

HURST F303 MULTI FOUNT BLUE

Chemwatch Independent Material Safety Data Sheet

Issue Date: 11-Nov-2010

C9317EC

CHEMWATCH 4748-87

Version No:2.0

CD 2010/4 Page 1 of 7

Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME

HURST F303 MULTI FOUNT BLUE

PRODUCT USE

■ Used according to manufacturer's directions.

SUPPLIER

Company: Hurst Australia Pty Ltd

Address:

10 Bellona Avenue

Regents Park

NSW, 2143

Australia

Telephone: +61 2 9644 6888

Emergency Tel: +61 2 9644 6888

Fax: +61 2 9644 6534

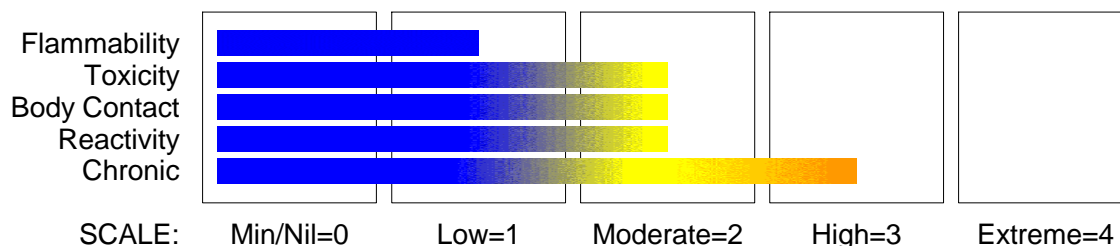
Email: info@hurst.com.au

Section 2 - HAZARDS IDENTIFICATION

STATEMENT OF HAZARDOUS NATURE

HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS. According to NOHSC Criteria, and ADG Code.

CHEMWATCH HAZARD RATINGS



RISK

Risk Codes

R20/21/22

R36/38

R43

R52

Risk Phrases

• Harmful by inhalation, in contact with skin and if swallowed.

• Irritating to eyes and skin.

• May cause SENSITISATION by skin contact.

• Harmful to aquatic organisms.

SAFETY

Safety Codes

S36

S401

S13

S46

Safety Phrases

• Wear suitable protective clothing.

• To clean the floor and all objects contaminated by this material, use water and detergent.

• Keep away from food, drink and animal feeding stuffs.

• If swallowed, IMMEDIATELY contact Doctor or Poisons Information Centre. (show this container or label).

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

NAME	CAS RN	%
glycol ether		30-60
glycols		10-30
citric acid	77-92-9	1-10
dicarboxylic acids, C4- 6	68603-87-2	1-10
2- bromo- 2- nitropropan- 1, 3- diol	52-51-7	<0.2
isothiazolinones, mixed	55965-84-9	<0.02
1- octyl- 2- pyrrolidone	2687-94-7	<1
other ingredients at levels determined not to be hazardous		balance

continued...

HURST F303 MULTI FOUNT BLUE

Chemwatch Independent Material Safety Data Sheet

Issue Date: 11-Nov-2010

C9317EC

CHEMWATCH 4748-87

Version No:2.0

CD 2010/4 Page 2 of 7

Section 4 - FIRST AID MEASURES

SWALLOWED

- - 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.

EYE

- If this product comes in contact with the eyes:
 - Wash out immediately with fresh running water.
 - 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

- 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.

INHALED

- - 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.

NOTES TO PHYSICIAN

- Treat symptomatically.
- Followed acute or short term repeated exposures to ethylene glycol monoalkyl ethers and their acetates:
- Hepatic metabolism produces ethylene glycol as a metabolite.
 - Clinical presentation, following severe intoxication, resembles that of ethylene glycol exposures.
 - Monitoring the urinary excretion of the alkoxyacetic acid metabolites may be a useful indication of exposure. [Ellenhorn and Barceloux: Medical Toxicology].

Section 5 - FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA

- - Water spray or fog.
- Foam.
- Dry chemical powder.
- BCF (where regulations permit).

