

# Hurst 103 All Purpose Blanket and Roller Wash

Hazard Alert Code: MODERATE

Chemwatch Material Safety Data Sheet  
Issue Date: 13-Jan-2012  
A317LP

CHEMWATCH 13358  
Version No:2.0  
Page 1 of 14

## Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

### PRODUCT NAME

Hurst 103 All Purpose Blanket and Roller Wash

### SYNONYMS

"blanket, roller and press wash", "hydrocarbon solvent blend"

### PROPER SHIPPING NAME

FLAMMABLE LIQUID, N.O.S.(contains liquid hydrocarbons)

### PRODUCT USE

As a cleaning solvent for printing blankets and press rollers.

### SUPPLIER

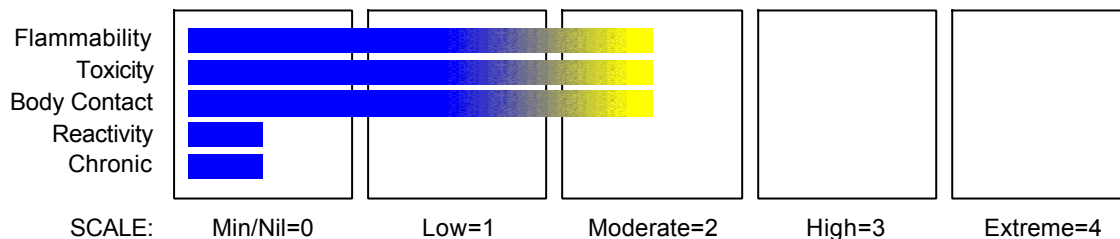
Company: Hurst Australia Pty Ltd  
Address:  
10 Bellona Avenue  
Regents Park  
NSW, 2143  
Australia  
Telephone: +61 2 9644 6888  
Emergency Tel:+61 2 9644 6888  
Fax: +61 2 9644 6534  
Email: info@hurst.com.au

## Section 2 - HAZARDS IDENTIFICATION

### STATEMENT OF HAZARDOUS NATURE

**HAZARDOUS SUBSTANCE. DANGEROUS GOODS.** According to the Criteria of NOHSC, and the ADG Code.

### CHEMWATCH HAZARD RATINGS



continued...

# Hurst 103 All Purpose Blanket and Roller Wash

Hazard Alert Code: MODERATE

Chemwatch Material Safety Data Sheet  
Issue Date: 13-Jan-2012  
A317LP

CHEMWATCH 13358

Version No:2.0

Page 2 of 14

## Section 2 - HAZARDS IDENTIFICATION

### RISK

- Flammable.
- Irritating to respiratory system.
- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- HARMFUL- May cause lung damage if swallowed.
- Repeated exposure may cause skin dryness and cracking.
- Vapours may cause drowsiness and dizziness.
- Inhalation, skin contact and/or ingestion may produce health damage\*.
- Cumulative effects may result following exposure\*.
- May produce discomfort of the eyes and skin\*.

\* (limited evidence).

### SAFETY

- Do not breathe gas/fumes/vapour/spray.
- Avoid contact with skin.
- Avoid contact with eyes.
  
- Wear suitable protective clothing.
- Wear suitable gloves.
  
- Wear eye/face protection.
- Use only in well ventilated areas.
  
- Keep container in a well ventilated place.
  
- Do not empty into drains.
  
- To clean the floor and all objects contaminated by this material, use water.
- Keep container tightly closed.
- This material and its container must be disposed of in a safe way.
- Keep away from food, drink and animal feeding stuffs.
- In case of contact with eyes, rinse with plenty of water and contact Doctor or Poisons Information Centre.
- If swallowed, IMMEDIATELY contact Doctor or Poisons Information Centre. (show this container or label).
- Use appropriate container to avoid environmental contamination.
- Avoid release to the environment. Refer to special instructions/Safety data sheets.
- This material and its container must be disposed of as hazardous waste.

## Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

NAME	CAS RN	%
naphtha petroleum, light aromatic solvent	64742-95-6.	30-60
No other ingredient information supplied.		

## Section 4 - FIRST AID MEASURES

### SWALLOWED

- For advice, contact a Poisons Information Centre or a doctor. • 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

continued...

