

SEAL N FLEX FC BIACK Revision Number 3 Revision date 01-Aug-2019 Supersedes Date: 10-May-2018

Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product Identifier

Product Name SEAL N FLEX FC BIACK

Pure substance/mixture Mixture

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use Sealant.

Uses advised against No information available.

1.3. Details of the supplier of the safety data sheet

Company Name Manufacturer

Bostik New Zealand Limited
Bostik Australia Pty Ltd
19 Eastern Hutt Road Wingate,
Lower Hutt, New Zealand
S1-71 High Street,
Thomastown Victoria

Tel: 04-567 5119 Australia

Fax: 04-567 5412 Tel: 613 9279-9333 Fax: 613 9279-9342

ABN: 79 003 893 838

1.4. Emergency telephone number

Emergency Telephone 24 Hr: 0800 243 622

+64 4 917 9888

Poison Centre: 0800 764 766

E-mail address SDS.AP@Bostik.com

Section 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Aspiration hazard	Category 1 (6.1E g)
Skin corrosion/irritation	Category 2 (6.3A)
Serious eye damage/eye irritation	Category 2A (6.4A)
Respiratory sensitization	Category 1A
Skin sensitization	Category 1A
Carcinogenicity	Category 2 (6.7B)
Hazardous to the Aquatic Environment - Acute Hazard	Category 3 (9.1D)

2.2. Label Elements



Signal word

Danger

Hazard statements

H319 - Causes serious eye irritation H351 - Suspected of causing cancer

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H315 - Causes skin irritation

H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled

H304 - May be fatal if swallowed and enters airways

H402 - Harmful to aquatic life

H317 - May cause an allergic skin reaction

Prevention

P201 - Obtain special instructions before use

P202 - Do not handle until all safety precautions have been read and understood

P281 - Use personal protective equipment as required

P264 - Wash face, hands and any exposed skin thoroughly after handling

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray

P284 - In case of inadequate ventilation wear respiratory protection

P272 - Contaminated work clothing should not be allowed out of the workplace

P280 - Wear protective gloves

P273 - Avoid release to the environment

Inhalation

P304 + P341 - IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing

P342 + P311 - If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician

Skir

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water

P362 - Take off contaminated clothing and wash before reuse

P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention

Eves

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

Ingestion

P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor

P331 - Do NOT induce vomiting

Storage

P405 - Store locked up

Disposal

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

2.3. Other Hazards

Small amounts of methanol (CAS 67-56-1) are formed by hydrolysis and released upon curing

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Mixture

3.2 Mixtures

J.Z WIIXUIES		
Chemical name	CAS No.	Weight-%
Xylenes (o-, m-, p- isomers)	1330-20-7	5 - <10
4,4'-Methylenediphenyl diisocyanate	101-68-8	5 - <10
Urea,	77703-56-1	1 - <5
N,N"-(methylenedi-4,1-phenylene)bis[N'-butyl-		
Ethylbenzene	100-41-4	1 - <3
Benzenesulfonyl isocyanate, 4-methyl-	4083-64-1	0.1- <1
Glycidoxypropyltrimethoxysilane	2530-83-8	0.1- <1

^{***} Any remaining ingredients are not hazardous

Section 4: FIRST AID MEASURES

4.1. Description of first aid measures

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General advice If symptoms persist, call a physician. Do not breathe dust/fume/gas/mist/vapors/spray.

Do not get in eyes, on skin, or on clothing.

Inhalation Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration.

Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Call a physician. Immediate medical attention is required. Move victim to fresh air. Administer oxygen if breathing is difficult. If breathing is irregular or stopped, administer artificial respiration. Artificial respiration and/or oxygen may be necessary. Oxygen or artificial respiration if needed. Immediate medical attention is not required. Move to fresh air in

case of accidental inhalation of vapors. If symptoms persist, call a physician.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. Consult a physician if necessary. Wash contaminated clothing before reuse. Wash off immediately with plenty of water. If symptoms persist, call a physician. If skin irritation persists, call a physician. Wash off immediately with soap and plenty of

water. Immediate medical attention is not required.

Eye contact Immediately flush with plenty of water. After initial flushing, remove any contact lenses

and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If

symptoms persist, call a physician. Call a physician immediately.

Ingestion Do NOT induce vomiting. Drink plenty of water. If symptoms persist, call a physician.

Rinse mouth. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person. Clean mouth with water and drink afterwards plenty

of water. Call a physician.

of the material(s) involved and take precautions to protect themselves

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

Symptoms None known.

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

Note to physicians May cause sensitization of susceptible persons. May cause sensitization by inhalation

and skin contact. Treat symptomatically. Small amounts of methanol (CAS 67-56-1) are

formed by hydrolysis and released upon curing.

4.4. Reference to Other Sections

Reference to other sections Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION. Section 11:

TOXICOLOGY INFORMATION.

