory irritation. Severe overexposure may result in nausea, dizziness, drowsiness and headache.

Skin Contact: Liquid contact may remove natural skin oils resulting in skin irritation.

Eye Contact: Causes serious eye irritation. Overexposure may result in corneal or conjunctival inflammation on contact with the liquid.

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

**5 . FIRE FIGHTING MEASURES****Suitable Extinguishing Media:**

Dry chemical powder, carbon dioxide gas, foam, halon and water fog. Do not use water jet.

**Specific Hazards Arising from the Chemical:**

Hazardous combustion products include oxides of carbon, hydrogen chloride and smoke.

Product is highly flammable. Vapours may travel considerable distances to a source of ignition where they can ignite, flashback, or explode.

Closed containers may explode when exposed to extreme heat. Containers close to fire should be removed if safe to do so. Use water spray to cool fire exposed containers.

**Special Protective Equipment and Precautions for Fire Fighters:**

Wear Safe Work Australia approved self-contained breathing apparatus and full protective clothing.

**6 . ACCIDENTAL RELEASE MEASURES****Personal Precautions, Protective Equipment and Emergency Procedures:**

Wear Safe Work Australia approved respiratory protection and other suitable protective equipment. Evacuate all non-essential personnel from affected area. Do not breathe vapours. Ensure adequate ventilation. Extinguish all sources of ignition. Avoid sparks and open flames. No smoking.

**Environmental Precautions:**

In the event of a major spill, prevent spillage from entering drains or water courses.

**Methods and Materials for Containment and Cleaning Up:**

Stop leak if safe to do so and absorb spill with sand, earth, vermiculite or some other absorbent material. Collect the spilled material and place into a closable metal container for disposal. Do not use aluminium or plastic containers. Use only non-sparking tools.

**7 . HANDLING AND STORAGE****Precautions for Safe Handling:**

Use of safe work practices are recommended to avoid eye or skin contact and inhalation of vapours. Use only outdoors or in a well-ventilated area.

Take precautionary measures against static discharge. Food, beverages and tobacco products should not be stored or consumed where this material is in use. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use. Provide eyewash fountains and safety showers in close proximity to points of potential exposure.

**Conditions for Safe Storage:**

Store in a cool, dry and well ventilated area. Keep container tightly closed when not in use. Do not expose to temperatures exceeding 27 °C. Protect from heat, sparks, open flames and other sources of ignition. Keep away from strong oxidising agents, caustics, ammonia, inorganic acids, chlorinated compounds and isocyanates. Do not weld, cut or drill on full or empty containers. Handling equipment must be grounded to prevent sparking.

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## 8 . EXPOSURE CONTROLS AND PERSONAL PROTECTION

<b>Exposure Standards:</b>	
<b>109-99-9 tetrahydrofuran</b>	
NES	TWA: 295 mg/m <sup>3</sup> , 100 ppm Sk
<b>108-94-1 Cyclohexanone</b>	
NES	TWA: 100 mg/m <sup>3</sup> , 25 ppm Sk
<b>78-93-3 2-Butanone</b>	
NES	STEL: 890 mg/m <sup>3</sup> , 300 ppm TWA: 445 mg/m <sup>3</sup> , 150 ppm
<b>67-64-1 Acetone</b>	
NES	STEL: 2375 mg/m <sup>3</sup> , 1000 ppm TWA: 1185 mg/m <sup>3</sup> , 500 ppm

**Engineering Controls:**

Maintain air concentration below occupational exposure standards, providing adequate ventilation. Use explosion-proof ventilating equipment.

**Respiratory Protection:**

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

If use conditions generate vapours or mists use respirator with a full face piece or a purifying cartridge respirator equipped for organic vapours and mists, a self contained breathing apparatus in the pressure demand mode or a positive pressure air-supplied respirator. See Australian Standards AS/NZS 1715 and 1716 for more information.

**Skin Protection:**

PVA, nitrile, neoprene, latex, rubber or vinyl gloves. See Australian/New Zealand Standard AS/NZS 2161 for more information. When selecting gloves for use against certain chemicals, the degradation resistance, permeation rate and permeation breakthrough time should be considered. Solvent-resistant barrier creams may also be used. Occupational protective clothing (depending on conditions in which it has to be used, in particular as regards the period for which it is worn, which shall be determined on the basis of the seriousness of the risk, the frequency of exposure to the risk, the characteristics of the workstation of each worker and the performance of the protective clothing). See Australian/New Zealand Standard AS/NZS 4501 for more information.