# Hurst 103 All Purpose Blanket and Roller Wash

Hazard Alert Code: MODERATE

Chemwatch Material Safety Data Sheet  
Issue Date: 13-Jan-2012  
A317LP

CHEMWATCH 13358

Version No:2.0

Page 3 of 14

Section 4 - FIRST AID MEASURES

unconscious

- Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink.
- Seek medical advice.

## EYE

- If this product comes in contact with the eyes:
  - Immediately hold eyelids apart and flush the eye continuously with 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.
  - Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes.
  - Transport to hospital or doctor without delay.
  - 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.
- Transport to hospital, or doctor.

## NOTES TO PHYSICIAN

- Treat symptomatically.

## Section 5 - FIRE FIGHTING MEASURES

### EXTINGUISHING MEDIA

- Foam.
- Dry chemical powder.
- BCF (where regulations permit).
- Carbon dioxide.
- Water spray or fog - Large fires only.

### FIRE FIGHTING

- Alert Fire Brigade and tell them location and nature of hazard.
- May be violently or explosively reactive.
- Wear breathing apparatus plus protective gloves.
- Prevent, by any means available, spillage from entering drains or water course.
- If safe, switch off electrical equipment until vapour fire hazard removed.
- Use water delivered as a fine spray to control fire and cool adjacent area.
- Avoid spraying water onto liquid pools.
- DO NOT approach containers suspected to be hot.
- Cool fire exposed containers with water spray from a protected location.
- If safe to do so, remove containers from path of fire.

When any large container (including road and rail tankers) is involved in a fire,

continued...

# Hurst 103 All Purpose Blanket and Roller Wash

Hazard Alert Code: MODERATE

Chemwatch Material Safety Data Sheet  
Issue Date: 13-Jan-2012  
A317LP

CHEMWATCH 13358

Version No:2.0

Page 4 of 14

Section 5 - FIRE FIGHTING MEASURES

consider evacuation by 500 metres in all directions.

## FIRE/EXPLOSION HAZARD

- Liquid and vapour are flammable.
  - Moderate fire hazard when exposed to heat or flame.
  - Vapour forms an explosive mixture with air.
  - Moderate explosion hazard when exposed to heat or flame.
  - Vapour may travel a considerable distance to source of ignition.
  - Heating may cause expansion or decomposition leading to violent rupture of containers.
  - On combustion, may emit toxic fumes of carbon monoxide (CO).
- May emit clouds of acrid smoke.  
Other decomposition products include: carbon dioxide (CO<sub>2</sub>).

## FIRE INCOMPATIBILITY

- Avoid reaction with oxidising agents, strong alkalis and strong acids.

## HAZCHEM

•3Y

## 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.
- Contain and absorb small quantities with vermiculite or other absorbent material.
- Wipe up.
- Collect residues in a flammable waste container.

### MAJOR SPILLS

- Clear area of personnel and move upwind.
- Alert Fire Brigade and tell them location and nature of hazard.
- May be violently or explosively reactive.
- Wear breathing apparatus plus protective gloves.
- Prevent, by any means available, spillage from entering drains or water course.
- No smoking, naked lights or ignition sources.
- Increase ventilation.
- Stop leak if safe to do so.
- Water spray or fog may be used to disperse / absorb vapour.
- Contain spill with sand, earth or vermiculite.
- Use only spark-free shovels and explosion proof equipment.
- Collect recoverable product into labelled containers for recycling.
- Absorb remaining product with sand, earth or vermiculite.
- Collect solid residues and seal in labelled drums for disposal.
- Wash area and prevent runoff into drains.
- If contamination of drains or waterways occurs, advise emergency services.

### PROTECTIVE ACTIONS FOR SPILL

continued...

