

SAFETY DATA SHEET

FULAFLEX 550 PU SEALANT LM

Infosafe No.: LQ4KE
ISSUED Date: 02/07/2015
ISSUED BY H.B. FULLER COMPANY

1. IDENTIFICATION

GHS Product Identifier

FULAFLEX 550 PU SEALANT LM

Company Name

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

Address

16-22 Red Gum Drive Dandenong South
Victoria 3175 Australia

Telephone/Fax Number

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

Emergency phone number

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

Recommended use of the chemical and restrictions on use

One part PU construction sealant

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

GHS classification of the substance/mixture

Classified as Hazardous according to the Globally Harmonised System of Classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia

Not classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)

Eye damage/irritation 2A

Sensitization - Respiratory category 1

Skin corrosion/irritation category 2

STOT repeated exposure category 2

Hazardous to the aquatic environment - long term hazard category 3

Signal Word (s)

DANGER

Hazard Statement (s)

H315 Causes skin irritation.

H319 Causes serious eye irritation.
 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
 H373 May cause damage to organs through prolonged or repeated exposure.
 H412 Harmful to aquatic life with long lasting effects.

Pictogram (s)

Exclamation mark, Health hazard



Precautionary statement – Prevention

P260 Do not breathe dust/fume/gas/mist/vapours/spray.
 P264 Wash contaminated skin thoroughly after handling
 P273 Avoid release to the environment.
 P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P285 In case of inadequate ventilation wear respiratory protection.

Precautionary statement – Response

P314 Get medical advice/attention if you feel unwell.
 P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
 P304+P341 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P337+P313 If eye irritation persists: Get medical advice/attention.
 P302+P352 IF ON SKIN: Wash with plenty of soap and water.
 P332+P313 If skin irritation occurs: Get medical advice/ attention.
 P362 Take off contaminated clothing and wash before re-use.

Precautionary statement – Disposal

P501 Dispose of contents/container to an approved waste disposal plant.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Name	CAS	Proportion
Aromatic hydrocarbons, C8 (benzene <0.01%)	90989-38-1	0-<10 %
Reactive mixture of ethylbenzene, m-xylene and p-xylene		0-<10 %
Xylene	1330-20-7	0-<10 %
Ethyl acetate	141-78-6	0-<5 %
Diphenylmethane diisocyanate	9016-87-9	0-<1 %
Tri-(Nonyl-Phenyl) phosphite	26523-78-4	0-<1 %
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	0-<1 %
Non-hazardous ingredients	-	Balance

4. FIRST-AID MEASURES

Inhalation

If inhaled, remove affected person from contaminated area. Apply artificial respiration if not breathing. Seek medical attention.

Ingestion

Do not induce vomiting. Wash out mouth thoroughly with water. Seek immediate medical attention.

Skin

Remove all contaminated clothing immediately. Wash affected area thoroughly with soap and water. Wash contaminated clothing before reuse or discard. Seek medical attention.

Eye contact

If in eyes, hold eyelids apart and flush the eyes continuously with running water. Remove contact lenses. Continue flushing for several minutes until all contaminants are washed out completely. Seek medical attention.

First Aid Facilities

Eyewash, safety shower 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. (131 126)

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use carbon dioxide, dry chemical or foam.

Unsuitable Extinguishing Media

Water jet

Hazards from Combustion Products

Under fire conditions this product may emit toxic and/or irritating fumes, smoke and gases including: carbon monoxide, carbon dioxide, isocyanates, hydrogen cyanide and oxides of nitrogen.

Special Protective Equipment for fire fighters

Precautions for Fire fighters and Special Protective Equipment:

Fire fighters to wear self-contained breathing apparatus and protective clothing. Do not breathe smoke from burning product. Do not discharge extinguishing waters into streams, rivers and lakes.

Specific Hazards Arising From The Chemical

This product will burn if exposed to fire.

Decomposition Temperature

Not available

Precautions in connection with Fire

Fire fighters should wear Self-Contained Breathing Apparatus (SCBA) operated in positive pressure mode and full protective clothing to prevent exposure to vapours or fumes. Water spray may be used to cool down heat-exposed containers. Fight fire from safe location. This product should be prevented from entering drains and watercourses.

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 non-sparking 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, including any incompatibilities

Store in a cool, dry, well-ventilated area away from sources of ignition, oxidising agents, strong acids, foodstuffs, and clothing. 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.

Storage Regulations

Classified as a Class 2 (COMBUSTIBLE LIQUID) for the purpose of storage and handling, in accordance with the requirements of AS1940.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limit values

No exposure standards have been established for this material. However, the available exposure limits for ingredients are listed below:

Xylene

TWA 80ppm, 350mg/m³

STEL 150ppm, 655mg/m³

Ethyl acetate

TWA 200ppm, 720mg/m³

STEL 400ppm, 1440mg/m³

Isocyanates (as NCO)

TWA : 0.02 mg/m³

STEL : 0.07 mg/m³

NOTICES Sen

TWA (Time Weighted Average): The average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day week.

STEL (Short Term Exposure Limit): The average airborne concentration over a 15 minute period which should not be exceeded at any time during a normal eight-hour workday.

