ChemWatch Material Safety Data Sheet

Issue Date: Tue 23-Sep-2003

CHEMWATCH 66670 CD 2004/1 Page 1 of 11

Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME

BISSELL TOUGH STAIN PRE-CLEANER

SYNONYMS

Formerly Prostrength

Product Code: BS0400 / 0403

PRODUCT USE

Water based stain remover.

SUPPLIER

Company: Bissell Australia P/L

Address:

PO Box 131 Melrose Park SA, 5039 **AUSTRALIA**

Company: Bissell Australia P/L

Address:

Unit 8/938 South Road

Edwardstown SA, 5039 **AUSTRALIA**

Telephone: +61 8 8371 3888 Telephone: 1800 811 183 Fax: 08 8371 1210

Section 2 - HAZARDS IDENTIFICATION

STATEMENT OF HAZARDOUS NATURE

NON-HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS.

According to the Criteria of NOHSC, and the ADG Code.

POISONS SCHEDULE

None

RISK

SAFETY

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

NAME glycol ether, as ethylene glycol monobutyl ether surfactants

CAS RN

% 2.8 - 3.2

111-76-2

Not spe

continued...

ChemWatch Material Safety Data Sheet

Issue Date: Tue 23-Sep-2003

CHEMWATCH 66670 CD 2004/1 Page 2 of 11

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS ...

acrylate copolymer fragrance water

Not spe Not spe

7732-18-5

Not spe

Section 4 - FIRST AID MEASURES

SWALLOWED

· Immediately give a glass of water.

· First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

EYE

If this product comes in contact with eyes:

· Wash out immediately with water.

If irritation continues, seek medical attention.

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

SKIN

If skin or hair contact occurs:

· 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.
- · Other measures are usually unnecessary.

NOTES TO PHYSICIAN

Treat symptomatically.

Section 5 - FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA

Water spray or fog.

Foam.

Dry chemical powder.

BCF (where regulations permit).

Carbon dioxide.

FIRE FIGHTING

- · Alert Fire Brigade and tell them location and nature of hazard.
- · Wear full body protective clothing with breathing apparatus.

ChemWatch Material Safety Data Sheet

Issue Date: Tue 23-Sep-2003

CHEMWATCH 66670 CD 2004/1 Page 3 of 11

Section 5 - FIRE FIGHTING MEASURES ...

- · Prevent, by any means available, spillage from entering drains or water
- · 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.

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 irritating/ toxic fumes.
- · May emit acrid smoke.
- · Mists containing combustible materials may be explosive.

FIRE INCOMPATIBILITY

None known.

HAZCHEM

None

Personal Protective Equipment

Glasses:

Chemical goggles.

Gloves:

When handling larger quantities:

General purpose rubber glove.

Respirator:

Type A Filter of sufficient capacity

Section 6 - ACCIDENTAL RELEASE MEASURES

EMERGENCY PROCEDURES

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 spill with sand, earth, inert material or vermiculite.
- · Wipe up.
- · Place in a suitable labelled container for waste disposal.

ChemWatch Material Safety Data Sheet

Issue Date: Tue 23-Sep-2003

CHEMWATCH 66670 CD 2004/1 Page 4 of 11

Section 6 - ACCIDENTAL RELEASE MEASURES ...

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.
- No smoking, naked lights or ignition sources.
- · Increase ventilation.
- · Stop leak if safe to do so.
- · Contain spill with sand, earth or vermiculite.
- · 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.

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 exposure 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 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.

STORAGE INCOMPATIBILITY

Avoid reaction with oxidising agents

ChemWatch Material Safety Data Sheet

Issue Date: Tue 23-Sep-2003

CHEMWATCH 66670 CD 2004/1 Page 5 of 11

Section 7 - HANDLING AND STORAGE ...

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.
- · Store away from incompatible materials and foodstuff containers.
- Protect containers against physical damage and check regularly for leaks.
- · Observe manufacturer's storing and handling recommendations.

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE CONTROLS

No data for Bissell Tough Stain Pre-Cleaner.

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.

Ingredient

ORG

UF

Endpoint

CR NA TLV Adea

ethylene glycol mono

3.6 mg/m³

100

D

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.

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)

INGREDIENT DATA

ETHYLENE GLYCOL MONOBUTYL ETHER:

TLV TWA: 20 ppm A3 [ACGIH]

PEL TWA: 50 ppm, 240 mg/m³ (SKIN) [OSHA Z1]

TLV TWA: 20 ppm A3

CAUTION: This substance has been classified by the ACGIH as A3 Animal Carcinogen

(at relatively high doses)

ES TWA: 25 ppm, 121 mg/m³

Under review

OES TWA: 25 ppm, 123 mg/m3

(skin) (skin)

Exposure limits with "skin" notation indicate that vapour and liquid may be absorbed through intact skin. Absorption by skin may readily exceed vapour

ChemWatch Material Safety Data Sheet Issue Date: Tue 23-Sep-2003

CHEMWATCH 66670 CD 2004/1 Page 6 of 11

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION ...

inhalation exposure. Symptoms for skin absorption are the same as for inhalation. Contact with eyes and mucous membranes may also contribute to overall exposure and may also invalidate the exposure standard.