# Hurst 103 All Purpose Blanket and Roller Wash

Hazard Alert Code: MODERATE

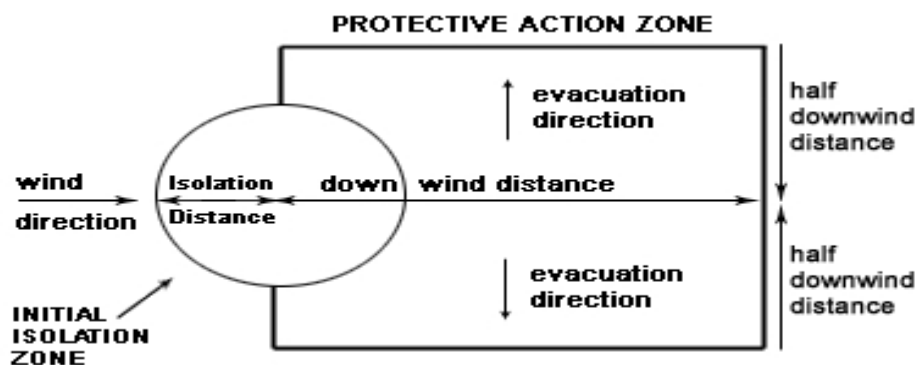
Chemwatch Material Safety Data Sheet  
Issue Date: 13-Jan-2012  
A317LP

CHEMWATCH 13358

Version No:2.0

Page 5 of 14

Section 6 - ACCIDENTAL RELEASE MEASURES



From IERG (Canada/Australia)

Isolation Distance	25 metres
Downwind Protection Distance	300 metres
IERG Number	14

## FOOTNOTES

- 1 PROTECTIVE ACTION ZONE is defined as the area in which people are at risk of harmful exposure. This zone assumes that random changes in wind direction confines the vapour plume to an area within 30 degrees on either side of the predominant wind direction, resulting in a crosswind protective action distance equal to the downwind protective action distance.
- 2 PROTECTIVE ACTIONS should be initiated to the extent possible, beginning with those closest to the spill and working away from the site in the downwind direction. Within the protective action zone a level of vapour concentration may exist resulting in nearly all unprotected persons becoming incapacitated and unable to take protective action and/or incurring serious or irreversible health effects.
- 3 INITIAL ISOLATION ZONE is determined as an area, including upwind of the incident, within which a high probability of localised wind reversal may expose nearly all persons without appropriate protection to life-threatening concentrations of the material.
- 4 SMALL SPILLS involve a leaking package of 200 litres (55 US gallons) or less, such as a drum (jerrican or box with inner containers). Larger packages leaking less than 200 litres and compressed gas leaking from a small cylinder are also considered "small spills".  
LARGE SPILLS involve many small leaking packages or a leaking package of greater than 200 litres, such as a cargo tank, portable tank or a "one-tonne" compressed gas cylinder.
- 5 Guide 128 is taken from the US DOT emergency response guide book.
- 6 IERG information is derived from CANUTEC - Transport Canada.

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

## Section 7 - HANDLING AND STORAGE

### PROCEDURE FOR HANDLING

- Avoid all personal contact, including inhalation.
- Wear protective clothing when risk of overexposure occurs.
- Use in a well-ventilated area.
- Prevent concentration in hollows and sumps.
- DO NOT enter confined spaces until atmosphere has been checked.
- Avoid smoking, naked lights or ignition sources.
- Avoid generation of static electricity.

continued...

# Hurst 103 All Purpose Blanket and Roller Wash

Hazard Alert Code: MODERATE

Chemwatch Material Safety Data Sheet  
Issue Date: 13-Jan-2012  
A317LP

CHEMWATCH 13358

Version No:2.0

Page 6 of 14

Section 7 - HANDLING AND STORAGE

- DO NOT use plastic buckets.
- Earth all lines and equipment.
- Use spark-free tools when handling.
- Avoid contact with incompatible materials.
- When handling, DO NOT eat, drink or smoke.
- Keep containers securely sealed when not in use.
- Avoid physical damage to containers.
- Always wash hands with soap and water after handling.
- Work clothes should be laundered separately.
- Use good occupational work practice.
- Observe manufacturer's storing and handling recommendations.
- Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions.

## SUITABLE CONTAINER

- Metal can or drum
- Packaging as recommended by manufacturer.
- Check all containers are clearly labelled and free from leaks.

Store in metal drums or safety cans.

## STORAGE INCOMPATIBILITY

- Avoid storage with oxidisers.

