

SAFETY DATA SHEETS (SDS)

Enviro Flex Pro



Hazard Identifiers



Version: 1

Issued by: EnviroSystems Technologies

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SECTION 1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name Enviro Flex Pro

1.2. Relevant identified uses of the substance or mixture

One-component elastic sealant suitable for various types of use.

1.3. Details of the supplier of the safety data sheet

Name EnviroSystems Technologies Pty Ltd
Full address 295 Princes Highway St Peters, NSW 2044
Website www.envirosystems.com.au
Telephone +61 2 85958699 (business hours)
Fax +61 2 85958660

1.4. Emergency telephone number

For urgent inquiries refer Info Safe – 1800 638 556, Poisons Centre – 131126

Other Information: All information in this SDS is to the best of our knowledge at time of publication. Users of this product should fully review this SDS prior to use to ensure best safety practices. Further information and or clarification can be obtained by contacting our technical department on the above telephone number.

SECTION 2. Hazards identification.

2.1. Classification of the substance or mixture.

Classified as **Hazardous** according to WHS Regulations, Australian GHS criteria and a **Non-Dangerous Goods** according to the Australian Dangerous Goods Code.

Hazard classification and indication: Respiratory sensitization category 1

2.2. Label elements.

Hazard pictograms:



Signal words: **Danger**

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Hazard statements:

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
EUH204 Contains isocyanates. May produce an allergic reaction.

Precautionary statements:

P284 [In case of inadequate ventilation] wear respiratory protection.
P304+P340 IF INHALED: remove person to fresh air and keep comfortable for breathing.
P342+P311 If experiencing respiratory symptoms: call a POISON CENTER / doctor / . . .

Contains: TRIS(NONYLPHENYL)PHOSPHITE
DIPHENYLMETHANE DIISOCYANATE, ISOMERS AND HOMOLOGUES.

2.3. Other hazards.

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0.1%.

SECTION 3. Composition/information on ingredients.

3.1. Substances.

Information not relevant.

3.2. Mixtures.

Contains:

Identification.	Conc. %.	Classification 1272/2008 (CLP).
REACTIVE MIXTURE OF ETHYLBENZENE, m-XYLENE AND p-XYLENE CAS. -	0 – 5.7	Flam. Liq. 2 H225, Acute Tox. 4 H312, Acute Tox. 4 H332, Asp. Tox. 1 H304, STOT RE 2 H373, Eye Irrit. 2 H319, Skin Irrit. 2 H315, STOT SE 3 H335
XYLENE (BENZENE <0.01%) CAS. 1330-20-7	0 – 5.7	Flam. Liq. 3 H226, Acute Tox. 4 H312, Acute Tox. 4 H332, Asp. Tox. 1 H304, STOT RE 2 H373, Eye Irrit. 2 H319, Skin Irrit. 2 H315, STOT SE 3 H335, Note C
ETHYL ACETATE CAS. 141-78-6	1 – 1.5	Flam. Liq. 2 H225, Eye Irrit. 2 H319, STOT SE 3 H336, EUH066
DIPHENYLMETHANE DIISOCYANATE, ISOMERS AND HOMOLOGUES. CAS. 9016-87-9	0.5 – 0.6	Carc. 2 H351, Acute Tox. 4 H332, STOT RE 2 H373, Eye Irrit. 2 H319, Skin Irrit. 2 H315, STOT SE 3 H335, Resp. Sens. 1 H334, Skin Sens. 1 H317
BIS(2,2,6,6-TETRAMETHYL-4-		

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PIPERIDYL)SEBACATE CAS. 52829-07-9	0.3 – 0.35	Eye Irrit. 2 H319, Aquatic Chronic 2 H411
DIPHENYLMETHANE-4,4'-DIISOCYANATE CAS. 101-68-8	0.25 – 0.3	Carc. 2 H351, Acute Tox. 4 H332, STOT RE 2 H373, Eye Irrit. 2 H319, Skin Irrit. 2 H315, STOT SE 3 H335, Resp. Sens. 1 H334, Skin Sens. 1 H317, Note 2 C
TRIS(NONYLPHENYL)PHOSPHITE CAS. 26523-78-4	0.2 – 0.25	Skin Sens. 1 H317, Aquatic Acute 1 H400 M=1, Aquatic Chronic 1 H410

The full wording of hazard (H) phrases is given in section 16 of the sheet.

SECTION 4. First aid measures.

4.1. Description of first aid measures.

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 30-60 minutes, opening the eyelids fully. Get medical advice/attention.

SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention.

INGESTION: Have the subject drink as much water as possible. Get medical advice/attention. Do not induce vomiting unless explicitly authorised by a doctor.

