Callington Haven

Chemwatch: 25-9307 Version No: 3.1.1.1 Safety Data Sheet according to WHS and ADG requirements Chemwatch Hazard Alert Code: 2

Issue Date: 13/02/2014 Print Date: 04/08/2014 Initial Date: Not Available S.GHS.AUS.EN

SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

Product Identifier

| Product name | Fluorescent Penetrant HM-604 |
|-------------------------------|------------------------------|
| Chemical Name | Not Applicable |
| Synonyms | Not Available |
| Proper shipping name | Not Applicable |
| Chemical formula | Not Applicable |
| Other means of identification | Not Available |
| CAS number | Not Applicable |

Relevant identified uses of the substance or mixture and uses advised against

| Relevant identified uses | Penetrant for flaw detection in metals. |
|--------------------------|-----------------------------------------|
|--------------------------|-----------------------------------------|

Details of the manufacturer/importer

| Registered company name | Callington Haven |
|-------------------------|-------------------------------------------------|
| Address | 30 South Street Rydalmere 2116 NSW Australia |
| Telephone | +61 2 9898 2788 |
| Fax | +61 2 9684 4215 |
| Website | www.callingtonhaven.com |
| Email | sales@calhaven.com.au |

Emergency telephone number

| Association / Organisation | Not Available |
|--------------------------------------|-------------------------------------------------------|
| Emergency telephone numbers | 1800 039 008 (24 hours),+61 3 9573 3112 (24 hours) |
| Other emergency telephone numbers | 1800 039 008 (24 hours),+61 3 9573 3112 (24 hours) |

CHEMWATCH EMERGENCY RESPONSE

| Primary Number | Alternative Number 1 | Alternative Number 2 |
|----------------|----------------------|----------------------|
| 1800 039 008 | +612 9186 1132 | Not Available |

Once connected and if the message is not in your prefered language then please dial 01

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

HAZARDOUS CHEMICAL. NON-DANGEROUS GOODS. According to the Model WHS Regulations and the ADG Code.

CHEMWATCH HAZARD RATINGS

| | Min | Max | |
|--------------|-----|-----|--------------|
| Flammability | 1 📃 | | |
| Toxicity | 1 | | 0 = Minimum |
| Body Contact | 2 | | 1 = Low |
| Reactivity | 0 | | 2 = Moderate |
| Chronic | 0 | | 4 = Extreme |

| Poisons Schedule | Not Applicable |
|-----------------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| GHS Classification ^[1] | Skin Corrosion/Irritation Category 2, Eye Irrit. 2 |
| Legend: | 1. Classified by Chemwatch; 2. Classification drawn from HSIS ; 3. Classification drawn from EC Directive 1272/2008 - Annex VI |

Label elements

| GHS label elements | |
|--------------------|---------|
| SIGNAL WORD | WARNING |
| | |

Hazard statement(s)

| H315 | Causes skin irritation |
|------|-------------------------------|
| H319 | Causes serious eye irritation |

...

| Precautionary statement(s): Prevention | | |
|----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|--|
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. | |
| Precautionary statement(s): R | esponse | |
| P321 | Specific treatment (see advice on this label). | |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. | |
| P337+P313 | If eye irritation persists: Get medical advice/attention. | |
| P302+P352 | IF ON SKIN: Wash with plenty of water and soap | |

Precautionary statement(s): Storage

Not Applicable

Precautionary statement(s): Disposal

Not Applicable

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

| CAS No | %[weight] | Name |
|------------|-----------|---------------------------------------|
| 84133-50-6 | NotSpec. | alcohols C12-14 secondary ethoxylated |

SECTION 4 FIRST AID MEASURES

| Description of first aid measures | | |
|-----------------------------------|---------------------------------------------------------------------------------------------------------|--|
| | If this product comes in contact with the eyes: | |
| | Wash out immediately with fresh running water. | |
| Eye Contact | Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids | |
| | by occasionally lifting the upper and lower lids. | |
| | Seek medical attention without delay: if pain persists or recurs seek medical attention | |

• Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

| Skin Contact | If skin contact occurs: Immediately remove all contaminated clothing, including footwear. Flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation. |
|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Inhalation | If fumes or combustion products are inhaled remove from contaminated area. Lay patient down. Keep warm and rested. Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures. Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary. Transport to hospital, or doctor. |
| Ingestion | If swallowed do NOT induce vomiting. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. Observe the patient carefully. Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious. Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink. Seek medical advice. |

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5 FIREFIGHTING MEASURES

Extinguishing media

| · Outboll dioxide. |
|--------------------|
|--------------------|

Special hazards arising from the substrate or mixture

| Fire Incompatibility | Avoid contamination with strong oxidising agents as ignition may result | |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Advice for firefighters | | |
| Fire Fighting | Alert Fire Brigade and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves. Prevent, by any means available, spillage from entering drains or water course. Use water delivered as a fine spray to control fire and cool adjacent area. | |
| Fire/Explosion Hazard | Combustible. Slight fire hazard when exposed to heat or flame. Heating may cause expansion or decomposition leading to violent rupture of containers. On combustion, may emit toxic fumes of carbon monoxide (CO). | |

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

| Minor Spills | Slippery when spilt. Remove all ignition sources. Clean up all spills immediately. Avoid breathing vapours and contact with skin and eyes. |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Major Spills | Slippery when spilt. Remove all ignition sources. Minor hazard. I Clear area of personnel. |
| | |
| | Personal Protective Equipment advice is contained in Section 8 of the MSDS. |

SECTION 7 HANDLING AND STORAGE

| Safe handling | Avoid smoking, naked lights or ignition sources. Limit all unnecessary personal contact. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Other information | Store in original containers. Keep containers securely sealed. No smoking, naked lights or ignition sources. Store in a cool, dry, well-ventilated area. |

Conditions for safe storage, including any incompatibilities

| Suitable container | Metal can or drum Packaging as recommended by manufacturer. Check all containers are clearly labelled and free from leaks. | |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Storage incompatibility | Avoid storage with oxidisers | |

PACKAGE MATERIAL INCOMPATIBILITIES

Not Available

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

Not Available

EMERGENCY LIMITS

| Ingredient | TEEL-0 | TEEL-1 | TEEL-2 | TEEL-3 |
|------------------------------|---------------|---------------|---------------|---------------|
| Fluorescent Penetrant HM-604 | Not Available | Not Available | Not Available | Not Available |
| | | | | |
| Ingredient | Original IDLH | | Revised IDLH | |
| alcohols C12-14 secondary | Not Available | | Not Available | |

Exposure controls

| Appropriate engineering controls | General exhaust is adequate under normal operating conditions. | | |
|-------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| Personal protection | | | |
| Eye and face protection | Safety glasses with side shields; or as required, Chemical goggles. Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. | | |
| Skin protection | See Hand protection below | | |
| Hands/feet protection | Wear chemical protective gloves, e.g. PVC. Wear safety footwear or safety gumboots, e.g. Rubber | | |
| Body protection | See Other protection below | | |
| Other protection | ▶ Overalls.▶ Eyewash unit. | | |
| Thermal hazards | Not Available | | |

Recommended material(s)

GLOVE SELECTION INDEX

Respiratory protection

Glove selection is based on a modified presentation of the: & 149:20

Type A-P Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

"Forsberg Clothing Performance Index".