## STORAGE REQUIREMENTS

- Store in original containers in approved flammable liquid storage area.
- Store away from incompatible materials in a cool, dry, well-ventilated area.
- DO NOT store in pits, depressions, basements or areas where vapours may be trapped.
- No smoking, naked lights, heat or ignition sources.
- Storage areas should be clearly identified, well illuminated, clear of obstruction and accessible only to trained and authorised personnel - adequate security must be provided so that unauthorised personnel do not have access.
- Store according to applicable regulations for flammable materials for storage tanks, containers, piping, buildings, rooms, cabinets, allowable quantities and minimum storage distances.
- Use non-sparking ventilation systems, approved explosion proof equipment and intrinsically safe electrical systems.
- Have appropriate extinguishing capability in storage area (e.g. portable fire extinguishers - dry chemical, foam or carbon dioxide) and flammable gas detectors.
- Keep adsorbents for leaks and spills readily available.
- Protect containers against physical damage and check regularly for leaks.
- Observe manufacturer's storing and handling recommendations.

In addition, for tank storages (where appropriate):

- Store in grounded, properly designed and approved vessels and away from incompatible materials.
- For bulk storages, consider use of floating roof or nitrogen blanketed vessels; where venting to atmosphere is possible, equip storage tank vents with flame arrestors; inspect tank vents during winter conditions for vapour/ ice build-up.
- Storage tanks should be above ground and diked to hold entire contents.

## SAFE STORAGE WITH OTHER CLASSIFIED CHEMICALS



+



X



+



X



X



+

+: May be stored together

continued...

# Hurst 103 All Purpose Blanket and Roller Wash

Hazard Alert Code: MODERATE

Chemwatch Material Safety Data Sheet  
Issue Date: 13-Jan-2012  
A317LP

CHEMWATCH 13358

Version No:2.0

Page 7 of 14

Section 7 - HANDLING AND STORAGE

O: May be stored together with specific preventions

X: Must not be stored together

## Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

### EXPOSURE CONTROLS

Source	Material	TWA ppm	TWA mg/m <sup>3</sup>	STEL ppm	STEL mg/m <sup>3</sup>	Peak ppm	Peak mg/m <sup>3</sup>	TWA F/CC	Notes
Australia Exposure Standards	naphtha petroleum, light aromatic solvent (Petrol (gasoline))		900						(see Chapter 16)

### MATERIAL DATA

HURST 103 ALL PURPOSE BLANKET AND ROLLER WASH:

REL TWA: 100 ppm

[Manufacturer]

NAPHTHA PETROLEUM, LIGHT AROMATIC SOLVENT:

■ Sensory irritants are chemicals that produce temporary and undesirable side-effects on the eyes, nose or throat. Historically occupational exposure standards for these irritants have been based on observation of workers' responses to various airborne concentrations. Present day expectations require that nearly every individual should be protected against even minor sensory irritation and exposure standards are established using uncertainty factors or safety factors of 5 to 10 or more. On occasion animal no-observable-effect-levels (NOEL) are used to determine these limits where human results are unavailable. An additional approach, typically used by the TLV committee (USA) in determining respiratory standards for this group of chemicals, has been to assign ceiling values (TLV C) to rapidly acting irritants and to assign short-term exposure limits (TLV STELs) when the weight of evidence from irritation, bioaccumulation and other endpoints combine to warrant such a limit. In contrast the MAK Commission (Germany) uses a five-category system based on intensive odour, local irritation, and elimination half-life. However this system is being replaced to be consistent with the European Union (EU) Scientific Committee for Occupational Exposure Limits (SCOEL); this is more closely allied to that of the USA.

OSHA (USA) concluded that exposure to sensory irritants can:

- cause inflammation
- cause increased susceptibility to other irritants and infectious agents
- lead to permanent injury or dysfunction
- permit greater absorption of hazardous substances and
- acclimate the worker to the irritant warning properties of these substances thus increasing the risk of overexposure.

Odour threshold: 0.25 ppm.

The TLV-TWA is protective against ocular and upper respiratory tract irritation and is recommended for bulk handling of gasoline based on calculations of hydrocarbon content of gasoline vapour. A STEL is recommended to prevent mucous membrane and ocular irritation and prevention of acute depression of the central nervous system. Because of the wide variation in molecular weights of its components, the conversion of ppm to mg/m<sup>3</sup> is approximate. Sweden recommends hexane type limits of 100 ppm and heptane and octane type limits of 300 ppm. Germany does not assign a value because of the widely differing compositions and resultant differences in toxic properties.