**Eye and Face Protection:**

Eye and face protectors for protection against splashing materials or liquids. See Australian/New Zealand Standard AS/NZS 1337.

## 9 . PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:**

<b>Form:</b>	Little syrupy liquid
<b>Colour:</b>	Clear
<b>Odour:</b>	Ether-like
<b>Odour Threshold:</b>	Not determined.
<b>pH-Value:</b>	Not applicable
<b>Melting point/Melting range:</b>	-95 °C (Acetone)
<b>Initial Boiling Point/Boiling Range:</b>	57 - 67 °C (Acetone)
<b>Flash Point:</b>	-14 °C (TCC - Tetrahydrofuran)

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<b>Flammability:</b>	Highly flammable.
<b>Auto-ignition Temperature:</b>	321 °C (Tetrahydrofuran)
<b>Decomposition Temperature:</b>	Not applicable
<b>Explosion Limits:</b>	
<b>Lower:</b>	2 Vol %
<b>Upper:</b>	11.8 Vol %
<b>Vapour Pressure at 20 °C:</b>	143 mmHg (Tetrahydrofuran)
<b>Relative Density at 23 °C:</b>	0.844
<b>Vapour Density:</b>	2.49
<b>Evaporation Rate:</b>	>1.0
<b>Solubility in Water:</b>	Solvent portion completely soluble in water. Resin portion separates out.
<b>Partition Coefficient (n-octanol/water):</b>	No information available
<b>Viscosity:</b>	Regular bodied
<b>VOC:</b>	=<510 g/L

## 10 . STABILITY AND REACTIVITY

**Possibility of Hazardous Reactions:** Hazardous polymerisation will not occur.

**Chemical Stability:** Stable at ambient temperature and under normal conditions of use.

**Conditions to Avoid:** Heat, sparks, open flames and other sources of ignition.

**Incompatible Materials:**

Strong oxidising agents, caustics, ammonia, inorganic acids, chlorinated compounds and isocyanates.

**Hazardous Decomposition Products:**

Carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>), hydrogen chloride (HCl) and smoke.

## 11 . TOXICOLOGICAL INFORMATION

**Toxicity:**

**LD<sub>50</sub>/LC<sub>50</sub> Values Relevant for Classification:**

**109-99-9 tetrahydrofuran**

Oral	LD <sub>50</sub>	2880 mg/kg (rat)
Inhalation	LC <sub>50</sub>	21000 ppm (rat) (3 hour)

**108-94-1 Cyclohexanone**

Oral	LD <sub>50</sub>	1900 mg/kg (rat)
Dermal	LD <sub>50</sub>	1000 mg/kg (rabbit)
Inhalation	LC <sub>50</sub> /4 h	8000 mg/l (rat)

**78-93-3 2-Butanone**

Oral	LD <sub>50</sub>	3980 mg/kg (rat)
Dermal	LD <sub>50</sub>	8-10 mg/kg (rabbit)
Inhalation	LC <sub>50</sub> /4 h	4000 ppm (rat)

**67-64-1 Acetone**

Oral	LD <sub>50</sub>	9750 mg/kg (rat)
Dermal	LD <sub>50</sub>	20000 mg/kg (rabbit)

**Acute Health Effects**

**Inhalation:**

Harmful if inhaled. May cause respiratory irritation. Severe overexposure may result in nausea, dizziness, drowsiness and headache.

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**Skin:** Liquid contact may remove natural skin oils resulting in skin irritation.**Eye:**

Causes serious eye irritation. Overexposure may result in corneal or conjunctival inflammation on contact with the liquid.

**Ingestion:** May cause nausea, vomiting, diarrhoea and mental sluggishness.**Skin Corrosion / Irritation:** Based on classification principles, the classification criteria are not met.**Serious Eye Damage / Irritation:** Causes serious eye irritation.**Respiratory or Skin Sensitisation:** Based on classification principles, the classification criteria are not met.**Germ Cell Mutagenicity:** Based on classification principles, the classification criteria are not met.**Carcinogenicity:**

Tetrahydrofuran is classified by Safe Work Australia as Carcinogen Category 3.