The effect(s) of the following substance(s) are taken into account in the *computer-generated* selection:

Fluorescent Penetrant HM-604 Not Available

* CPI - Chemwatch Performance Index

A: Best Selection

B: Satisfactory; may degrade after 4 hours continuous immersion C: Poor to Dangerous Choice for other than short term immersion **NOTE**: As a series of factors will influence the actual performance of the glove, a final selection must be based on detailed observation. -* Where the glove is to be used on a short term, casual or infrequent basis, factors such as "feel" or convenience (e.g. disposability), may dictate a choice of gloves which might otherwise be unsuitable following long-term or frequent use. A qualified practitioner should be consulted. Where the concentration of gas/particulates in the breathing zone, approaches or exceeds the "Exposure Standard" (or ES), respiratory protection is required.

Degree of protection varies with both face-piece and Class of filter; the nature of protection varies with Type of filter.

| Required Minimum Protection Factor | Half-Face Respirator | Full-Face Respirator | Powered Air Respirator |
|------------------------------------------|-------------------------|-------------------------|----------------------------|
| up to 10 x ES | A-AUS P2 | - | A-PAPR-AUS / Class 1 P2 |
| up to 50 x ES | - | A-AUS / Class 1 P2 | - |
| up to 100 x ES | - | A-2 P2 | A-PAPR-2 P2 ^ |

^ - Full-face

A(All classes) = Organic vapours, B AUS or B1 = Acid gasses, B2 = Acid gas or hydrogen cyanide(HCN), B3 = Acid gas or hydrogen cyanide(HCN), E = Sulfur dioxide(SO2), G = Agricultural chemicals, K = Ammonia(NH3), Hg = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 degC)

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance Yellow-green liquid with petroleum odour; dispersible in water.

| Physical state | Liquid | Relative density (Water = 1) | ~0.97 |
|-------------------------------------------------|----------------|--------------------------------------------|----------------|
| Odour | Not Available | Partition coefficient n-octanol / water | Not Available |
| Odour threshold | Not Available | Auto-ignition temperature (°C) | Not Available |
| pH (as supplied) | Not Applicable | Decomposition temperature | Not Available |
| Melting point / freezing point (°C) | Not Available | Viscosity (cSt) | Not Available |
| Initial boiling point and boiling range (°C) | 227 | Molecular weight (g/mol) | Not Applicable |
| Flash point (°C) | 171 (ASTM D93) | Taste | Not Available |
| Evaporation rate | Not Available | Explosive properties | Not Available |
| Flammability | Not Applicable | Oxidising properties | Not Available |
| Upper Explosive Limit (%) | Not Available | Surface Tension (dyn/cm or mN/m) | Not Available |
| Lower Explosive Limit (%) | Not Available | Volatile Component (%vol) | Not Available |
| Vapour pressure (kPa) | Not Available | Gas group | Not Available |
| Solubility in water (g/L) | Miscible | pH as a solution(1%) | Not Available |
| Vapour density (Air = 1) | Not Available | VOC g/L | Not Available |

SECTION 10 STABILITY AND REACTIVITY

| Reactivity | See section 7 |
|-------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Chemical stability | Unstable in the presence of incompatible materials. Product is considered stable. Hazardous polymerisation will not occur. |
| Possibility of hazardous reactions | See section 7 |
| Conditions to avoid | See section 7 |
| Incompatible materials | See section 7 |
| Hazardous decomposition products | See section 5 |

SECTION 11 TOXICOLOGICAL INFORMATION

Information on toxicological effects

| Inhaled | Not normally a hazard due to non-vola | atile nature of product |
|------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| Ingestion | Accidental ingestion of the material may be damaging to the health of the individual. Ingestion may result in nausea, abdominal irritation, pain and vomiting | |
| Skin Contact | This material can cause inflammation of the skin on contact in some persons. Toxic effects may result from skin absorption The material may accentuate any pre-existing skin condition | |
| Eye | This material can cause eye irritation and damage in some persons. | |
| Chronic | Long-term exposure to the product is not thought to produce chronic effects adverse to the health (as classified by EC Directives using animal models); nevertheless exposure by all routes should be minimised as a matter of course. | |
| | | |
| Fluorescent Penetrant HM-604 | ΤΟΧΙΟΙΤΥ | IRRITATION |
| | Not Available | Not Available |
| alcohols C12-14 secondary ethoxylated | TOXICITY Not Available | IRRITATION Not Available |