Odour Safety Factor (OSF)

OSF=0.042 (gasoline).

REL TWA: 25-100 ppm\*, 125 mg/m<sup>3</sup>\*

[Various Manufacturers]

continued...

# Hurst 103 All Purpose Blanket and Roller Wash

Hazard Alert Code: MODERATE

Chemwatch Material Safety Data Sheet  
Issue Date: 13-Jan-2012  
A317LP

CHEMWATCH 13358

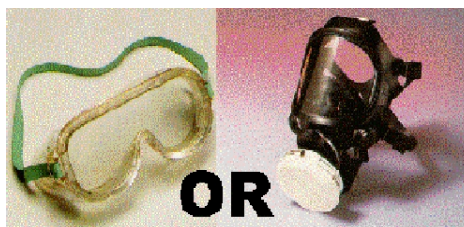
Version No:2.0

Page 8 of 14

## Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

CEL TWA: 50 ppm, 125 mg/m3

### PERSONAL PROTECTION



### EYE

- 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 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], [AS/NZS 1336 or national equivalent].

### HANDS/FEET

- Barrier cream with polyethylene gloves.
- Wear chemical protective gloves, eg. PVC.  
Wear safety footwear.
- DO NOT use this product to clean the skin.

### OTHER

- Overalls.
- Eyewash unit.

### RESPIRATOR

- Type A Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)
- Respiratory protection may be required when ANY "Worst Case" vapour-phase concentration is exceeded (see Computer Prediction in "Exposure Standards").

Required Minimum Protection Factor	Half- Face Respirator	Full- face Respirator
up to 10 x ES	A- - AUS / Class 1 A- - PAPR- AUS / Class 1	-
up to 20 x ES	-	A- - AUS / Class 1 A- - PAPR- AUS / Class 1
up to 100 x ES	-	A- - 2 A- - PAPR- 2

^ - Full-face

continued...



# Hurst 103 All Purpose Blanket and Roller Wash

Hazard Alert Code: MODERATE

Chemwatch Material Safety Data Sheet  
Issue Date: 13-Jan-2012  
A317LP

CHEMWATCH 13358

Version No:2.0

Page 9 of 14

## Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

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(SO<sub>2</sub>), G = Agricultural chemicals, K = Ammonia(NH<sub>3</sub>), Hg = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 degC).

The local concentration of material, quantity and conditions of use determine the type of personal protective equipment required. For further information consult site specific CHEMWATCH data (if available), or your Occupational Health and Safety Advisor.

### ENGINEERING CONTROLS

■ Use in a well-ventilated area or Local exhaust ventilation may be required for safe working, i.e. to keep exposures below required standards, otherwise PPE is required.

Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.

The basic types of engineering controls are:

Process controls which involve changing the way a job activity or process is done to reduce the risk.

Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment. Ventilation can remove or dilute an air contaminant if designed properly. The design of a ventilation system must match the particular process and chemical or contaminant in use.

Employers may need to use multiple types of controls to prevent employee overexposure.

General exhaust is adequate under normal operating conditions. If risk of overexposure exists, wear SAA approved respirator. Correct fit is essential to obtain adequate protection. Provide adequate ventilation in warehouse or closed storage areas.

## Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

### APPEARANCE

Water clear flammable liquid with mild petroleum odour; mixes with water.

### PHYSICAL PROPERTIES

Liquid.

Mixes with water.

State	Liquid	Molecular Weight	Not applicable
Melting Range (°C)	Not available	Boiling Range (°C)	151- 210
Solubility in water (g/L)	Miscible	Flash Point (°C)	45 (CC)
pH (1% solution)	Not applicable.	Decomposition Temp (°C)	Not available
pH (as supplied)	Not applicable	Autoignition Temp (°C)	Not available
Vapour Pressure (kPa)	0.8 @ 38C	Upper Explosive Limit (%)	6.0
Specific Gravity (water=1)	0.835	Lower Explosive Limit (%)	0.7
Relative Vapour Density (air=1)	4.1	Volatile Component (%vol)	100
Evaporation Rate	0.2 BuAc=1		

continued...