FIRE FIGHTING

- - Alert Fire Brigade and tell them location and nature of hazard.
- Wear full body protective clothing with breathing apparatus.
- 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).
- Combustion products include: carbon dioxide (CO₂), acrolein, nitrogen oxides (NO_x), other pyrolysis products typical of burning organic material. May emit poisonous fumes.

FIRE INCOMPATIBILITY

- - Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result.

HAZCHEM

None

Personal Protective Equipment

Breathing apparatus.
Gas tight chemical resistant suit.
Limit exposure duration to 1 BA set 30 mins.

continued...

HURST F303 MULTI FOUNT BLUE

Chemwatch Independent Material Safety Data Sheet

Issue Date: 11-Nov-2010

C9317EC

CHEMWATCH 4748-87

Version No:2.0

CD 2010/4 Page 3 of 7

Section 6 - ACCIDENTAL RELEASE MEASURES

MINOR SPILLS

- - Remove all ignition sources.
- Clean up all spills immediately.
- Avoid breathing vapours and contact with skin and eyes.
- Control personal contact by using protective equipment.

MAJOR SPILLS

- Moderate hazard.
- Clear area of personnel and move upwind.
- 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.

Personal Protective Equipment advice is contained in Section 8 of the MSDS.

Section 7 - HANDLING AND STORAGE

PROCEDURE FOR HANDLING

- - DO NOT allow clothing wet with material to stay in contact with skin.
- Avoid all personal contact, including inhalation.
- Wear protective clothing when risk of exposure occurs.
- Use in a well-ventilated area.
- Prevent concentration in hollows and sumps.

SUITABLE CONTAINER

- - DO NOT use aluminium or galvanised containers.
- Metal can or drum
- Packaging as recommended by manufacturer.
- Check all containers are clearly labelled and free from leaks.

STORAGE INCOMPATIBILITY

- - Avoid reaction with oxidising agents.

STORAGE REQUIREMENTS

- - Store in original containers.
- Keep containers securely sealed.
- No smoking, naked lights or ignition sources.
- Store in a cool, dry, well-ventilated area.

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE CONTROLS

The following materials had no OELs on our records

- | | |
|-----------------------------------------|------------------|
| • citric acid: | CAS:77- 92- 9 |
| • dicarboxylic acids, C4- 6: | CAS:68603- 87- 2 |
| • 2- bromo- 2- nitropropan- 1, 3- diol: | CAS:52- 51- 7 |
| • isothiazolinones, mixed: | CAS:55965- 84- 9 |
| • 1- octyl- 2- pyrrolidone: | CAS:2687- 94- 7 |

PERSONAL PROTECTION

RESPIRATOR

Type AK-P Filter of sufficient capacity

EYE

- - Safety glasses with side shields.
- 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 lens 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. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59].

HANDS/FEET

- - Wear chemical protective gloves, eg. PVC.
- Wear safety footwear or safety gumboots, eg. Rubber.

NOTE:

continued...

HURST F303 MULTI FOUNT BLUE

Chemwatch Independent Material Safety Data Sheet

Issue Date: 11-Nov-2010

C9317EC

CHEMWATCH 4748-87

Version No:2.0

CD 2010/4 Page 4 of 7

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

- The material may produce skin sensitisation in predisposed individuals. Care must be taken, when removing gloves and other protective equipment, to avoid all possible skin contact.

- Contaminated leather items, such as shoes, belts and watch-bands should be removed and destroyed.

Suitability and durability of glove type is dependent on usage. Important factors in the selection of gloves include: such as:

- frequency and duration of contact,
- chemical resistance of glove material,
- glove thickness and
- dexterity.

OTHER

- - Overalls.
- P.V.C. apron.
- Barrier cream.
- Skin cleansing cream.

ENGINEERING CONTROLS

- Local exhaust ventilation usually required. If risk of overexposure exists, wear approved respirator.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE

Coloured liquid with a characteristic odour; miscible with water.