MAK value: 20 ppm, 98 mg/m³

Designated H in List of MAK values: Danger of cutaneous absorption.

Absorption of such substances through the skin can pose an incomparably larger danger of toxicity than their inhalation. To avoid health risks when handling such substances, meticulous cleaning of the skin, hair and clothing is imperative.

MAK Category II Peak Limitation: For substances with systemic effects and with a half-life in humans of less than two hours.

Allows excursions of 2 times the MAK value, for 30 minutes (on average), four times per shift.

MAK Group C: There is no reason to fear risk of damage to the developing embryo when MAK and BAT values are observed.

MAK values, and categories and groups are those recommended within the Federal Republic of Germany

Odour Threshold Value: 0.10 ppm (detection), 0.35 ppm (recognition)

IDLH Level: 700 ppm

Although rats appear to be more susceptible than other animals anaemia is not uncommon amongst humans following exposure. The TLV reflects the need to maintain exposures below levels found to cause blood changes in experimental animals. It is concluded that this limit will reduce the significant risk of irritation, haematologic effects and other systemic effects observed in humans and animals exposed to higher vapour concentrations. The toxic effects typical of some other glycol ethers (pancytopenia, testis atrophy and teratogenic effects) are not found with this substance.

WATER:

No exposure limits set by NOHSC or ACGIH

PERSONAL PROTECTION

EYE

- Safety glasses with side shields
- · Chemical goggles.
- · Contact lenses pose a special hazard; soft lenses may absorb irritants and all lenses concentrate them.

HANDS/FEET

Wear general protective gloves, eg. light weight rubber gloves.

OTHER

No special equipment needed when handling small quantities. OTHERWISE:

- · Overalls.
- Barrier cream.
- · Eyewash unit.

ChemWatch Material Safety Data Sheet

Issue Date: Tue 23-Sep-2003

CHEMWATCH 66670 CD 2004/1 Page 7 of 11

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION ...

RESPIRATOR

Selection of the Class and Type of respirator will depend upon the level of breathing zone contaminant and the chemical nature of the contaminant. Protection Factors (defined as the ratio of contaminant outside and inside the mask) may also be important.

Breathing Zone Level ppm (volume) 1000	Maximum Protection Factor 10	Half-face Respirator A-AUS -	Full-Face Respirator
1000	50	-	A-AUS
5000	50	Airline *	-
5000	100	-	A-2
10000	100	-	A-3
	100+		Airline**

^{* -} Continuous Flow ** - Continuous-flow or positive pressure demand

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

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

Pale yellow, clear liquid with a fresh, citrus odour; mixes with water.

PHYSICAL PROPERTIES

Liquid.

Mixes with water.

Molecular Weight: Not Applicable Melting Range (°C): Not Available Solubility in water (q/L): Miscible pH (1% solution): Not Available

Volatile Component (%vol): Not Available

Relative Vapour Density (air=1): 1

Lower Explosive Limit (%): Not Applicable Autoignition Temp (°C): Not Applicable

State: Liquid

Evaporation Rate: Not Available Flash Point (°C): >100 Upper Explosive Limit (%): Not Applicable Decomposition Temp (°C): Not Available

Vapour Pressure (kPa): Not Available

Boiling Range (°C): 100

pH (as supplied): 8.2-8.8

Specific Gravity (water=1): 1.015

log Kow (Prager 1995): 0.83

ChemWatch Material Safety Data Sheet Issue Date: Tue 23-Sep-2003

CHEMWATCH 66670 CD 2004/1 Page 8 of 11

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES ...

log Kow (Sangster 1997): 0.8 log Kow: 0.76-0.83

Section 10 - CHEMICAL STABILITY AND REACTIVITY INFORMATION

CONDITIONS CONTRIBUTING TO INSTABILITY

- · Presence of incompatible materials.
- · Product is considered stable.
- · Hazardous polymerisation will not occur.

Section 11 - TOXICOLOGICAL INFORMATION

POTENTIAL HEALTH EFFECTS

ACUTE HEALTH EFFECTS

SWALLOWED

The material has NOT been classified by EC Directives or other classification systems as "harmful by ingestion". This is because of the lack of corroborating animal or human evidence. The material may still be damaging to the health of the individual, following ingestion, especially where pre-existing organ (e.g liver, kidney) damage is evident. Present definitions of harmful or toxic substances are generally based on doses producing mortality rather than those producing morbidity (disease, ill-health). Gastrointestinal tract discomfort may produce nausea and vomiting. In an occupational setting however, ingestion of insignificant quantities is not thought to be cause for concern.

EYE

Although the liquid is not thought to be an irritant (as classified by EC Directives), direct contact with the eye may produce transient discomfort characterised by tearing or conjunctival redness (as with windburn).

SKIN

The material is not thought to produce adverse health effects or skin irritation following contact (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable gloves be used in an occupational setting.

INHALED

The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting.