# Hurst 103 All Purpose Blanket and Roller Wash

Chemwatch Material Safety Data Sheet  
Issue Date: 13-Jan-2012  
A317LP

Hazard Alert Code: MODERATE

CHEMWATCH 13358

Version No:2.0

Page 10 of 14

## 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

##### SWALLOWED

■ Considered an unlikely route of entry in commercial/industrial environments. The liquid may produce gastrointestinal discomfort and may be harmful if swallowed. Ingestion may result in nausea, pain and vomiting. Vomiting entering the lungs by aspiration may cause potentially lethal chemical pneumonitis.

##### EYE

■ The liquid may produce eye discomfort and is capable of causing temporary impairment of vision and/or transient eye inflammation, ulceration.

The vapour is discomforting to the eyes if exposure is prolonged.

##### SKIN

■ The liquid may produce skin discomfort following prolonged contact. Defatting and/or drying of the skin may lead to dermatitis.

The material may accentuate any pre-existing skin condition.

Toxic effects may result from skin absorption.

##### INHALED

■ The vapour is discomforting to the upper respiratory tract and lungs.

Inhalation hazard is increased at higher temperatures.

Inhalation of vapour may result in nausea, headache.

Acute effects from inhalation of high vapour concentrations may be chest and nasal irritation with coughing, sneezing, headache and even nausea.

If exposure to highly concentrated solvent atmosphere is prolonged this may lead to narcosis, unconsciousness, even coma and possible death.

##### CHRONIC HEALTH EFFECTS

■ Principal routes of exposure are usually by inhalation of vapour and skin contact.

Prolonged or continuous skin contact with the liquid may cause defatting with drying, cracking, irritation and dermatitis following.

##### TOXICITY AND IRRITATION

HURST 103 ALL PURPOSE BLANKET AND ROLLER WASH:

■ Not available. Refer to individual constituents.

NAPHTHA PETROLEUM, LIGHT AROMATIC SOLVENT:

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

continued...

# Hurst 103 All Purpose Blanket and Roller Wash

Hazard Alert Code: MODERATE

Chemwatch Material Safety Data Sheet  
Issue Date: 13-Jan-2012  
A317LP

CHEMWATCH 13358

Version No:2.0

Page 11 of 14

## Section 11 - TOXICOLOGICAL INFORMATION

### TOXICITY

Oral (rat) LD50: >5000 mg/kg \*

Inhalation (rat) LC50: >3670 ppm/8 h \*

■ for petroleum:

This product contains benzene which is known to cause acute myeloid leukaemia and n-hexane which has been shown to metabolize to compounds which are neuropathic.

This product contains toluene. There are indications from animal studies that prolonged exposure to high concentrations of toluene may lead to hearing loss.

This product contains ethyl benzene and naphthalene from which there is evidence of tumours in rodents

Carcinogenicity: Inhalation exposure to mice causes liver tumours, which are not considered relevant to humans. Inhalation exposure to rats causes kidney tumours which are not considered relevant to humans.

Mutagenicity: There is a large database of mutagenicity studies on gasoline and gasoline blending streams, which use a wide variety of endpoints and give predominantly negative results. All in vivo studies in animals and recent studies in exposed humans (e.g. petrol service station attendants) have shown negative results in mutagenicity assays.

Reproductive Toxicity: Repeated exposure of pregnant rats to high concentrations of toluene (around or exceeding 1000 ppm) can cause developmental effects, such as lower birth weight and developmental neurotoxicity, on the foetus. However, in a two-generation reproductive study in rats exposed to gasoline vapour condensate, no adverse effects on the foetus were observed.

Human Effects: Prolonged/ repeated contact may cause defatting of the skin which can lead to dermatitis and may make the skin more susceptible to irritation and penetration by other materials.

Lifetime exposure of rodents to gasoline produces carcinogenicity although the relevance to humans has been questioned. Gasoline induces kidney cancer in male rats as a consequence of accumulation of the alpha2-microglobulin protein in hyaline droplets in the male (but not female) rat kidney. Such abnormal accumulation represents lysosomal overload and leads to chronic renal tubular cell degeneration, accumulation of cell debris, mineralisation of renal medullary tubules and necrosis. A sustained regenerative proliferation occurs in epithelial cells with subsequent neoplastic transformation with continued exposure. The alpha2-microglobulin is produced under the influence of hormonal controls in male rats but not in females and, more importantly, not in humans.