Section 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the

surrounding environment.

Unsuitable extinguishing media No information available.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the

chemical

In the event of fire and/or explosion do not breathe fumes. May cause sensitization by inhalation and skin contact. Thermal decomposition can lead to release of irritating and toxic gases and vapors. Thermal decomposition can lead to release of irritating and toxic

gases and vapors.

5.3. Advice for firefighters

Special protective equipment for

fire-fighters

Wear self-contained breathing apparatus and protective suit.

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Section 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin, eyes or clothing. Use personal protective equipment as required.

Evacuate personnel to safe areas. Do not touch or walk through spilled material. Keep

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people away from and upwind of spill/leak. Remove all sources of ignition.

6.2. Environmental precautions

Environmental precautions Prevent entry into waterways, sewers, basements or confined areas. Do not flush into

surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. See Section 12 for additional Ecological

Information.

6.3. Methods and material for containment and cleaning up

Methods for containment If possible, turn leaking containers so that gas escapes rather than liquid. Absorb spill

with inert material (e.g. dry sand or earth), then place in a chemical waste container. Transport to well ventilated area and treat with neutralizing solution: mixture of 80% water and 20% non-ionic surfactant Tergitol TMN-10; or 90% water, 3-8% concentrated ammonia and 2% detergent. Add about 10 parts of neutralizer per part of isocyanate,

with mixing. Allow substance to evaporate. Protect from moisture.

Methods for cleaning up Cover liquid spill with sand, earth or other non-combustible absorbent material. Cover

powder spill with plastic sheet or tarp to minimize spreading. Pick up and transfer to properly labeled containers. Do not direct water at spill or source of leak. Decontaminate floor with decontamination solution letting stand for at least 15 minutes. Soak up with inert absorbent material. Dam up. Avoid creating dust. Sweep up and shovel into suitable containers for disposal. After cleaning, flush away traces with water. Take

precautionary measures against static discharges.

6.4. Reference to other sections

Reference to other sections Section 7: HANDLING AND STORAGE

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Section 13: DISPOSAL CONSIDERATIONS

Section 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Advice on safe handling Avoid contact with skin, eyes or clothing. Wash contaminated clothing before reuse. Do

not eat, drink or smoke when using this product. Use personal protective equipment as required. Do not breathe dust/fume/gas/mist/vapors/spray. Ensure adequate ventilation, especially in confined areas. Avoid breathing vapors or mists. Use with local exhaust

ventilation.

7.2. Conditions for safe storage, including any incompatibilities

General hygiene considerations When using do not eat, drink or smoke. Regular cleaning of equipment, work area and

clothing is recommended.

Storage Conditions Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of

children. Keep containers tightly closed in a cool, well-ventilated place. Keep in properly labeled containers. Protect from moisture. Protect from direct contact with water or excessive moisture. Keep away from heat, sparks, flame and other sources of ignition

(i.e., pilot lights, electric motors and static electricity).

Incompatible materials Water Alcohols Strong bases Strong oxidizing agents Finely powdered metals

7.3. Specific end use(s)

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Specific Use(s) Sealant.

Other information No information available.

7.4. References to Other Sections

Reference to other sections Section 13: DISPOSAL CONSIDERATIONS. Section 10: STABILITY AND REACTIVITY.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Exposure Limits

Chemical name	New Zealand	Australia	European Union
Xylenes (o-, m-, p- isomers) 1330-20-7	TWA: 50 ppm TWA: 217 mg/m³	80 ppm TWA 350 mg/m³ TWA 150 ppm STEL 655 mg/m³ STEL	TWA: 50 ppm TWA: 221 mg/m³ STEL: 100 ppm STEL: 442 mg/m³ *
4,4'-Methylenediphenyl diisocyanate 101-68-8	TWA: 0.02 mg/m³ STEL: 0.07 mg/m³	0.02 mg/m³ TWA 0.07 mg/m³ STEL	-
Ethylbenzene 100-41-4	TWA: 100 ppm TWA: 434 mg/m³ STEL: 125 ppm STEL: 543 mg/m³	100 ppm TWA 434 mg/m³ TWA 125 ppm STEL 543 mg/m³ STEL	TWA: 100 ppm TWA: 442 mg/m³ STEL: 200 ppm STEL: 884 mg/m³ *

Chemical name	ACGIH TLV	NIOSH IDLH	OSHA PEL
Xylenes (o-, m-, p- isomers)	STEL: 150 ppm	-	TWA: 100 ppm
1330-20-7	TWA: 100 ppm		TWA: 435 mg/m ³
4,4'-Methylenediphenyl	TWA: 0.005 ppm	IDLH: 75 mg/m ³	Ceiling: 0.02 ppm
diisocyanate		Ceiling: 0.020 ppm 10 min	Ceiling: 0.2 mg/m ³
101-68-8		Ceiling: 0.2 mg/m ³ 10 min	
		TWA: 0.005 ppm	
		TWA: 0.05 mg/m ³	
Ethylbenzene	TWA: 20 ppm	IDLH: 800 ppm	TWA: 100 ppm
100-41-4		TWA: 100 ppm	TWA: 435 mg/m ³
		TWA: 435 mg/m ³	
		STEL: 125 ppm	
		STEL: 545 mg/m ³	

