

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® GRAY HEAVY BODY®

Other Means of Identification: Mixture

Recommended Use of the Chemical and Restriction on Use: 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).



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



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.

P243 Take precautionary measures against static discharge.

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| 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+P35 | 3 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. |
| P305+P351+P338 | B 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: CO2, 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: | | |
|-----------------------|---|--------|
| 109-99-9 | tetrahydrofuran | 40-65% |
| | ♦ Flam. Liq. 2, H225; ♦ Carc. 2, H351; ♦ Eye Irrit. 2A, H319; STOT SE 3, H335 | |
| 108-94-1 | Cyclohexanone | 10-30% |
| | ♦ Flam. Liq. 3, H226; ♦ Acute Tox. 4, H332 | |
| 78-93-3 | 2-Butanone | 5-20% |
| | ♦ Flam. Liq. 2, H225; ♦ Eye Irrit. 2, H319; STOT SE 3, H336 | |
| 67-64-1 | Acetone | 0-20% |
| | ♦ Flam. Liq. 2, H225; ♦ Eye Irrit. 2, H319; STOT SE 3, H336 | |

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.

Eve 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

| Expo | Exposure Standards: | | |
|-------|--|--|--|
| 109-9 | 109-99-9 tetrahydrofuran | | |
| NES | TWA: 295 mg/m³, 100 ppm Sk | | |
| 108-9 | 108-94-1 Cyclohexanone | | |
| NES | TWA: 100 mg/m³, 25 ppm Sk | | |
| 78-93 | 78-93-3 2-Butanone | | |
| NES | STEL: 890 mg/m³, 300 ppm TWA: 445 mg/m³, 150 ppm | | |
| 67-64 | 67-64-1 Acetone | | |
| NES | STEL: 2375 mg/m³, 1000 ppm TWA: 1185 mg/m³, 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.

Eve 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:

Form: Heavy, syrupy liquid

Colour:
Odour:
Colour:

Flash Point: -14 °C (TCC - Tetrahydrofuran)

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Flammability: Highly flammable.

Auto-ignition Temperature: 321 °C (Tetrahydrofuran)

Decomposition Temperature: Not applicable

Explosion Limits:

Lower: 2 Vol % **Upper:** 11.8 Vol %

Vapour Pressure at 20 °C: 190 mmHg (Acetone)

Relative Density at 23 °C: 0.966
Vapour Density: 2.49
Evaporation Rate: >1.0

Solubility in Water: Solvent portion completely soluble in water. Resin portion separates

out.

Partition Coefficient (n-octanol/water): No information available

Viscosity: Heavy bodied. VOC: =<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 (CO2), hydrogen chloride (HCI) and smoke.

11. TOXICOLOGICAL INFORMATION

Toxicity:

| LD ₅₀ /LC ₅₀ | LD ₅₀ /LC ₅₀ Values Relevant for Classification: | | | | |
|------------------------------------|--|--------------------------|--|--|--|
| 109-99-9 tetrahydrofuran | | | | | |
| Oral | LD ₅₀ | 2880 mg/kg (rat) | | | |
| Inhalation | LC ₅₀ | 21000 ppm (rat) (3 hour) | | | |
| 108-94-1 | 108-94-1 Cyclohexanone | | | | |
| Oral | LD ₅₀ | 1900 mg/kg (rat) | | | |
| Dermal | LD ₅₀ | 1000 mg/kg (rabbit) | | | |
| Inhalation | LC ₅₀ /4 h | 8000 mg/l (rat) | | | |
| 78-93-3 2- | 78-93-3 2-Butanone | | | | |
| Oral | LD ₅₀ | 3980 mg/kg (rat) | | | |
| Dermal | LD ₅₀ | 8-10 mg/kg (rabbit) | | | |
| Inhalation | LC ₅₀ /4 h | 4000 ppm (rat) | | | |
| 67-64-1 A | 67-64-1 Acetone | | | | |
| Oral | LD ₅₀ | 9750 mg/kg (rat) | | | |
| Dermal | LD₅o | 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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Dangerous Goods Class

ADG Class: 3 Flammable liquids.

Packing Group:

ADG, IMDG, IATA

II

Marine pollutant:

No

Hazchem Code:

Limited Quantities:

5L

Packagings & IBCs - Packing Instruction: P001, IBC02

Packagings & IBCs - Special Packing Provisions: PP1
Portable Tanks & Bulk Containers - Instructions: T4

Portable Tanks & Bulk Containers - Special

Provisions: 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: Not Scheduled.

16. OTHER INFORMATION

Creation Date: 31.03.2015

Prepared by: MSDS.COM.AU Pty Ltd 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

VOC: Volatile Organic Compounds LC₅₀: Lethal concentration, 50 percent

LD₅o: 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"

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product is used.