PHYSICAL PROPERTIES

Liquid.
Mixes with water.

State	Liquid	Molecular Weight	Not Applicable
Melting Range (°C)	Not Available	Viscosity	Not Available
Boiling Range (°C)	100	Solubility in water (g/L)	Miscible
Flash Point (°C)	Not Applicable	pH (1% solution)	Not Available
Decomposition Temp (°C)	Not Available	pH (as supplied)	Not Available
Autoignition Temp (°C)	Not Available	Vapour Pressure (kPa)	Not Available
Upper Explosive Limit (%)	Not Applicable	Specific Gravity (water=1)	>1
Lower Explosive Limit (%)	Not Applicable	Relative Vapour Density (air=1)	Not Available
Volatile Component (%vol)	Not Available	Evaporation Rate	Not Available

Section 10 - STABILITY AND REACTIVITY

CONDITIONS CONTRIBUTING TO INSTABILITY

- - Presence of incompatible materials.
 - Product is considered stable.
 - Hazardous polymerisation will not occur.
- For incompatible materials - refer to Section 7 - Handling and Storage.*

Section 11 - TOXICOLOGICAL INFORMATION

POTENTIAL HEALTH EFFECTS

ACUTE HEALTH EFFECTS

- Harmful by inhalation, in contact with skin and if swallowed.
- Irritating to eyes and skin.
- Vapours may cause dizziness or suffocation.

CHRONIC HEALTH EFFECTS

- May cause SENSITISATION by skin contact.

TOXICITY AND IRRITATION

- unless otherwise specified data extracted from RTECS - Register of Toxic Effects of Chemical Substances.

1-OCTYL-2-PYRROLIDONE:

HURST F303 MULTI FOUNT BLUE:

- The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.

2-BROMO-2-NITROPROPAN-1,3-DIOL:

ISOTHIAZOLINONES, MIXED:

1-OCTYL-2-PYRROLIDONE:

CITRIC ACID:

- Asthma-like symptoms may continue for months or even years after exposure to the material ceases. This may be due to a non-allergenic condition known as reactive airways dysfunction syndrome (RADS) which can occur following exposure to high levels of highly irritating compound.

DICARBOXYLIC ACIDS, C4-6:

continued...

HURST F303 MULTI FOUNT BLUE

Chemwatch Independent Material Safety Data Sheet

Issue Date: 11-Nov-2010

C9317EC

CHEMWATCH 4748-87

Version No:2.0

CD 2010/4 Page 5 of 7

Section 11 - TOXICOLOGICAL INFORMATION

1-OCTYL-2-PYRROLIDONE:

HURST F303 MULTI FOUNT BLUE:

■ No significant acute toxicological data identified in literature search.

ISOTHIAZOLINONES, MIXED:

HURST F303 MULTI FOUNT BLUE:

■ Contact allergies quickly manifest themselves as contact eczema, more rarely as urticaria or Quincke's oedema. The pathogenesis of contact eczema involves a cell-mediated (T lymphocytes) immune reaction of the delayed type.

CITRIC ACID:

ISOTHIAZOLINONES, MIXED:

HURST F303 MULTI FOUNT BLUE:

■ The material may cause skin irritation after prolonged or repeated exposure and may produce a contact dermatitis (nonallergic). This form of dermatitis is often characterised by skin redness (erythema) and swelling epidermis.

HURST F303 MULTI FOUNT BLUE:

■ Allergic reactions which develop in the respiratory passages as bronchial asthma or rhinoconjunctivitis, are mostly the result of reactions of the allergen with specific antibodies of the IgE class and belong in their reaction rates to the manifestation of the immediate type. In addition to the allergen-specific potential for causing respiratory sensitisation, the amount of the allergen, the exposure period and the genetically determined disposition of the exposed person are likely to be decisive.

Particular attention is drawn to so-called atopic diathesis which is characterised by an increased susceptibility to allergic rhinitis, allergic bronchial asthma and atopic eczema (neurodermatitis) which is associated with increased IgE synthesis.

