



Nanopore

Safety Data Sheet

SECTION 1: Identification of the substance/mixture and of the company

1.1 Product identifier

Product name : Nanopore

Types : NP80, NP100, NP150, NP200, NP250, NP300, NP400, NP600, NP800, NP1000, NP2000, NP4000

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

Identified uses : R&D, Industrial & for Professional use only.

1.3 Details of the supplier of the safety data sheet

Company	IZON Science Ltd	
Address	2 Show Place	PO Box 9292
	Addington	Tower Junction
	Christchurch	Christchurch
	8024	8149
	New Zealand	New Zealand

Telephone : +64 3 357 4270

Email : info@izon.com

Website : www.izon.com

Emergency Poison Centre Information: https://www.who.int/gho/phe/chemical_safety/poisons_centres/en/

SECTION 2: Hazards identification

2.1 Classification of the mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]

2.1.1 Thermoplastic Polyurethane Elastomer (polyether).

No need for classification according to GHS

criteria for this product.

2.2 Label elements

Globally Harmonized System, EU (GHS)

The product does not require a hazard warning label in accordance with GHS criteria.

2.3 Other hazards

According to Regulation (EC) No 1272/2008 [CLP]

No specific dangers known, if the regulations/notes for storage and handling are considered.

SECTION 3: Composition/information on ingredients

3.1 Mixture

Chemical nature

Polymer based on: polyurethane, stabilizing agents, additives

Hazardous ingredients (GHS)

according to Regulation (EC) No. 1272/2008

Does not contain any hazardous ingredients.

SECTION 4: First Aid Measures

4.1 Description of first aid measures

General Advice

Remove contaminated clothing.

If inhaled:

Remove the affected individual into fresh air and keep the person calm. Immediate medical attention required.

On skin contact:

Burns caused by molten material require hospital treatment.

On contact with eyes:

In case of contact with the eyes, rinse immediately for at least 15 minutes with plenty of water. If irritation develops, seek medical attention.

On ingestion:

Immediately rinse mouth and then drink plenty of water, do not induce vomiting, seek medical attention.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms: No significant reaction of the human body to the product known.

Hazards: No hazards anticipated.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

SECTION 5: Firefighting Measures

5.1 Extinguishing media

Suitable extinguishing media:

water spray, foam, dry powder, carbon dioxide

Unsuitable extinguishing media for safety reasons:

water jet

5.2 Special hazards arising from the substance or mixture

Carbon dioxide, carbon monoxide, hydrogen cyanide; hydrocyanic acid, nitrogen oxides, isocyanate
The substances/groups of substances mentioned can be released in case of fire.

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information

Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

SECTION 6: Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

No special precautions necessary.

6.2 Environmental precautions

No special precautions necessary

6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal

6.4 Reference to other sections

Information regarding exposure controls/personal protection and disposal considerations can be found in section 8 and 13.

SECTION 7: Handling and Storage

7.1 Precautions for safe handling

Protection against fire and explosion:
No special precautions necessary.

7.2 Conditions for safe storage, including any incompatibilities

Segregate from foods and animal feeds.

Suitable materials for containers: High density polyethylene (HDPE), Low density polyethylene (LDPE), Paper/Fibreboard. Further information on storage conditions: Keep container tightly closed. Protect against moisture

7.3 Specific end use(s)

For the relevant identified use(s) listed in Section 1.2 the advice mentioned in this section 7 is to be observed.

SECTION 8: Exposure Controls/Personal Protection

8.1 Control parameters

Components with occupational exposure limits

The substances mentioned are contained only in traces in the product.

101-68-8: 4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate

PNEC

No PNEC value available.

DNEL

No DNEL value available.

8.2 Exposure controls

Personal protective equipment

Respiratory protection:
Breathing protection if breathable aerosols/dust are formed.

Hand protection:

Hand protection not required

Eye protection:

Eye protection not required.

Body protection:

Body protection not required.

General safety and hygiene measures

Wearing of closed work clothing is recommended. When using, do not eat, drink or smoke. Hands and/or face should be washed before breaks and at the end of the shift. At the end of the shift the skin should be cleaned and skin-care agents applied.

SECTION 9: Physical and Chemical Properties

Form:	solid formed plastic piece	
Colour:	transparent	
Odour:	odourless	
Odour threshold:	not applicable	
pH value:	not applicable	
Melting point:	> 100 °C	
boiling temperature:	The product is a non-volatile solid.	
Flash point:	not applicable	
Evaporation rate:	Value can be approximated from Henry's Law Constant or vapor pressure.	
Flammability:	not flammable	(Directive 92/69/EEC, A.10)
Lower explosion limit:	For solids not relevant for classification and labelling.	
Upper explosion limit:	For solids not relevant for classification and labelling.	
Ignition temperature:	> 400 °C	
Vapour pressure:	not applicable	
Density:	1.2 g/cm ³ (20 °C)	(EN ISO 1183-1)
Relative density:	1.2 (20 °C)	
Relative vapour density (air):	not applicable	
Solubility in water:	not soluble	
Partitioning coefficient n-octanol/water (log Kow):	not applicable	
Thermal decomposition:	No decomposition if stored and handled as prescribed/indicated. > 230 °C Thermal decomposition above the indicated temperature is possible. Prolonged thermal loading can result in products of degradation being given off.	
Viscosity, dynamic:	not applicable	
Explosion hazard:	not explosive	
Fire promoting properties:	not fire-propagating	

SECTION 10: Stability and Reactivity

10.1 Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

Corrosion to metals: No corrosive effect on metal.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No hazardous reactions when stored and handled according to instructions.

