1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name
PUR CLEANER

Company Name
H.B. FULLER COMPANY (ABN 003 638 435)

Address
16-22 Red Gum Drive Dandenong South
Victoria 3175 Australia

Emergency Tel.
AUS: 1800 033111 (or IDD +61 3 9663 2130), NZ: 0800 734 607 (Or IDD +64 473 4607)

Telephone/Fax Number
Tel: Customer Service Toll Free Numbers: Australia 1800 423 855; New Zealand: 0800 555 072

Recommended Use
PUR Cleaner is developed for the cleaning of polyurethane hot melt glue pots and application equipments before final cross linkage

Other Information
This MSDS summarises at the date of issue our best knowledge of the health and safety hazard information of the product, and in particular, how to safely handle and use the product in the workplace. Since H.B. Fuller Company Australia Pty Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, review this MSDS in the context of how the user intends to handle and use the product in the workplace. If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this company. Our responsibility for the products sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available on request.

2. HAZARD IDENTIFICATION

Hazard Classification
Australia:
Not classified as Hazardous according to criteria of National Occupational Health & Safety Commission, Australia (NOHSC).
Classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)

New Zealand:
Classified as Hazardous according to the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001, New Zealand.

HSNO Classification:
9.1B - Substance that is ecotoxic in the aquatic environment

Hazard statement codes:
H411  Toxic to aquatic life with long lasting effects.

Precautionary statement codes - Prevention:
P103  Read label before use.
P273  Avoid release to the environment.

Precautionary statement codes - Response:
P391  Collect spillage.

Precautionary statement codes - Disposal:
P501  In the case of a substance that is in compliance with a HSNO approval other than a Part 6A (Group Standards) approval, a label must provide a description of one or more appropriate and achievable methods for the disposal of a substance in accordance with the Hazardous Substances (Disposal) Regulations 2001. This may also include any method of disposal that must be avoided. See Section 13 for disposal details.

Risk Phrase(s)
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety Phrase(s)
S61 Avoid release to the environment. Refer to special instructions/safety data sheet.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dipropylene glycol dibenzoate</td>
<td>27138-31-4</td>
<td>80-100 %</td>
</tr>
<tr>
<td>Ingredients determined not to be hazardous</td>
<td></td>
<td>Balance</td>
</tr>
</tbody>
</table>

4. FIRST-AID MEASURES

Inhalation
If inhaled, remove affected person from contaminated area. Keep at rest until recovered. If symptoms persist seek medical attention.
Ingestion
Do not induce vomiting. Wash out mouth thoroughly with water. Seek medical attention.

Skin
Wash affected area thoroughly with soap and water. If symptoms develop seek medical attention.

Eye
If in eyes, hold eyelids apart and flush the eyes continuously with running water. Continue flushing for several minutes until all contaminants are washed out completely. If symptoms develop and persist seek medical attention.

First Aid Facilities
Eyewash and normal washroom facilities.

Advice to Doctor
Treat symptomatically.

Other Information
For advice in an emergency, contact a Poisons Information Centre or a doctor at once. (Australia: 131 126, New Zealand: 0800 764 766)

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media
Use carbon dioxide, dry chemical, foam, water mist or water spray.

Hazards from Combustion Products
Under fire conditions this product may emit toxic and/or irritating fumes, smoke and gases including carbon monoxide, carbon dioxide, aldehydes, oxides of nitrogen and incomplete products of combustion.

Specific Hazards
This product will burn if exposed to fire.

Hazchem Code
•3Z

Decomposition Temperature
>270°C

Precautions in connection with Fire
Fire fighters should wear Self-Contained Breathing Apparatus (SCBA) and full protective clothing to prevent exposure to vapours or products of combustion. Water spray may be used to cool down heat-exposed material. If safe to do so, remove containers from path of fire. Do not allow run-off from fire fighting to enter drains or water courses.

Unsuitable Extinguishing Media
High volume water jet
6. ACCIDENTAL RELEASE MEASURES

Emergency Procedures
Wear appropriate personal protective equipment and clothing to prevent exposure. Extinguish or remove all sources of ignition and stop leak if safe to do so. Increase ventilation. Evacuate all unprotected personnel. If possible contain the spill. Place inert absorbent, non-combustible material onto spillage. Use clean tools to collect the material and place into suitable labelled containers for subsequent recycling or disposal. Dispose of waste according to the applicable local and national regulations. If contamination of sewers or waterways occurs inform the local water and waste management authorities in accordance with local regulations.

7. HANDLING AND STORAGE

Precautions for Safe Handling
Avoid inhalation of vapours and mists, and skin or eye contact. Use only in a well ventilated area. Keep containers sealed when not in use. Prevent the build up of mists or vapours in the work atmosphere. Do not use near ignition sources. Do not pressurise, cut, heat or weld containers as they may contain hazardous residues. Maintain high standards of personal hygiene by washing hands prior to eating, drinking, smoking or using toilet facilities.