Inhalation (rat) TCLo: 1320 ppm/6h/90D-I

\* [Devoe]

### IRRITATION

Nil Reported

## Section 12 - ECOLOGICAL INFORMATION

### NAPHTHA PETROLEUM, LIGHT AROMATIC SOLVENT:

■ May cause long-term adverse effects in the aquatic environment.

For Petroleum Derivatives:

Environmental Fate: Chemical analysis for all individual compounds in a petroleum bulk product released to the environment is generally unrealistic due to the complexity of these mixtures and the laboratory expense.

This is further complicated by differences in behavior of the substances in water, and biological/non-biological processes.

Atmospheric Fate: Petroleum derivatives with high vapor pressures are expected to evaporate and become a vapor. The exact composition of these vapors depends on the composition of the original product. Compounds such as butane, propane, benzene, toluene, ethylbenzene and xylene are preferentially evaporated from gasoline.

Terrestrial Fate: Petroleum products migrate through soil as bulk flow or by the separation of individual compounds from the bulk flow. Bulk flow results in rapid soil infiltration. Factors affecting the rate of bulk oil infiltration include soil moisture content, vegetation, terrain, climate, rate of release, soil particle size, (e.g., sand versus clay), and oil viscosity, (e.g., gasoline versus motor oil). These substances can persist in soil for years, which can lead to contamination of groundwater. As the bulk product migrates through the soil column, individual compounds may separate from the mixture and migrate

continued...

# Hurst 103 All Purpose Blanket and Roller Wash

Hazard Alert Code: MODERATE

Chemwatch Material Safety Data Sheet  
Issue Date: 13-Jan-2012  
A317LP

CHEMWATCH 13358

Version No:2.0

Page 12 of 14

## Section 12 - ECOLOGICAL INFORMATION

independently. Light-fraction hydrocarbons tend to migrate readily through soil and heavier weight petroleum is generally more persistent in soil. The presence of oil should increase soil temperature, particularly at the surface.

**Aquatic Fate:** Almost all motor and heating oils are less dense than water. Solubility of these substances generally decreases with increasing molecular weight. Many compounds that are insoluble/immobile in water are soluble in bulk oil and will migrate along with the bulk oil flow.

**Biodegradation:** Microbes found in many natural settings have been shown to degrade organic compounds; however, low rates of breakdown are expected and are limited by environmental factors and chemical composition of the product released. The final products of microbial degradation are carbon dioxide, water, and microbial biomass. In almost all cases, the presence of oxygen is essential for effective biodegradation of oil.

Petroleum hydrocarbons in low oxygen environments have extremely low rates of degradation. The ideal pH range to promote biodegradation is close to neutral, (6-8). Soil moisture content will affect biodegradation of oils. Biodegradation rates in soils are also affected by the volume of product released to the environment.

All biological transformations are affected by temperature. Generally, as the temperature increases, biological activity tends to increase up to a temperature where enzyme denaturation occurs. The optimal temperature for biodegradation to occur ranges from 18 C to 30C.

**Ecotoxicity:** Large amounts of petroleum derivatives that enter the environment are expected to cause serious long-term damage. Each oil spill will have a different impact on wildlife and the surrounding environment, depending on type of substance released, location, species affected, weather, etc. These substances can coat the bodies of wildlife with a thick layer which inhibits their activities. Ingestion of these substances by wildlife will lead to movement up the food chain.

DO NOT discharge into sewer or waterways.

### Ecotoxicity

Ingredient	Persistence: Water/Soil	Persistence: Air	Bioaccumulation	Mobility
naphtha petroleum, light aromatic solvent	No Data Available	No Data Available		

## Section 13 - DISPOSAL CONSIDERATIONS

- Consult manufacturer for recycling options and recycle where possible .
- Consult State Land Waste Management Authority for disposal.
- Incinerate residue at an approved site.
- Recycle containers if possible, or dispose of in an authorised landfill.

## Section 14 - TRANSPORTATION INFORMATION



Labels Required: FLAMMABLE LIQUID

### HAZCHEM:

•3Y (ADG7)

continued...