'Sen' Notice: The substance may cause sensitisation by skin contact or by inhalation

Biological Limit Values

Name: Xylene

Determinant: Methylhippuric acids in urine

Value: 1.5 g/g creatinine

Sampling time: end of shift.

Source: American Conference of Industrial Hygienists (ACGIH)

Appropriate Engineering Controls

This substance is hazardous and should be used with a local exhaust ventilation system, drawing vapours away from workers' breathing zone. A flame-proof exhaust ventilation system is required. If the engineering controls are not sufficient to maintain concentrations of vapours/mists below the exposure standards, suitable respiratory protection must be worn. 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 mist/dust filter should be used. Refer to relevant regulations for further information concerning respiratory protective requirements.

Reference should be made to Australian 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, chemical goggles or full-face shield as appropriate should be used. Final choice of appropriate eye/face protection will vary according to individual circumstances. Eye protection devices should conform to relevant regulations. Eye protection should conform with Australian/New Zealand Standard AS/NZS 1337 - Eye Protectors for Industrial Applications.

Hand Protection

Wear gloves of impervious material. For short term or splash protection butyl or nitrile rubber is recommended (0.4mm thickness, permeation time <30 minutes) and for long term Viton is recommended. (0.4mm thickness, permeation time >30 minutes). Final choice of appropriate gloves will vary according to individual circumstances i.e. methods of handling or according to risk assessments undertaken. Occupational protective gloves should conform to relevant regulations. 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 is recommended. Chemical resistant apron is recommended where large quantities are handled.

9. PHYSICAL AND CHEMICAL PROPERTIES

Properties	Description	Properties	Description
Form	Paste	Appearance	Paste
Colour	Various	Odour	Characteristic
Decomposition Temperature	Not available	Melting Point	Not available
Boiling Point	Not available	Solubility in Water	Insoluble
pH	Not applicable	Vapour Pressure	Not available
Vapour Density (Air=1)	Not available	Evaporation Rate	Not available
Odour Threshold	Not available	Viscosity	70,000-130,000 cps
Partition Coefficient: n-octanol/water	Not available	Density	1.33 kg/l
Flash Point	>200°C	Flammability	Not flammable
Auto-Ignition Temperature	>250°C	Flammable Limits - Lower	Not available
Flammable Limits - Upper	Not available		

Other Information

VOC 58g/L (According to California South Coast Air Quality Management Rule 1168)

10. STABILITY AND REACTIVITY

Reactivity

Reacts with incompatible materials

Chemical Stability

Stable under normal conditions of storage and handling. The vapours may form explosive mixtures with the air.

Conditions to Avoid

Heat, open flames, electrostatic charges and other sources of ignition.

Incompatible materials

Ethyl acetate: acids and bases, strong oxidising agents; aluminium and some plastics, nitrates and chlorosulphuric acid.

Hazardous Decomposition Products

Under fire conditions this product may emit toxic and/or irritating fumes, smoke and gases including: carbon monoxide, carbon dioxide, isocyanates, hydrogen cyanide and oxides of nitrogen.

Possibility of hazardous reactions

Ethyl acetate:

Decomposes slowly into acetic acid and ethanol under the effect of light, air and water.

Risk of explosion on contact with: metals, alkalis, hydrides. oleum. can react violently with: fluoride, strong oxidising agents,

chlorosulfuric acid, potassium tert-butoxide. Forms explosive mixtures with the air.
Avoid exposure to light, sources of heat and naked flames.

11. TOXICOLOGICAL INFORMATION

Toxicology Information

No toxicity data available for this material. The available acute toxicity data for the ingredients is given below.

Acute Toxicity - Oral

Phenol, 2-(2H-benzotriazol-2-yl)-4,6-bis(1,1-dimethylpropyl)-

LD50 (rat): > 2000 mg/kg

Tri-(Nonyl-Phenyl) phosphite

LD50 (Rattus sp.): > 15,000 mg/kg

Diphenylmethane diisocyanate

LD50 (Rattus sp.): > 10,000 mg/kg

Aromatic hydrocarbons, C8 (benzene <0.01%)

LD50 (Mus sp.): 5627 mg/kg

Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate

LD50 (Rattus sp.): > 2000 mg/kg

Reactive mixture of ethylbenzene, m-xylene and p-xylene

LD50 (Mus sp.): 5627 mg/kg

Ethyl Acetate

LD50 (Rattus sp.): 5620 mg/kg

Xylene

LD50 (Rattus sp.): 5627 mg/kg

Acute Toxicity - Inhalation

Diphenylmethane diisocyanate

LC50 (Rattus sp.): 0.31mg/l/4h

Aromatic hydrocarbons, C8 (benzene <0.01%)