10.4 Conditions to avoid

No conditions to avoid anticipated

10.5 Incompatible materials

Substances to avoid:

No substances known that should be avoided.

10.6 Hazardous decomposition products

Gaseous products of degradation can be given off if the product is greatly overheated.

SECTION 11: Toxicological Information

Acute toxicity

Assessment of acute toxicity:

Virtually nontoxic after a single skin contact. Virtually nontoxic by inhalation. Virtually nontoxic after a single ingestion.

Experimental/calculated data:

LD50 rat (oral): > 5,000 mg/kg

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Irritation

Assessment of irritating effects:

Not irritating to the eyes. Not irritating to the skin. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Respiratory/Skin sensitization

Assessment of sensitization:

The chemical structure does not suggest a sensitizing effect.

Germ cell mutagenicity

Assessment of mutagenicity:

The chemical structure does not suggest a specific alert for such an effect.

Carcinogenicity

Assessment of carcinogenicity:

The chemical structure does not suggest a specific alert for such an effect.

Reproductive toxicity

Assessment of reproduction toxicity:

The chemical structure does not suggest a specific alert for such an effect.

Developmental toxicity

Assessment of teratogenicity:

The chemical structure does not suggest a specific alert for such an effect.

Specific target organ toxicity (single exposure)

Assessment of STOT single:

Based on the available information there is no specific target organ toxicity to be expected after a single exposure.

Repeated dose toxicity and Specific target organ toxicity (repeated exposure)

Assessment of repeated dose toxicity:

Repeated dermal uptake of the substance did not cause substance-related effects. Repeated inhalative uptake of the substance did not cause substance-related effects. Repeated oral uptake of the substance did not cause substance-related effects.

Aspiration hazard

No aspiration hazard expected.

SECTION 12: Ecological Information

12.1. Toxicity

Assessment of aquatic toxicity:

There is a high probability that the product is not acutely harmful to aquatic organisms.

12.2. Persistence and degradability

Assessment biodegradation and elimination (H₂O):

Poorly biodegradable.

Elimination information:

Poorly biodegradable.

12.3. Bioaccumulative potential

Assessment bioaccumulation potential:

Does not significantly accumulate in organisms.

12.4. Mobility in soil

Assessment transport between environmental compartments:

Adsorption in soil: Due to the product characteristics the test is impossible.

12.5. Results of PBT and vPvB assessment

According to Annex XIII of Regulation (EC) No.1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH): The product does not contain a substance fulfilling the PBT (persistent/bioaccumulative/toxic) criteria.

12.6. Other adverse effects

The product does not contain substances that are listed in Annex I of Regulation (EC) 2037/2000 on substances that deplete the ozone layer.

12.7. Additional information

Adsorbable organically-bound halogen (AOX):

This product contains no organically-bound halogen.

SECTION 13: Disposal Considerations

13.1. Waste treatment methods

Can be used without re-conditioning.

May be disposed of or combusted with domestic refuse according to local regulations.

Waste key:

07 02 13 waste plastic

Contaminated packaging:

Completely emptied packagings can be given for recycling.

SECTION 14: Transport Information

Land transport

ADR

Not classified as a dangerous good under transport regulations

UN number: Not applicable

UN proper shipping name: Not applicable

Transport hazard class(es): Not applicable

Packing group: Not applicable
Environmental hazards: Not applicable
Special precautions for user: None known

RID

Not classified as a dangerous good under transport regulations
UN number: Not applicable
UN proper shipping name: Not applicable
Transport hazard class(es): Not applicable
Packing group: Not applicable
Environmental hazards: Not applicable
Special precautions for user: None known

Inland waterway transport

ADN

Not classified as a dangerous good under transport regulations
UN number: Not applicable
UN proper shipping name: Not applicable
Transport hazard class(es): Not applicable
Packing group: Not applicable
Environmental hazards: Not applicable
Special precautions for user: None known

Transport in inland waterway vessel

Not evaluated

Sea transport

IMDG

Not classified as a dangerous good under transport regulations
UN number: Not applicable
UN proper shipping name: Not applicable
Transport hazard class(es): Not applicable
Packing group: Not applicable
Environmental hazards: Not applicable
Special precautions for user: None known

Air transport

IATA/ICAO

Not classified as a dangerous good under transport regulations

UN number: Not applicable
UN proper shipping name: Not applicable
Transport hazard class(es): Not applicable
Packing group: Not applicable
Environmental hazards: Not applicable
Special precautions for user: None known

SECTION 15: Regulatory Information

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

Prohibitions, Restrictions and Authorizations

If it is intended to use materials for the manufacture of consumer goods (e. g. products which will come into contact with foodstuffs or with the skin, toys) or medical products, national and international regulations have to be observed. Where no regulations exist, consumer goods or medical products must at least comply with European legislation. We recommend contacting our Sales and our Product Safety departments.

15.2. Chemical Safety Assessment

Product is not classified as hazardous.

SECTION 16: Other Information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. IZON Science Ltd shall not be held liable for any damage resulting from handling or from contact with the above product. See www.izon.com for additional terms and conditions of sale.

The reader should refer to their individual country's relevant laws and regulations to identify any variant requirements to this (EC) No 1272/2008 [CLP] compliant SDS.