

# SAFETY DATA SHEET



## Nafion™ NR211

Version	Revision Date:	SDS Number:	Date of last issue: 17.07.2024
1.1	16.10.2024	11424330-00002	Date of first issue: 17.07.2024

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### SECTION 1: Identification of the hazardous chemical and of the supplier

#### Product identifier

Product name	:	Nafion™ NR211
SDS-Identcode	:	130000053272
Chemical name	:	
CAS-No.	:	Not Assigned
Product code	:	

#### Recommended use of the chemical and restrictions on use

Recommended use	:	sheets and shaped articles Electrical industry and electronics film
Restrictions on use	:	For industrial use only. Do not use or resell Chemours™ materials in medical applications involving implantation in the human body or contact with internal body fluids or tissues unless agreed to by Seller in a written agreement covering such use. For further information, please contact your Chemours representative.

#### Manufacturer or supplier's details

Company	:	The Chemours Malaysia Sdn. Bhd.
Address	:	Suite 20-01 & 20-02B, Level 20, The Pinnacle, Persiaran Lagoon, Bandar Sunway, Subang Jaya Selangor Darul Ehsan 47500 Malaysia
Telephone	:	+60 3 5021 0178
Emergency telephone number	:	1-800-815-308
Telefax	:	+60 3 2178 4719

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### SECTION 2: Hazards identification

#### Classification of the hazardous chemical

Not a hazardous substance or mixture.

#### Label elements

No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required.

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### Other hazards which do not result in classification

None known.

### SECTION 3: Composition and information of the ingredients of the hazardous chemical

Substance / Mixture : Mixture

#### Components

No hazardous ingredients

### SECTION 4: First aid measures

If inhaled	: Not applicable
In case of skin contact	: Not applicable
In case of eye contact	: Not applicable
If swallowed	: Not applicable
Most important symptoms and effects, both acute and delayed	: Polymer fume fever Local irritation Symptoms may be delayed.
Protection of first-aiders	: No special precautions are necessary for first aid responders.
Notes to physician	: Treat symptomatically and supportively.

### SECTION 5: Firefighting measures

#### Extinguishing media

Suitable extinguishing media : Water spray  
Alcohol-resistant foam  
Carbon dioxide (CO<sub>2</sub>)  
Dry chemical

Unsuitable extinguishing media : None known.

#### Physicochemical hazards arising from the chemical

Specific hazards during fire-fighting : Exposure to combustion products may be a hazard to health.

Hazardous combustion products : No hazardous combustion products are known

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### Special protective equipment and precautions for fire-fighters

Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.  
Use personal protective equipment.

Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.  
Use water spray to cool unopened containers.  
Remove undamaged containers from fire area if it is safe to do so.  
Evacuate area.

### SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures : Not applicable

Environmental precautions : No special environmental precautions required.

Methods and materials for containment and cleaning up : Not applicable

### SECTION 7: Handling and storage

#### Handling

##### Precautions for safe handling

Technical measures : Not applicable

Local/Total ventilation : Not applicable

Advice on safe handling : Not applicable

#### Storage

##### Conditions for safe storage, including any incompatibilities

Conditions for safe storage : Store in accordance with the particular national regulations.  
Ensure proper labeling

Materials to avoid : No special restrictions on storage with other products.

Recommended storage temperature : 2 - 50 °C

Further information on storage stability : Stable under recommended storage conditions.

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### SECTION 8: Exposure controls and personal protection

#### Control parameters

Contains no substances with occupational exposure limit values.

**Appropriate engineering controls** : Not applicable

#### Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection : Not applicable

Skin protection : Not applicable

Hand protection

Remarks : Wash hands before breaks and at the end of workday.

Respiratory protection : If adequate local exhaust ventilation is not available or exposure assessment demonstrates exposures outside the recommended guidelines, use respiratory protection.

Hygiene measures : When using do not eat, drink or smoke.