INHALATION: Get medical advice/attention immediately. Remove victim to fresh air, away from the accident scene. If the subject stops breathing, administer artificial respiration. Take suitable precautions for rescue workers.

4.2. Most important symptoms and effects, both acute and delayed.

For symptoms and effects caused by the contained substances, see chap. 11.

4.3. Indication of any immediate medical attention and special treatment needed.

Information not available.

SECTION 5. Firefighting measures.

5.1. Extinguishing media.

SUITABLE EXTINGUISHING EQUIPMENT

Extinguishing substances are: carbon dioxide, foam, chemical powder. For product loss or leakage that has not caught fire, water spray can be used to disperse flammable vapours and protect those trying to stem the leak.

UNSUITABLE EXTINGUISHING EQUIPMENT

Do not use jets of water. Water is not effective for putting out fires but can be used to cool containers exposed to flames to prevent explosions.

5.2. Special hazards arising from the substance or mixture.

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Excess pressure may form in containers exposed to fire at a risk of explosion. Do not breathe combustion products.

5.3. Advice for firefighters.

GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

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SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

SECTION 6. Accidental release measures.

6.1. Personal precautions, protective equipment and emergency procedures.

Block the leakage if there is no hazard.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

6.2. Environmental precautions.

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

6.3. Methods and material for containment and cleaning up.

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.

Make sure the leakage site is well aired. Check incompatibility for container material in section 7. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

6.4. Reference to other sections.

Any information on personal protection and disposal is given in sections 8 and 13.

SECTION 7. Handling and storage.

7.1. Precautions for safe handling.

Keep away from heat, sparks and naked flames; do not smoke or use matches or lighters. Vapours may catch fire and an explosion may occur; vapour accumulation is therefore to be avoided by leaving windows and doors open and ensuring good cross ventilation. Without adequate ventilation, vapours may accumulate at ground level and, if ignited, catch fire even at a distance, with the danger of backfire. Avoid bunching of electrostatic charges. When performing transfer operations involving large containers, connect to an earthing system and wear antistatic footwear. Vigorous stirring and flow through the tubes and equipment may cause the formation and accumulation of electrostatic charges. In order to avoid the risk of fires and explosions, never use compressed air when handling. Open containers with caution as they may be pressurised. Do not eat, drink or smoke during use. Avoid leakage of the product into the environment.

7.2. Conditions for safe storage, including any incompatibilities.

Store only in the original container. Store the containers sealed, in a well ventilated place, away from direct sunlight. Store in a well ventilated place, keep far away from sources of heat, naked flames and sparks and other sources of ignition. Keep containers away from any incompatible materials, see section 10 for details.

7.3. Specific end use(s).

Information not available.

SECTION 8. Exposure controls/personal protection.

8.1. Control parameters.

Emergency limits:

Ingredient	STEL	TWA	
XYLENE	150ppm	80ppm	

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diphenylmethane-diisocyanate, isomers and homologues	0.07 mg/m ³	0.02mg/m ³	
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8.2. Exposure controls.

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration. Personal protective equipment must be CE marked, showing that it complies with applicable standards.

RESPIRATORY PROTECTION

This product is a thick sealant with under 0.7% free isocyanate. Respiratory protection is generally not required as long as the workplace is well aired through effective local ventilation however half-face respirators organic vapour respirators with particulate pre-filters (eg 3M™ Organic Vapor Cartridges, 6051) and powered air-purifying respirators are preferred and air quality monitoring, but not suitable in low ventilated spaces or when monitoring equipment suggest exposure levels are reached, as they do not provide adequate protection, as the filter will saturate quickly and the smell will come through, in these situations use air-line respirators or self-contained breathing apparatus complying with AS/NZS 1716.

In case of hypersensitivity of the respiratory tract (e.g. asthmatics and those who suffer from chronic bronchitis) it is inadvisable to work with the product

HAND PROTECTION

Protect your hands with work gloves, category III (ref. standard EN 374). For the final choice of material you need to assess the type of use. In case of contact for the short term or as protection against splashes, use gloves made of nitrile (0.3mm thickness, permeation time >480 min.). In the event of continued exposure use butyl rubber gloves (0.4mm thickness, permeation time > 480 min.). Contaminated gloves should be removed.

SKIN PROTECTION

Wear category I professional long-sleeved overalls and safety footwear. Wash body with soap and water after removing protective clothing.

EYE PROTECTION

Wear airtight protective goggles.

ENVIRONMENTAL EXPOSURE CONTROLS.

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

SECTION 9. Physical and chemical properties.