ChemWatch Material Safety Data Sheet

Issue Date: Tue 23-Sep-2003

CHEMWATCH 66670 CD 2004/1 Page 9 of 11

Section 11 - TOXICOLOGICAL INFORMATION ...

CHRONIC HEALTH EFFECTS

Long-term exposure to the product is not thought to produce chronic effects adverse to health (as classified by EC Directives using animal models); nevertheless exposure by all routes should be minimised as a matter of course.

Bissell Tough Stain Pre-Cleaner

No data for Bissell Tough Stain Pre-Cleaner.

ETHYLENE GLYCOL MONOBUTYL ETHER:

TOXICITY

Oral (rat) LD50: 470 mg/kg

Dermal (rabbit) LD50: 220 mg/kg Inhalation (human) TCLo: 100 ppm

Inhalation (human) TCLo: 195 ppm/8h

Inhalation (rat-male) LC50: 486 ppm *

Inhalation (rat-female) LC50: 460 ppm *

NOTE: Changes in kidney, liver, spleen a

IRRITATION

Skin (rabbit): 500 mg, open; mild

Eye (rabbit): 100 mg/24h-moderateSkin (rabbit): 500 mg, open; mild

Eye (rabbit): 100 mg SEVEREEye (rabbit): 100 mg/24h-moderateSkin (rabbit): 500 mg, open; mild

* [Union Carbide]Eye (rabbit): 100 mg SEVEREEye (rabbit): 100 mg/24h-moderateSkin (rabbit): 500 mg, open; mild

TE: Changes in kidney, liver, spleen and lungs are observed in animals* [Union Carbide]Eye (rabbit): 100 mg SEVEREEye

exposed to high concentrations of this substance by all routes.

WATER:

No significant acute toxicological data identified in literature search.

Section 12 - ECOLOGICAL INFORMATION

No data for Bissell Tough Stain Pre-Cleaner. Refer to data for ingredients, which follows:

ETHYLENE GLYCOL MONOBUTYL ETHER:

Hazardous Air Pollutant: No

Fish LC50 (96hr.) (mg/l): 1490

BCF<100: 0.4

log Kow (Prager 1995): 0.83

log Kow (Sangster 1997): 0.8

Half-life Soil - High (hours): 672

Half-life Soil - Low (hours): 168

Half-life Air - High (hours): 32.8

Half-life Air - Low (hours): 3.28

Half-life Surface water - High (hours): 672

Half-life Surface water - Low (hours): 168

Half-life Ground water - High (hours): 1344

Half-life Ground water - Low (hours): 336

Aqueous biodegradation - Aerobic - High (hours): 672

Aqueous biodegradation - Aerobic - Low (hours): 168

Aqueous biodegradation - Anaerobic - High (hours): 2688

ChemWatch Material Safety Data Sheet

Issue Date: Tue 23-Sep-2003

CHEMWATCH 66670 CD 2004/1 Page 10 of 11

Section 12 - ECOLOGICAL INFORMATION ...

Aqueous biodegradation - Anaerobic - Low (hours): 672

Photooxidation half-life air - High (hours): 32.8 Photooxidation half-life air - Low (hours): 3.28

Hazardous Air Pollutant: No Fish LC50 (96hr.) (mg/l): 1250-1650

Daphnia magna EC50 (48hr.) (mg/l): 600-1000

log Kow: 0.76-0.83

Koc: 67

Half-life (hr) air: 17

Henry's atm m3 /mol: 2.08E-08

BOD 5 if unstated: 0.71

COD: 2.2 Log BCF: 0.4 Fish toxicity:

(-) 24h LD50: 983-1650 mg/L

(Fathead minnow) 96h LC50: 1700 mg/L **

Invertebrate toxicity:

cell mult. inhib.91-900mg/L

(Daphnia) 48h LC50: >1000 mg/L **

Bioaccumulation: not sig

Effects on algae and plankton: cell mult. inhib.35-900mg/L

Degradation Biological: rapid

processes Abiotic: no hydrol&photol,RxnOH*

** [Union Carbide]

WATER:

No data for water.

Section 13 - DISPOSAL CONSIDERATIONS

- Recycle wherever possible or consult manufacturer for recycling options.
- · Consult State Land Waste Management Authority for disposal.
- · Bury residue in an authorised landfill.
- · Recycle containers if possible, or dispose of in an authorised landfill.

Section 14 - TRANSPORTATION INFORMATION

Shipping Name:

None

Hazard Class: None UN/NA Number: None

ADR Number:

Packing Group: None Labels Required:

Additional Shipping Information: International Transport Regulations:

IMO: None

ChemWatch Material Safety Data Sheet Issue Date: Tue 23-Sep-2003

CHEMWATCH 66670 CD 2004/1 Page 11 of 11

Section 14 - TRANSPORTATION INFORMATION ...

HAZCHEM

None

Section 15 - REGULATORY INFORMATION

POISONS SCHEDULE

None

Section 16 - OTHER INFORMATION

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: Tue 23-Sep-2003 Print Date: Wed 10-Mar-2004