Derived No Effect Level (DNEL) No information available

Predicted No Effect Concentration No information available

(PNEC)

OTHER INFORMATION Small amounts of methanol (CAS 67-56-1) are formed by hydrolysis and released upon

curing

8.2. Exposure controls

Engineering controls Ensure adequate ventilation, especially in confined areas.

PPE - Personal Protection Equipment

Respiratory protection

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin and body protection Wear suitable protective clothing. No special technical protective measures are

necessary under normal conditions.

Hand protection Wear suitable chemical resistant gloves. The selection of suitable gloves does not only

depend on the material, but also on further marks of quality and various manufacturers. No protective equipment is needed under normal use conditions. Respiratory protection required in insufficiently ventilated working areas and during spraying. An air-fed mask,

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or for short pariods of work, a combination of professional filter is

or for short periods of work, a combination of professional filter is recommended. **General hygiene considerations**Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Avoid contact with skin, eyes or clothing. Take off contaminated clothing and wash before reuse.

Environmental exposure controls Do not allow into any sewer, on the ground or into any body of water.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance Paste
Color Black
Odor Solvent

Odor threshold No information available

Property Values Remarks • Method

pH No data available
Melting point / freezing point
Boiling point / boiling range
Flash point > 61 °C
Evaporation rate No data available
Flammability (solid, gas)
No data available
No data available

Flammability Limit in Air

Upper flammability or explosive No data available

limits

Lower flammability or explosive No data available

limits

Vapor pressureNo data availableVapor densityNo data availableRelative densityNo data available

Water solubility Insoluble in water Slightly soluble

Solubility(ies)

Partition coefficient
Autoignition temperature
Decomposition temperature
Kinematic viscosity
Dynamic viscosity
Explosive properties

No data available
No data available
No data available
No data available
No information available

Explosive properties No information available Oxidizing properties No information available

9.2. Other information

Softening Point
Molecular weight
Solvent content (%)
Solid content (%)
No information available
No information available
No information available

Density 1.26 g/ml

Bulk density

No information available

VOC Content (%)

No information available

Section 10: STABILITY AND REACTIVITY

10.1. Reactivity

Reactivity None under normal use conditions.

10.2. Chemical stability

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

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Hazardous polymerization Hazardous polymerization may occur.

10.4. Conditions to avoid

Conditions to avoid Protect from moisture. Keep from any possible contact with water. Extremes of

temperature and direct sunlight. Storage near to reactive materials.

10.5. Incompatible materials

Incompatible materials Water. Alcohols. Strong bases. Strong oxidizing agents. Finely powdered metals.

10.6. Hazardous decomposition products

Hazardous decomposition

products

Carbon monoxide. Carbon dioxide (CO2). Nitrogen oxides (NOx). Hydrogen cyanide. Thermal decomposition can lead to release of irritating and toxic gases and vapors.

Section 11: TOXICOLOGY INFORMATION

11.1. Information on toxicological effects

Acute Toxicity

Product Information Product does not present an acute toxicity hazard based on known or supplied

information.

Inhalation May cause sensitization by inhalation. May cause drowsiness or dizziness.

Eye contact Severely irritating to eyes.

Skin contactIrritating to skin.IngestionNo data available.

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Xylenes (o-, m-, p- isomers) 1330-20-7	= 3500 mg/kg (Rat)	> 1700 mg/kg (Rabbit) > 4350 mg/kg (Rabbit)	= >47635 mg/L (Rat) 4 h = >5000 ppm (Rat) 4 h
4,4'-Methylenediphenyl diisocyanate 101-68-8	= 31600 mg/kg(Rat) = 9200 mg/kg(Rat)	LD 50 > 9400 mg/kg (Rabbit) OECD 402	= 1.5 mg/L (Rat) 4 h
Ethylbenzene 100-41-4	= 3500 mg/kg (Rat)	= 15400 mg/kg (Rabbit)	= 1432 mg/L (Rat) 4 h
Benzenesulfonyl isocyanate, 4-methyl- 4083-64-1	= 2234 mg/kg(Rat)	LD 50 (Rat) > 2000 mg/kg OECD 402	> 640 ppm (Rat)1 h
Glycidoxypropyltrimethoxysilane 2530-83-8	= 8025 mg/kg (rat)	= 4250 mg/kg (Rabbit)	> 5.3 mg/L (Rat)4 h

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation No information available. Serious eye damage/eye irritation No information available.