9.1. Information on basic physical and chemical properties.

Appearance	paste
Colour	various
Odour	typical
Odour threshold.	Not available.
pH.	Not available.
Melting point / freezing point.	Not available.
Initial boiling point.	Not available.
Boiling range.	Not available.
Flash point.	Not applicable.
Evaporation rate	Not available.
Flammability (solid, gas)	not flammable
Lower inflammability limit.	Not available.
Upper inflammability limit.	Not available.
Lower explosive limit.	Not available.
Upper explosive limit.	Not available.
Vapour pressure.	Not available.
Vapour density	Not available.
Relative density.	1,33 Kg/l
Solubility	insoluble in water
Partition coefficient: n-octanol/water	Not available.
Auto-ignition temperature.	Not available.
Decomposition temperature.	Not available.
Viscosity	70000-150000 cps
Explosive properties	Not available.
Oxidising properties	Not available.

9.2. Other information.

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VOC (Directive 2010/75/EC) : 6,80 % - 90,44 g/litre.
VOC (volatile carbon) : Not available.

SECTION 10. Stability and reactivity.

10.1. Reactivity.

There are no particular risks of reaction with other substances in normal conditions of use.

10.2. Chemical stability.

The product is stable in normal conditions of use and storage.

10.3. Possibility of hazardous reactions.

The vapours may also form explosive mixtures with the air.

10.4. Conditions to avoid.

Avoid overheating. Avoid bunching of electrostatic charges. Avoid all sources of ignition.

10.5. Incompatible materials.

Information not available.

10.6. Hazardous decomposition products.

In the event of thermal decomposition or fire, gases and vapours that are potentially dangerous to health may be released.

SECTION 11. Toxicological information.

11.1. Information on toxicological effects.

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification. It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

Inhalation of this product causes sensitization, which may then give rise to a series of inflammatory episodes, most of all characterized by obstruction and affecting the respiratory system. Sometimes, sensitization phenomena arise together with evident rhinitis and asthma. Damages to the respiratory system depend on the inhaled quantity, on the product concentration in the working environment and on the exposure time.

This product contains isocyanates. Producer's specifications are as follows: Ready-to-use products containing isocyanates may irritate mucosas, particularly those of the respiratory system, and may give rise to hypersensitivity reactions. Vapour or aerosol inhalation may lead to sensitization. Please take all the measures used for all solvent-containing products while manipulating isocyanate-containing products. Avoid vapour and aerosol inhalation. People with allergic or asthmatic precedents or subject to respiratory disorders should not handle products containing isocyanates.

This product contains sensitizing substance/s and may cause allergic reactions.

TRIS(NONYLPHENYL)PHOSPHITE

LD50 (Oral).> 15000 mg/kg Rattus sp.

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

DIPHENYLMETHANE DIISOCYANATE, ISOMERS AND HOMOLOGUES.

LD50 (Oral).> 10000 mg/kg Rattus sp.

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

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LC50 (Inhalation).0,31 mg/l/4h Rattus sp.

DIPHENYLMETHANE-4,4'-DIISOCYANATE
LD50 (Oral).> 2000 mg/kg Rattus sp.
LD50 (Dermal).> 9400 mg/kg Oryctolagus sp.
LC50 (Inhalation).2,24 mg/l Rattus sp.

BIS(2,2,6,6-TETRAMETHYL-4-PIPERIDYL)SEBACATE
LD50 (Oral).> 2000 mg/kg Rattus sp.
LD50 (Dermal).> 2000 mg/kg Rattus sp.
LC50 (Inhalation).5 mg/l Rattus sp.

REACTIVE MIXTURE OF ETHYLBENZENE, m-XYLENE AND p-XYLENE
LD50 (Oral).5627 mg/kg Mus sp.
LD50 (Dermal).> 5000 ml/kg Oryctolagus sp.
LC50 (Inhalation).6700 ppm/4h Rattus sp.

ETHYL ACETATE
LD50 (Oral).5620 mg/kg Rattus sp.
LD50 (Dermal).> 20000 mg/kg Oryctolagus sp.
LC50 (Inhalation).1600 mg/kg Oryctolagus sp.

XYLENE (BENZENE <0.01%)
LD50 (Oral).5627 mg/kg Mus sp.
LD50 (Dermal).> 5000 mg/kg Oryctolagus sp.
LC50 (Inhalation).6700 ppm/4h Rattus sp.

SECTION 12. Ecological information.

12.1. Toxicity.

TRIS(NONYLPHENYL)PHOS
PHITE
LC50 - for Fish.