Conditions for Safe Storage
Store in a cool, dry, well-ventilated area away from sources of ignition, oxidising agents, strong acids, foodstuffs, and clothing. Protect from humidity and water. Keep containers closed when not in use, securely sealed and protected against physical damage. Inspect regularly for deficiencies such as damage or leaks. Have appropriate fire extinguishers available in and near the storage area. Take precautions against static electricity discharges. Use proper grounding procedures. Ensure that storage conditions comply with applicable local and national regulations. For information on the design of the storeroom, reference should be made to Australian Standard AS1940 - The storage and handling of flammable and combustible liquids. Reference should also be made to all applicable state and federal regulations.

Storage Regulations
Classified as a Class C2 (COMBUSTIBLE LIQUID) for the purpose of storage and handling, in accordance with the requirements of AS1940.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

National Exposure Standards
No exposure standards have been established for the mixture. However, over-exposure to some chemicals may result in enhancement of pre-existing adverse medical conditions and/or allergic reactions and should be kept to the least possible levels.

Biological Limit Values
No biological limits allocated.

Engineering Controls
Provide sufficient ventilation to keep airborne levels below the exposure limits or as low as possible. Where vapours or fumes are generated, particularly in enclosed areas, and natural ventilation is inadequate, a flameproof exhaust ventilation system is required. Refer to relevant regulations for further information concerning ventilation requirements.
Respiratory Protection
If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable organic vapour filter should be used. Reference should be made to Australian/New Zealand Standards AS/NZS 1715, Selection, Use and Maintenance of Respiratory Protective Devices; and AS/NZS 1716, Respiratory Protective Devices, in order to make any necessary changes for individual circumstances.

Eye Protection
Safety glasses with side shields or chemical goggles should be worn. Final choice of appropriate eye/face protection will vary according to individual circumstances. Eye protection devices should conform with Australian/New Zealand Standard AS/NZS 1337 - Eye Protectors for Industrial Applications.

Hand Protection
Wear gloves of impervious material such as laminated film, neoprene, nitrile or butyl rubber. Final choice of appropriate gloves will vary according to individual circumstances i.e. methods of handling or according to risk assessments undertaken. Reference should be made to AS/NZS 2161.1: Occupational protective gloves - Selection, use and maintenance.

Body Protection
Suitable protective workwear, e.g. cotton overalls buttoned at neck and wrist. When large quantities are handled the use of plastic aprons and rubber boots is recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance**
Clear, colourless liquid

**Odour**
Mild ester like odour

**Decomposition Temperature**
>270°C

**Melting Point**
Not available

**Boiling Point**
>270°C (Decomposes without boiling)

**Solubility in Water**
8.96mg/l

**Specific Gravity**
1.120

**pH Value**
Not available

**Vapour Pressure**
0.00000012 mmHg at 25°C
Vapour Density (Air=1)
11.8

Evaporation Rate
<1 (n-butyl acetate=1)

Odour Threshold
Not available

Viscosity
110 cP at 25°C (approximate)

Colour
Colourless

Volatile Component
Not available

Octanol/Water Partition Coefficient
3.9

Flash Point
192°C (Closed Cup)

Flammability
Not flammable

Auto-Ignition Temperature
>400°C

Flammable Limits - Lower
Not available

Flammable Limits - Upper
Not available

10. STABILITY AND REACTIVITY

Chemical Stability
Stable under normal conditions of storage and handling.

Conditions to Avoid
Heat, open flames and other sources of ignition.

Incompatible materials
Strong oxidising agents, acids and bases.

Hazardous Decomposition Products
Thermal decomposition may result in the release of toxic and/or irritating fumes including carbon monoxide, carbon dioxide and aldehydes
Hazardous Polymerization
Will not occur.

11. TOXICOLOGICAL INFORMATION

Toxicology Information
Toxicity data is given below

Inhalation
Inhalation of product vapours may cause irritation of the nose, throat and the upper respiratory tract.

Ingestion
Ingestion of this product may irritate the gastric tract causing nausea and vomiting. Ingestion of large quantities may depress the central nervous system.

Skin
May be irritating to skin. The symptoms may include redness, itching and swelling.

Eye
May be irritating to eyes. The symptoms may include redness, itching and tearing.

Chronic Effects
Not available

Acute Toxicity - Oral
LD50 (rat): 5,313 mg/kg

Acute Toxicity - Dermal
LD50 (rat): >2,000 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity
Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Persistence / Degradability
Not available

Mobility
Not available

Bioaccumulative Potential
Not available

Environmental Protection
Do not discharge this material into waterways, drains and sewers.

13. DISPOSAL CONSIDERATIONS

Disposal considerations
Australia:
Dispose of waste according to applicable local and national regulations. Do not allow into drains or watercourses or dispose of where ground or surface waters may be affected. Wastes including emptied containers are controlled wastes and should be disposed of in accordance with all applicable local and national regulations.

New Zealand:
Product Disposal:
Product wastes are controlled wastes and should be disposed of in accordance with all applicable local and national regulations. This product can be disposed through a licensed commercial waste collection service. In this specific case the product is a combustible substance and therefore can be sent to an approved high temperature incineration plant for disposal.
Personal protective clothing and equipment as specified in Section 8 of this SDS must be worn during handling and disposal of this product. The ventilation requirements as specified in the same section must also be followed, and the precautions given in Section 7 of this SDS regarding handling must also be followed.