Exogenous allergic alveolitis is induced essentially by allergen specific immune-complexes of the IgG type; cell-mediated reactions (T lymphocytes) may be involved. Such allergy is of the delayed type with onset up to four hours following exposure.

For ethylene glycol monoalkyl ethers and their acetates (EGMAEs):

Typical members of this category are ethylene glycol propylene ether (EGPE), ethylene glycol butyl ether (EGBE) and ethylene glycol hexyl ether (EGHE) and their acetates.

EGMAEs are substrates for alcohol dehydrogenase isozyme ADH-3, which catalyzes the conversion of their terminal alcohols to aldehydes (which are transient metabolites).

Acute Toxicity: Oral LD50 values in rats for all category members range from 739 (EGHE) to 3089 mg/kg bw (EGPE), with values increasing with decreasing molecular weight.

Exposure of pregnant rats to ethylene glycol monobutyl ether (2-butoxyethanol) at 100 ppm or rabbits at 200 ppm during organogenesis resulted in maternal toxicity and embryotoxicity including a decreased number of viable implantations per litter. Slight foetotoxicity in the form of poorly ossified or unossified skeletal elements was also apparent in rats.

At least one researcher has stated that the reproductive effects were less than that of other monoalkyl ethers of ethylene glycol.

CITRIC ACID:

Oral (rat) LD50: 3000 mg/kg

Skin (rabbit): 500 mg/24h - Mild

Eye (rabbit): 0.75 mg/24h- SEVERE

2-BROMO-2-NITROPROPAN-1,3-DIOL:

Oral (rat) LD50: 180 mg/kg

Inhalation (rat) LC50: >5000 mg/m³/6h

Dermal (rat) LD50: 1600 mg/kg

Intraperitoneal (Rat) LD50: 26 mg/kg

Subcutaneous (Rat) LD50: 170 mg/kg

Oral (Mouse) LD50: 270 mg/kg

Subcutaneous (Mouse) LD50: 116 mg/kg

Intravenous (Mouse) LD50: 48 mg/kg

Oral (Dog) LD50: 250 mg/kg

Skin (human): 10 mg Moderate

Skin (rabbit): 500 mg/24h Mild

Skin (rabbit): 80 mg Moderate

Eye (rabbit): 5 mg

■ The material may cause skin irritation after prolonged or repeated exposure and may produce a contact dermatitis (nonallergic). This form of dermatitis is often characterised by skin redness (erythema) and swelling the epidermis.

Formaldehyde generators (releasers) are often used as preservatives. Formaldehyde may be generated following hydrolysis.

Formaldehyde generators are a diverse group of chemicals that can be recognised by a small, easily detachable formaldehyde moiety.

According to Annex VI of the Cosmetic Directive 76/768/EC, the maximum authorised concentration of free formaldehyde is 0.2%. In addition, the provisions of Annex VI state that,

Chemical with the aliphatic nitro group (-C-NO₂) have been added to a list of DNA-reactive subgroups recognised by the National Toxicological Program (NTP, U.S. Dept Health and Human Services) for possible carcinogenic activity.

ISOTHIAZOLINONES, MIXED:

Oral (rat) LD50: 53 mg/kg

Nil Reported

■ The material may be irritating to the eye, with prolonged contact causing inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.

1-OCTYL-2-PYRROLIDONE:

■ The material may produce severe skin irritation after prolonged or repeated exposure, and may produce a contact dermatitis (nonallergic). This form of dermatitis is often characterised by skin redness (erythema) thickening of the epidermis.<</>

SENSITISER

isothiazolinones,
mixed

Australia Final Report on Hazard
Classification of Common Skin Sensitisers

Recommended for
Hazard Classification
(R43)

Currently
listed in
Annex 1,
Directive
67/548/EEC

continued...

HURST F303 MULTI FOUNT BLUE

Chemwatch Independent Material Safety Data Sheet

Issue Date: 11-Nov-2010

C9317EC

CHEMWATCH 4748-87

Version No:2.0

CD 2010/4 Page 6 of 7

Section 12 - ECOLOGICAL INFORMATION

Harmful to aquatic organisms.