7,1 mg/l/96h Danio rerio

DIPHENYLMETHANE
DIISOCYANATE, ISOMERS
AND HOMOLOGUES.
LC50 - for Fish.

> 1000 mg/l/96h Danio rerio

EC50 - for Algae / Aquatic
Plants.

> 1640 mg/l/72h Scenedesmus subspicatus

Chronic NOEC for
Crustacea.

> 10 mg/l Daphnia magna

DIPHENYLMETHANE-4,4'-
DIISOCYANATE
LC50 - for Fish.

> 1000 mg/l/96h Danio rerio

Chronic NOEC for Algae /
Aquatic Plants.

1640 mg/l Desmodemus subspicatus

BIS(2,2,6,6-
TETRAMETHYL-4-
PIPERIDYL)SEBACATE
LC50 - for Fish.

4,4 mg/l/96h Brachydanio rerio

EC50 - for Algae / Aquatic
Plants.

1,9 mg/l/72h Scenedesmus subspicatus

REACTIVE MIXTURE OF
ETHYLBENZENE, m-

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XYLENE AND p-XYLENE
LC50 - for Fish. 2,6 mg/l/96h *Salmo gairdneri*
EC10 for Algae / Aquatic
Plants. 1,9 mg/l/72h *Selenastrum capricornutum*

ETHYL ACETATE
LC50 - for Fish. > 212 mg/l/96h
EC50 - for Crustacea. 260 mg/l/48h *Daphnia pulex*

XYLENE (BENZENE
<0.01%)
LC50 - for Fish. 2,6 mg/l/96h *Oncorhynchus mykiss*
EC50 - for Algae / Aquatic
Plants. 4,36 mg/l/72h *Pseudokirchneriella subcapitata*
Chronic NOEC for Fish. > 1,3 mg/l *Oncorhynchus mykiss*
Chronic NOEC for
Crustacea. 1,57 mg/l *Daphnia magna*

12.2. Persistence and degradability.

TRIS(NONYLPHENYL)PHOS
PHITE
NOT rapidly biodegradable.

DIPHENYLMETHANE
DIISOCYANATE, ISOMERS
AND HOMOLOGUES.
NOT rapidly biodegradable.

BIS(2,2,6,6-
TETRAMETHYL-4-
PIPERIDYL)SEBACATE
NOT rapidly biodegradable.

ETHYL ACETATE
Solubility in water. > 10000 mg/l
Rapidly biodegradable.

XYLENE (BENZENE
<0.01%)
Rapidly biodegradable.

12.3. Bioaccumulative potential.

ETHYL ACETATE
Partition coefficient: n-
octanol/water. 0,68

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BCF.

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12.4. Mobility in soil.

Information not available.

12.5. Results of PBT and vPvB assessment.

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

12.6. Other adverse effects.

Information not available.

SECTION 13. Disposal considerations.

13.1. Waste treatment methods.

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

SECTION 14. Transport information.

14.1. UN number.

Not applicable.

14.2. UN proper shipping name.

Not applicable.

14.3. Transport hazard class(es).

Not applicable.

14.4. Packing group.

Not applicable.

14.5. Environmental hazards.

Not applicable.

14.6. Special precautions for user.

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code.

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Information not relevant.

14.7. Poison Schedule.

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SECTION 15. Regulatory information.

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture.

SECTION 16. Other information.

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

Flam. Liq. 2	Flammable liquid, category 2
Flam. Liq. 3	Flammable liquid, category 3
Carc. 2	Carcinogenicity, category 2
Acute Tox. 4	Acute toxicity, category 4
Asp. Tox. 1	Aspiration hazard, category 1
STOT RE 2	Specific target organ toxicity - repeated exposure, category 2
Eye Irrit. 2	Eye irritation, category 2
Skin Irrit. 2	Skin irritation, category 2
STOT SE 3	Specific target organ toxicity - single exposure, category 3
Resp. Sens. 1	Respiratory sensitization, category 1
Skin Sens. 1	Skin sensitization, category 1
Aquatic Acute 1	Hazardous to the aquatic environment, acute toxicity, category 1
Aquatic Chronic 1	Hazardous to the aquatic environment, chronic toxicity, category 1
Aquatic Chronic 2	Hazardous to the aquatic environment, chronic toxicity, category 2
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H351	Suspected of causing cancer.
H312	Harmful in contact with skin.
H332	Harmful if inhaled.
H304	May be fatal if swallowed and enters airways.
H373	May cause damage to organs through prolonged or repeated exposure.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H335	May cause respiratory irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317	May cause an allergic skin reaction.
H336	May cause drowsiness or dizziness.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.
EUH204	Contains isocyanates. May produce an allergic reaction.

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Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.