### SECTION 9: Physical and chemical properties

Appearance : Membrane, film

Colour : natural colour, tan

Odour : alcohol-like

Odour Threshold : No data available

pH : No data available

Melting point/freezing point : No data available

Initial boiling point and boiling range : No data available

Flash point : Not applicable

Evaporation rate : Not applicable

Flammability (solid, gas) : No data available

Upper explosion limit / Upper : No data available

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flammability limit

Lower explosion limit / Lower flammability limit : No data available

Vapour pressure : Not applicable

Relative vapour density : Not applicable

Relative density : No data available

Solubility(ies)

Water solubility : insoluble

Partition coefficient: n-octanol/water : Not applicable

Auto-ignition temperature : No data available

Decomposition temperature : 175 °C

Viscosity

Viscosity, kinematic : Not applicable

Explosive properties : Not explosive

Oxidizing properties : The substance or mixture is not classified as oxidizing.

Particle characteristics

Particle size : No data available

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### SECTION 10: Stability and reactivity

Reactivity : Not classified as a reactivity hazard.

Chemical stability : Stable under normal conditions.

Possibility of hazardous reactions : None known.

Conditions to avoid : None known.

Incompatible materials : None.

Hazardous decomposition products : No hazardous decomposition products are known.

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### SECTION 11: Toxicological information

Information on likely routes of exposure : Skin contact  
Ingestion  
Eye contact

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### Acute toxicity

Not classified based on available information.

### Skin corrosion/irritation

Not classified based on available information.

### Serious eye damage/eye irritation

Not classified based on available information.

### Respiratory or skin sensitisation

#### Skin sensitisation

Not classified based on available information.

#### Respiratory sensitisation

Not classified based on available information.

#### Germ cell mutagenicity

Not classified based on available information.

#### Carcinogenicity

Not classified based on available information.

#### Reproductive toxicity

Not classified based on available information.

#### STOT - single exposure

Not classified based on available information.

#### STOT - repeated exposure

Not classified based on available information.

#### Aspiration toxicity

Not classified based on available information.

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## SECTION 12: Ecological information

### Ecotoxicity

No data available

### Persistence and degradability

No data available

### Bioaccumulative potential

No data available

### Mobility in soil

No data available

### Other adverse effects

No data available

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## SECTION 13: Disposal information

### Disposal methods

Waste from residues : Disposal of waste to be in accordance with the Environmental Quality (Scheduled Wastes) Regulations and other guidelines

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issuance by DOE and/or local authorities.  
Do not dispose of waste into sewer.

Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.  
If not otherwise specified: Dispose of as unused product.

### SECTION 14: Transport information

#### International Regulations

##### UNRTDG

UN number	: Not applicable
Proper shipping name	: Not applicable
Class	: Not applicable
Subsidiary risk	: Not applicable
Packing group	: Not applicable
Labels	: Not applicable
Environmentally hazardous	: no

##### IATA-DGR

UN/ID No.	: Not applicable
Proper shipping name	: Not applicable
Class	: Not applicable
Subsidiary risk	: Not applicable
Packing group	: Not applicable
Labels	: Not applicable
Packing instruction (cargo aircraft)	: Not applicable
Packing instruction (passenger aircraft)	: Not applicable

##### IMDG-Code

UN number	: Not applicable
Proper shipping name	: Not applicable
Class	: Not applicable
Subsidiary risk	: Not applicable
Packing group	: Not applicable
Labels	: Not applicable
EmS Code	: Not applicable
Marine pollutant	: Not applicable

#### Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

#### Special precautions for user

Not applicable

### SECTION 15: Regulatory information

#### Safety, health, and environmental regulations specific for the hazardous chemical

Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013.

Occupational Safety and Health (Use and Standards of Exposure of Chemicals Hazardous to Health) Regulations 2000.

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### SECTION 16: Other information

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Other information : Nafion™ and any associated logos are trademarks or copy-rights of The Chemours Company FC, LLC.  
Chemours™ and the Chemours Logo are trademarks of The Chemours Company.  
Before use read Chemours safety information.  
For further information contact the local Chemours office or nominated distributors.

#### Further information

Sources of key data used to compile the Safety Data Sheet : Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agency, <http://echa.europa.eu/>

Date format : dd.mm.yyyy

#### Full text of other abbreviations

AIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System



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