Ecotoxicity

Ingredient	Persistence: Water/Soil	Persistence: Air	Bioaccumulation	Mobility
citric acid	LOW		LOW	HIGH
2- bromo- 2- nitropropan- 1, 3- diol	LOW		LOW	HIGH
1- octyl- 2- pyrrolidone	LOW		LOW	MED

Section 13 - DISPOSAL CONSIDERATIONS

■ - Containers may still present a chemical hazard/ danger when empty.

- Return to supplier for reuse/ recycling if possible.

Otherwise:

- If container can not be cleaned sufficiently well to ensure that residuals do not remain or if the container cannot be used to store the same product, then puncture containers, to prevent re-use, and bury at an authorised landfill.

- Where possible retain label warnings and MSDS and observe all notices pertaining to the product.

Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area.

A Hierarchy of Controls seems to be common - the user should investigate:

- Reduction.

- DO NOT allow wash water from cleaning or process equipment to enter drains.

- It may be necessary to collect all wash water for treatment before disposal.

- In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.

- Where in doubt contact the responsible authority.

- 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 - TRANSPORTATION INFORMATION

HAZCHEM:

None (ADG7)

NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS: ADG7, UN, IATA, IMDG

Section 15 - REGULATORY INFORMATION

POISONS SCHEDULE S5

REGULATIONS

Regulations for ingredients

citric acid (CAS: 77-92-9) is found on the following regulatory lists;

"Australia High Volume Industrial Chemical List (HVICL)", "Australia Inventory of Chemical Substances (AICS)", "Australia Therapeutic Goods Administration (TGA) Substances that may be used as active ingredients in Listed medicines", "CODEX General Standard for Food Additives (GSFA) - Additives Permitted for Use in Food in General, Unless Otherwise Specified, in Accordance with GMP", "GESAMP/EHS Composite List - GESAMP Hazard Profiles", "IMO IBC Code Chapter 17: Summary of minimum requirements", "IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk", "International Council of Chemical Associations (ICCA) - High Production Volume List", "International Fragrance Association (IFRA) Survey: Transparency List", "OECD Representative List of High Production Volume (HPV) Chemicals"

dicarboxylic acids, C4-6 (CAS: 68603-87-2) is found on the following regulatory lists;

"OECD Representative List of High Production Volume (HPV) Chemicals"

2-bromo-2-nitropropan-1,3-diol (CAS: 52-51-7) is found on the following regulatory lists;

"Australia Hazardous Substances", "Australia Inventory of Chemical Substances (AICS)"

isothiazolinones, mixed (CAS: 55965-84-9) is found on the following regulatory lists;

"Australia Final Report on Hazard Classification of Common Skin Sensitisers", "Australia Hazardous Substances"

1-octyl-2-pyrrolidone (CAS: 2687-94-7) is found on the following regulatory lists;

"Australia Hazardous Substances", "Australia Inventory of Chemical Substances (AICS)", "Australia Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP) - Appendix E (Part 2)", "Australia Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP) - Schedule 5", "Australia Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP) - Schedule 6", "OECD Representative List of High Production Volume (HPV) Chemicals"

continued...

HURST F303 MULTI FOUNT BLUE

Chemwatch Independent Material Safety Data Sheet
Issue Date: 11-Nov-2010
C9317EC

CHEMWATCH 4748-87
Version No:2.0
CD 2010/4 Page 7 of 7
Section 15 - REGULATORY INFORMATION

No data for Hurst F303 Multi Fount Blue (CW: 4748-87)

Section 16 - 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.

This document is copyright. Apart from any fair dealing for the purposes of private study, research, review or criticism, as permitted under the Copyright Act, no part may be reproduced by any process without written permission from CHEMWATCH. TEL (+61 3) 9572 4700.

Issue Date: 11-Nov-2010
Print Date: 11-Nov-2010

This is the end of the MSDS.