Sensitization May cause sensitization by inhalation. May cause sensitization by skin contact.

Germ cell mutagenicity
Reproductive toxicity
STOT - single exposure
STOT - repeated exposure
Target organ effects
Aspiration hazard
No information available.
No information available.
retina, Eyes, Skin, liver.
No information available.

Carcinogenicity Contains a known or suspected carcinogen. The following substance(s) are classified in

Annex VI CLP (1272/2008) as carcinogenic.

Chemical name	IARC	China	Japan
Xylenes (o-, m-, p- isomers)	Group 3	-	=
4,4'-Methylenediphenyl	Group 3	-	-
diisocyanate			
Ethylbenzene	Group 2B	Possibly carcinogenic to humans	Group 2B

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IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans Group 2B - Possibly Carcinogenic to Humans Group 3 - Not Classifiable as to Carcinogenicity in Humans

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Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecotoxicity

Product Information

Toxic to aquatic life. Harmful to aquatic life with long lasting effects. Very toxic to aquatic life. Harmful to aquatic life.

Component Information

Data obtained on the component(s) include

Chemical name	Algae/aquatic plants	Fish	Crustacea
Xylenes (o-, m-, p- isomers)	-	LC50 96 h 2.6 mg/L	EC50 48 h = 3.4 mg/L (water flea)
1330-20-7		(Oncorhynchus mykiss) (OECD	
		203)	
4,4'-Methylenediphenyl	-	>1000 mg/l (Danio rerio)	-
diisocyanate			
101-68-8			
Urea,	EC50 (72h) >100 mg/L Algae	LC50 (96h)>250 mg/L Fish	EC50 (48h) >100 mg/L Daphnia
N,N"-(methylenedi-4,1-phenylene)	(Raphidocelis subcapitata)	(Brachydanio rerio)	magna
bis[N'-butyl-			
77703-56-1			
Ethylbenzene	EC50 72 h 2.6 - 11.3 mg/L	LC50 96 h = 4.2 mg/L	EC50: 1.8 - 2.4mg/L (48h, Daphnia
100-41-4	(Pseudokirchneriella subcapitata)	(Oncorhynchus mykiss semi-static)	magna)
Glycidoxypropyltrimethoxysilane	-	LC50 (96h) = 55 mg/L	EC50 (48h) =473 mg/L Daphnia
2530-83-8		(Cyprinus carpio) OECD 203	magna

12.2. Persistence and degradability

No information available.

Component Information 4.4'-Methylenediphenyl diisocyanate (101-68-8)			
Method	Exposure time	Value	Results
OECD Test No. 302C: Inherent	28 days	0% biodegradation	Not readily biodegradable
Biodegradability: Modified MITI Test	-		
(II)			

12.3. Bioaccumulative potential

No information available.

Chemical name	Partition coefficient	Bioconcentration factor (BCF)
Xylenes (o-, m-, p- isomers) 1330-20-7	3.15	15
4,4'-Methylenediphenyl diisocyanate 101-68-8	4.51	200
Ethylbenzene 100-41-4	3.2	15
Benzenesulfonyl isocyanate, 4-methyl- 4083-64-1	0.6	-

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

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The components in this formulation do not meet the criteria for classification as PBT or vPvB.

Chemical name	PBT and vPvB assessment
Xylenes (o-, m-, p- isomers)	The substance is not PBT / vPvB
1330-20-7	
4,4'-Methylenediphenyl diisocyanate	The substance is not PBT / vPvB
101-68-8	
Urea, N,N"-(methylenedi-4,1-phenylene)bis[N'-butyl-	Further information relevant for the PBT assessment is
77703-56-1	necessary
Ethylbenzene	The substance is not PBT / vPvB
100-41-4	
Benzenesulfonyl isocyanate, 4-methyl-	The substance is not PBT / vPvB
4083-64-1	
Glycidoxypropyltrimethoxysilane	The substance is not PBT / vPvB
2530-83-8	

12.6. Other adverse effects

No information available. **Endocrine Disruptor**

Information

Section 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from residues/unused

products

Disposal should be in accordance with applicable regional, national and local laws and

regulations.

Contaminated packaging Disposal should be in accordance with applicable regional, national and local laws and

regulations.

Section 14: TRANSPORT INFORMATION

IMDG Not regulated

IATA Not regulated

ADR Not regulated

Section 15: REGULATORY INFORMATION

National Regulations

ERMA Group HSR002679

Section 16: OTHER INFORMATION

Chronic Hazard Star Legend *= Chronic Health Hazard

Key or legend to abbreviations and acronyms used in the safety data sheet

No information available

Key Literature References and Sources for Data

No information available

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Revision note Not applicable.

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Training Advice

No information available

Disclaimer

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End of Safety Data Sheet