Suspected of causing cancer.

Cyclohexanone is classified by IARC as Group 3 - Not classifiable as to its carcinogenicity to humans.

**Reproductive Toxicity:** Based on classification principles, the classification criteria are not met.**Specific Target Organ Toxicity (STOT) - Single Exposure:** May cause respiratory irritation.**Specific Target Organ Toxicity (STOT) - Repeated Exposure:**

Based on classification principles, the classification criteria are not met.

**Aspiration Hazard:** Based on classification principles, the classification criteria are not met.**Chronic Health Effects:** Repeated exposure may cause skin dryness or cracking.**Existing Conditions Aggravated by Exposure:** No information available**Additional toxicological information:** No information available**12 . ECOLOGICAL INFORMATION****Ecotoxicity:** No information available**Aquatic toxicity:** No information available**Persistence and Degradability:** Biodegradable**Bioaccumulative Potential:** Minimal to none.**Mobility in Soil:**

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

**Other adverse effects:** No information available**13 . DISPOSAL CONSIDERATIONS****Disposal Methods and Containers:** Dispose according to applicable local and state government regulations.**Special Precautions for Landfill or Incineration:**

Please consult your state Land Waste Management Authority for more information.

**14 . TRANSPORT INFORMATION****UN Number****ADG, IMDG, IATA**

UN1133

**Proper Shipping Name****ADG, IMDG, IATA**

ADHESIVES containing flammable liquid

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<b>Dangerous Goods Class</b>	
<b>ADG Class:</b>	3 Flammable liquids.
<b>Packing Group:</b>	
<b>ADG, IMDG, IATA</b>	II
<b>Marine pollutant:</b>	No
<b>Hazchem Code:</b>	.3YE
<b>Limited Quantities:</b>	5L
<b>Packagings &amp; IBCs - Packing Instruction:</b>	P001, IBC02
<b>Packagings &amp; IBCs - Special Packing Provisions:</b>	PP1
<b>Portable Tanks &amp; Bulk Containers - Instructions:</b>	T4
<b>Portable Tanks &amp; Bulk Containers - Special Provisions:</b>	TP1, TP8

## 15 . REGULATORY INFORMATION

### Australian Inventory of Chemical Substances:

109-99-9	tetrahydrofuran
108-94-1	Cyclohexanone
78-93-3	2-Butanone
67-64-1	Acetone

### Standard for the Uniform Scheduling of Drugs and Poisons (SUSMP) - Poison Schedule:

Poisons Schedule: 5

## 16 . OTHER INFORMATION

**Creation Date:** 31.03.2015**Prepared by:** MSDS.COM.AU Pty Ltd[www.msds.com.au](http://www.msds.com.au)

### Abbreviations and acronyms:

ADG: Australian Dangerous Goods  
 IMDG: International Maritime Code for Dangerous Goods  
 IATA: International Air Transport Association  
 GHS: Globally Harmonized System of Classification and Labelling of Chemicals  
 EINECS: European Inventory of Existing Commercial Chemical Substances  
 ELINCS: European List of Notified Chemical Substances  
 CAS: Chemical Abstracts Service (division of the American Chemical Society)  
 VOC: Volatile Organic Compounds  
 LC<sub>50</sub>: Lethal concentration, 50 percent  
 LD<sub>50</sub>: Lethal dose, 50 percent  
 IARC: International Agency for Research on Cancer  
 STEL: Short Term Exposure Limit  
 TWA: Time Weighted Average  
 NES: National Exposure Standard (Safe Work Australia - Workplace Exposure Standards For Airborne Contaminants)

### Disclaimer

This MSDS is prepared in accord with the Safe Work Australia document "Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals - December 2011"

The information contained in this material safety data sheet is provided in good faith and is believed to be accurate at the date of issuance. HR Products makes no representation of the accuracy or comprehensiveness of the information and to the full extent allowed by law excludes all liability for any loss or damage related to the supply or use of the information in this material safety data sheet. MSDS.COM.AU Pty Ltd is not in a position to warrant the accuracy of the data herein. The user is cautioned to make their own determinations as to the suitability of the information provided to the particular circumstances in which the

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product is used.