# Hurst 103 All Purpose Blanket and Roller Wash

Hazard Alert Code: MODERATE

Chemwatch Material Safety Data Sheet  
Issue Date: 13-Jan-2012  
A317LP

CHEMWATCH 13358

Version No:2.0

Page 13 of 14

## Section 14 - TRANSPORTATION INFORMATION

### Land Transport UNDG:

Class or division:	3	Subsidiary risk:	None
UN No.:	1993	UN packing group:	III
Shipping Name:FLAMMABLE LIQUID, N.O.S. (contains liquid hydrocarbons)			

### Air Transport IATA:

ICAO/IATA Class:	3	ICAO/IATA Subrisk:	None
UN/ID Number:	1993	Packing Group:	III
Special provisions:	A3		

Shipping name:FLAMMABLE LIQUID, N.O.S.(contains liquid hydrocarbons)

### Maritime Transport IMDG:

IMDG Class:	3	IMDG Subrisk:	None
UN Number:	1993	Packing Group:	III
EMS Number:	F-E,S-E	Special provisions:	223 274 955
Limited Quantities:	5 L	Marine Pollutant:	Yes
Shipping name:FLAMMABLE LIQUID, N.O.S.(contains liquid hydrocarbons)			

## Section 15 - REGULATORY INFORMATION

### POISONS SCHEDULE

S5

### REGULATIONS

#### Regulations for ingredients

**naphtha petroleum, light aromatic solvent (CAS: 64742-95-6) is found on the following regulatory lists;**

"Australia Hazardous Substances", "Australia High Volume Industrial Chemical List (HVICL)", "Australia Inventory of Chemical Substances (AICS)", "International Council of Chemical Associations (ICCA) - High Production Volume List"

**No data for Hurst 103 All Purpose Blanket and Roller Wash (CW: 13358)**

## Section 16 - OTHER INFORMATION

### REPRODUCTIVE HEALTH GUIDELINES

■ Established occupational exposure limits frequently do not take into consideration reproductive end points that are clearly below the thresholds for other toxic effects. Occupational reproductive guidelines (ORGs) have been suggested as an additional standard. These have been established after a literature search for reproductive no-observed-adverse effect-level (NOAEL) and the lowest-observed-adverse-effect-level (LOAEL). In addition the US EPA's procedures for risk assessment for hazard identification and dose-response assessment as applied by NIOSH were used in the creation of such limits. Uncertainty factors (UFs) have also been incorporated.

Ingredient	ORG	UF	Endpoint	CR	Adeq	TLV
naphtha petroleum, light aromatic solvent	12 mg/m <sup>3</sup>	100	D	NA	-	

■ These exposure guidelines have been derived from a screening level of risk assessment and should not be construed as unequivocally safe limits. ORGS represent an 8-hour time-weighted average unless specified otherwise.

continued...

# Hurst 103 All Purpose Blanket and Roller Wash

Hazard Alert Code: MODERATE

Chemwatch Material Safety Data Sheet

Issue Date: 13-Jan-2012

A317LP

CHEMWATCH 13358

Version No:2.0

Page 14 of 14

Section 16 - OTHER INFORMATION

CR = Cancer Risk/10000; UF = Uncertainty factor:

TLV believed to be adequate to protect reproductive health:

LOD: Limit of detection

Toxic endpoints have also been identified as:

D = Developmental; R = Reproductive; TC = Transplacental carcinogen

Jankovic J., Drake F.: A Screening Method for Occupational Reproductive

American Industrial Hygiene Association Journal 57: 641-649 (1996).

## EXPOSURE STANDARD FOR MIXTURES

■ "Worst Case" computer-aided prediction of vapour components/concentrations:

■ Composite Exposure Standard for Mixture (TWA) (mg/m<sup>3</sup>): 125 mg/m<sup>3</sup>

■ If the breathing zone concentration of ANY of the components listed below is exceeded, "Worst Case" considerations deem the individual to be overexposed.

Component Breathing Zone ppm Breathing Zone mg/m<sup>3</sup> Mixture Conc: (%).

Component	Breathing zone (ppm)	Breathing zone (mg/m <sup>3</sup> )	Mixture Conc (%)
naphtha petroleum,	50.00	125.0000	60.0
light aromatic solvent			

■ 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](http://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.

*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: 13-Jan-2012

Print Date: 8-Feb-2012

*This is the end of the MSDS.*