LC50 (Rattus sp.): 6700 ppm

Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate

LC50 (Rattus sp.): 5 mg/l

Reactive mixture of ethylbenzene, m-xylene and p-xylene

LC50 (Rattus sp.): 6700 ppm/4h

Ethyl Acetate

LC50 (Oryctolagus sp.): 1600 mg/kg

Xylene

LC50 (Rattus sp.): 20 mg/l/4h

Acute Toxicity - Dermal

Tri-(Nonyl-Phenyl) phosphite

LD50 (Oryctolagus sp.): > 2000 mg/kg

Diphenylmethane diisocyanate

LD50 (Oryctolagus sp.): > 9400 mg/kg

Aromatic hydrocarbons, C8 (benzene <0.01%)

LD50 (Oryctolagus sp.): > 5000 ml/kg

Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate

LD50 (Rattus sp.): > 2000 mg/kg

Reactive mixture of ethylbenzene, m-xylene and p-xylene

LD50 (Oryctolagus sp.): > 5000 ml/kg

Xylene

LD50 (Oryctolagus sp.): > 5000 mg/kg

Ingestion

Ingestion of this product may irritate the gastric tract causing nausea and vomiting.

Inhalation

Inhalation of product vapours can cause irritation of the nose, throat and respiratory system. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Skin

Causes skin irritation. Skin contact will cause redness, itching and swelling. Repeated exposure may cause skin dryness and cracking and may lead to dermatitis.

Eye

Causes serious eye irritation. On eye contact this product will cause tearing, stinging, blurred vision, and redness.

Respiratory sensitisation

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Skin Sensitisation

Not expected to be a skin sensitiser.

Germ cell mutagenicity

Not considered to be a mutagenic hazard.

Carcinogenicity

Not considered to be a carcinogenic hazard.

Diphenylmethane diisocyanate and Xylene are listed as Group 3: Not classifiable as to carcinogenicity to humans according to International Agency for Research on Cancer (IARC).

Reproductive Toxicity

Not considered to be toxic to reproduction.

STOT-single exposure

Not expected to cause toxicity to a specific target organ.

STOT-repeated exposure

May cause damage to organs through prolonged or repeated exposure

Aspiration Hazard

Not expected to be an aspiration hazard.

12. ECOLOGICAL INFORMATION

Ecological information

Harmful to aquatic life with long lasting effects. No ecological data available for this material. The available ecological data for the ingredients is given below:

Persistence and degradability

Tri-(Nonyl-Phenyl) phosphite

Not rapidly biodegradable

Diphenylmethane diisocyanate

Not rapidly biodegradable

Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate

Not rapidly biodegradable.

Ethyl acetate

Rapidly biodegradable

Mobility

Insoluble in water

Bioaccumulative Potential

Ethyl acetate

Partition coefficient: n-octanol/water: 0.68

BCF: 30

Other Adverse Effects

Not available

Environmental Protection

Prevent this material entering waterways, drains and sewers.

Acute Toxicity - Fish

Phenol, 2-(2H-benzotriazol-2-yl)-4,6-bis(1,1-dimethylpropyl)-

LC50: >100 mg/l/96h

Tri-(Nonyl-Phenyl) phosphite

LC50 (Danio rerio): 7.1 mg/l/96h

Diphenylmethane diisocyanate.
LC50 (Danio rerio): >1000 mg/l/96h
Aromatic hydrocarbons, C8 (benzene <0.01%)
LC50 (Salmo gairdneri): 2.6 mg/l/96h
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate
LC50 (Brachydanio rerio): 4.4 mg/l/96h
Reactive mixture of ethylbenzene, m-xylene and p-xylene
LC50 (Salmo gairdneri): 2.6 mg/l/96h
Ethyl acetate
LC50: >212 mg/l/96h
Xylene
LC50: 2.6 mg/l/96h

Acute Toxicity - Algae

Diphenylmethane diisocyanate
EC50 (Scenedesmus subspicatus): >1640 mg/l/72h
Aromatic hydrocarbons, C8 (benzene <0.01%)
EC10 (Selenastrum capricornutum): 1.9 mg/l/72h
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate
EC50 (Scenedesmus subspicatus): 1.9 mg/l/72h
Reactive mixture of ethylbenzene, m-xylene and p-xylene
EC10 (Selenastrum capricornutum) : 1.9 mg/l/72h
Xylene
EC50 : 4.36 mg/l/72h

Other Information

Diphenylmethane diisocyanate.
Chronic NOEC (Daphnia magna): >10 mg/l

13. DISPOSAL CONSIDERATIONS

Disposal considerations

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.

14. TRANSPORT INFORMATION

Transport Information

Not classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)

Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

U.N. Number

None Allocated

UN proper shipping name

None Allocated

Transport hazard class(es)

None Allocated

Special Precautions for User

Not available

IMDG Marine pollutant

No

Transport in Bulk

Not available

15. REGULATORY INFORMATION

Regulatory information

Classified as Hazardous according to the Globally Harmonised System of Classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia

Not classified as a Scheduled Poison according to the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP)

Poisons Schedule

Not Scheduled

Australia (AICS)

All components of this product are listed on the Inventory or exempted.

16. OTHER INFORMATION

Date of preparation or last revision of SDS

SDS created: July 2015

References

Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice
Standard for the Uniform Scheduling of Medicines and Poisons.

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)

Globally Harmonised System of classification and labelling of chemicals.

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)

END OF SDS

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