Not available. Refer to individual constituents.

| ALCOHOLS C12-14 SECONDARY ETHOXYLATED | Both laboratory and animal testing has shown that there is no evidence for alcohol ethoxylates (AEs) causing genetic damage, mutations or cancer. No adverse reproductive or developmental effects were observed. No significant acute toxicological data identified in literature search. | | |
|------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|---|
| | | | |
| Acute Toxicity | 0 | Carcinogenicity | 0 |
| Skin Irritation/Corrosion | ✓ | Reproductivity | 0 |
| Serious Eye Damage/Irritation | ¥ | STOT - Single Exposure | 0 |
| Respiratory or Skin sensitisation | 0 | STOT - Repeated Exposure | 0 |
| Mutagenicity | 0 | Aspiration Hazard | 0 |

Legend:

Data required to make classification available

 \mathbf{X} – Data available but does not fill the criteria for classification

🛇 – Data Not Available to make classification

CMR STATUS

Not Applicable

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

DO NOT discharge into sewer or waterways.

Persistence and degradability

| Ingredient | Persistence: Water/Soil | Persistence: Air |
|---------------------------|-------------------------|------------------|
| Not Available | Not Available | Not Available |
| Bioaccumulative potential | | |
| Ingredient | Bioaccumulation | |
| Not Available | Not Available | |
| Mobility in soil | | |
| Ingredient | Mobility | |

Page 7 of 7

Not Available

Not Available

SECTION 13 DISPOSAL CONSIDERATIONS

| Waste treatment methods | |
|------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product / Packaging disposal | Recycle wherever possible or consult manufacturer for recycling options. Consult State Land Waste Authority for disposal. Bury or incinerate residue at an approved site. Recycle containers if possible, or dispose of in an authorised landfill. |

SECTION 14 TRANSPORT INFORMATION

Labels Required

| Marine Pollutant | NO |
|------------------|----------------|
| HAZCHEM | Not Applicable |

Land transport (ADG): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

SECTION 15 REGULATORY INFORMATION

Safety, health and environmental regulations / legislation specific for the substance or mixture

| International Mantine Dangerous Goods Requirements (IMDO Gode), International Mantine Dangerous | 30005 |
|--------------------------------------------------------------------------------------------------------------------------------------|------------|
| Requirements (IMDG Code) - Substance Index", "Australia FAISD Handbook - Safety Directions", "Austral | a ADI list |
| - Acceptable daily intakes for agricultural and veterinary chemicals","Australia Dangerous Goods Code (/ | .DG |
| Code) - List of Emergency Action Codes", "United Nations Recommendations on the Transport of Danger | ous |
| Goods Model Regulations (English)","OECD List of High Production Volume (HPV) Chemicals","Australia | Inventory |
| alconois C12-14 secondary of Chemical Substances (AICS)", "Belgium Federal Public Service Mobility and Transport, Regulations con | cerning |
| ernoxylated(84133-50-6) is found the International Carriage of Dangerous Goods by Rail - Table A: Dangerous Goods List - RID 2013 | |
| (Dutch)","OSPAR National List of Candidates for Substitution – United Kingdom","United Nations | |
| Recommendations on the Transport of Dangerous Goods Model Regulations (Spanish)","Australia Danger | ous |
| Goods Code (ADG Code) - Dangerous Goods List","International Air Transport Association (IATA) Danger | us Goods |
| Regulations","International Fragrance Association (IFRA) Survey: Transparency List","Australia - New So | uth Wales |
| Protection of the Environment Operations (Waste) Regulation 2005 - Characteristics of trackable wastes | |

SECTION 16 OTHER INFORMATION

Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

A list of reference resources used to assist the committee may be found at:

www.chemwatch.net/references

The (M)SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

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