Do not dispose into the sewerage system. Do not discharge into drains or watercourses or dispose where ground or surface waters may be affected.
In New Zealand, the disposal agency or contractor must comply with the New Zealand Hazardous Substances (Disposal) Regulations 2001. Further details regarding disposal can be obtained on the EPA New Zealand website under specific group standards.
Container Disposal:
The container or packaging can be disposed of in a manner consistent with that of the substance it contained. In this instance the packaging can be disposed through a commercial waste collection service. Alternatively, the container or packaging can be recycled if the hazardous residues have been thoroughly cleaned or rendered non-hazardous.
In New Zealand, the packaging (that may or may not hold any residual substance) that is lawfully disposed of by householders or other consumers through a public or commercial waste collection service is a means of compliance with regulations.

14. TRANSPORT INFORMATION

Transport Information

Road and Rail Transport:
Australia:
This material is classified as Dangerous Goods Class 9 Miscellaneous Dangerous Goods
Class 9: Miscellaneous substances Dangerous Goods are incompatible in a placard load with any of the following:
Class 1: Explosives (when the class 9 substance is a fire risk substance) Division 5.1: Oxidising substances (when the class 9 substance is a fire risk substance) and
Division 5.2: Organic peroxides (when the class 9 substance is a fire risk substance)
Note: Special Provision AU01:
Environmentally Hazardous Substances meeting the descriptions of UN 3077 or UN 3082 are not subject to this Code when transported by road or rail in:
packagings that do not incorporate a receptacle exceeding 500 kg(L); or
IBCs

New Zealand:
This material is classified as a Class 9 – Miscellaneous Substances
Must not be loaded in the same freight container or on the same vehicle with:
- Class 1, Explosives

Class 9 dangerous goods that contain organic matter must not be loaded in the same bulk container or tankwagon with dangerous goods of Division 5.1 unless the Class 9 and Division 5.1 dangerous goods are in separate compartments of a bulk container or tankwagon.

Goods of packing group II or III may be loaded in the same freight container or on the same vehicle if transported in segregation devices. Segregation devices may be used to segregate Dangerous goods of Class 9 when the nature of those dangerous goods requires them to be segregated from dangerous goods of Class 3, 4, 5, 6 or 8 or from food items.

Marine Transport (IMO/IMDG):
Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

UN No.: 3082
Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N. O. S. (Contains DIPROPYLENE GLYCOL DIBENZOATE) MARINE POLLUTANT
DG Class: 9
Packaging Group: III
EMS No.: F-A, S-F
Special provisions: 274, 335

Air Transport (ICAO/IATA):
Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

UN No: 3082
Proper Shipping Name: Environmentally hazardous substance, liquid, n.o.s. (Contains DIPROPYLENE GLYCOL DIBENZOATE)
Class: 9
Packaging Group: III
Label: Miscellaneous
Packing Instruction: 964 (For passenger and cargo aircraft)
Packing Instruction: 964 (For cargo aircraft only)
Special provisions: A97, A158, A197

U.N. Number
3082

Proper Shipping Name
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(Contains DIPROPYLENE GLYCOL DIBENZOATE)

DG Class
9

Packing Group
III

Hazchem Code
•3Z

EPG Number
9C1
15. REGULATORY INFORMATION

Regulatory information
Australia:
Not classified as Hazardous according to criteria of National Occupational Health & Safety Commission (NOHSC), Australia.
Not classified as a Scheduled Poison according to the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).

Poisons Schedule
Not Scheduled

National and or International Regulatory Information
New Zealand:
Classified as Hazardous according to the New Zealand Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001.

HSNO Approval Number
HSR002503

Hazard Category
Dangerous for the environment

Australia (AICS)
The listed chemicals are included in Australian Inventory of Chemical Substances (AICS) or otherwise notified under NICNAS.

16. OTHER INFORMATION

Date of preparation or last revision of MSDS
SDS reviewed: February 2015
Supersedes: October 2009

Contact Person/Point
For advice in an emergency contact:
Australia: 1800 033 111 (or IDD +61 3 9663 2130).
New Zealand: 0800 734 607 (or IDD +64 4 473 4607)

References
Australia:
Standard for the Uniform Scheduling of Medicines and Poisons.
Approved criteria for classifying hazardous substances [NOHSC:1008(2004)].
Australian Code for the Transport of Dangerous Goods by Road & Rail.
Model Work Health and Safety Regulations, Schedule 10: Prohibited carcinogens, restricted carcinogens and restricted hazardous chemicals.
Workplace exposure standards for airborne contaminants, Safe work Australia.
American Conference of Industrial Hygienists (ACGIH)

New Zealand:
Workplace Exposure Standards and Biological Exposure Indices.
Transport of Dangerous goods on land NZS 5433.
Preparation of Safety Data Sheets - Approved Code of Practice Under the HSNO Act 1996 (HSNO CoP 8-1 09-06).
Assigning a hazardous substance to a group standard.
American Conference of Industrial Hygienists (ACGIH).

END OF SDS