

# Material Safety Data Sheet

## TYVEK (R) SPUNBONDED OLEFIN (ALL STYLES)

**Infosafe no.** DU001      **Issue Date** March 2000      **Status** ISSUED by  
DUPONT

**Not classified as hazardous**

### 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY

**Product Name** TYVEK (R) SPUNBONDED OLEFIN (ALL STYLES)  
**Product Use** Water and dirt resistant protective clothing, durable envelopes to protect contents.  
**Company Name** DuPont (Australia) Ltd (ABN 59 000 716 469)  
**Address** 168 Walker St North Sydney  
NSW 2060  
**Emergency Tel. Telephone/Telex Number** (02) 9963 1301  
Tel: (02) 9923 6111 Fax: (02) 9923 6011

Other Names	Name	Product Code
	TYVEK	

**Other Information** 24 hour Medical Emergency: 1800 674 415  
(R) DuPont Registered Trademark  
  
DuPont New Zealand  
98 Kerrs Road  
Manukau  
Auckland  
New Zealand  
Ph: (09) 268 5500 (24 Hours)  
NZ Poisons Information Centre Ph: 0800 764766

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Characterization Ingredients	Solid Name	CAS	Proportion
	Polyethylene	9002-88-4	98-100 %
	Proprietary Antistatic Agent		0-1.3 %

### 3. HAZARDS IDENTIFICATION

**Other Information**

Tyvek (R) has been manufactured and converted into industrial and consumer products since 1967 without any identifiable health effects.  
Tyvek (R) may be categorized as essentially non-toxic. The nature of the product make either ingestion or inhalation highly improbable. Normally, converting presents no dust hazard from Tyvek (R) because it is composed of continuous fiber.  
Eye contact will produce a mechanical irritation like any foreign object.  
Skin contact should produce no skin irritation, swelling, or sensitization.  
Human - Testing using a panel of 20 men and women performed using Tyvek (R) spunbonded olefin with up to 3.0% antistatic agent with a 48-hour contact time produced no skin redness or swelling.  
Modified Draize Repeated Insult Patch Test Study using a panel of 106 men and women was performed using Tyvek (R) style 1422A produced no skin redness, swelling, or skin sensitization.

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## 4. FIRST AID MEASURES

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**Inhalation** No data supplied.  
**Ingestion** No data supplied.  
**Skin** No data supplied.  
**Eye** Mechanical irritation - remove particle. Seek medical help if irritation persists.  
**Advice to Doctor** No data supplied.

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## 5. FIRE FIGHTING MEASURES

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**Extinguishing Media** Water, Dry Chemical, CO2.  
**Specific Methods** Wear self-contained breathing apparatus.  
**Specific Hazards**

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## 6. ACCIDENTAL RELEASE MEASURES

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**Spills & Disposal** Spill Clean Up  
Not applicable.  
Incomplete combustion yields hazardous gases/vapors including CO, acrolein, other aldehydes, ketones, fatty acids, and short-chain hydrocarbons.

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## 7. HANDLING AND STORAGE

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## 8. EXPOSURE CONTROLS, PERSONAL PROTECTION

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**Exposure Limits** POLYETHYLENE:  
Worksafe TWA : 10mg/m3 8hr. TWA total dust  
PEL (OSHA) : None Established  
TLV (ACGIH) : None Established  
AEL \* (DuPont) : 10 mg/m3, 8 Hr. TWA, total dust  
5 mg/m3, 8 Hr. TWA, respirable dust  
\* AEL is DuPont's Acceptable Exposure Limit. Where governmentally imposed occupational exposure limits which are lower than the AEL are in effect, such limits shall take precedence.

FF 3-71, Children's Sleepwear Test.

Tyvek (R) and laminates of Tyvek (R) are not intended for use in fire-retardant garments. Fabrics of Tyvek (R) should not be used near heat, flame, sparks nor in explosive environments.

Static Discharge: Some styles of Tyvek (R) do not contain an antistatic agent. These styles can build a static charge during roll or sheet handling operations and care should be used when handling in areas where potential for flammable or explosive vapor/air mixtures exist. In low humidity conditions, all styles of Tyvek (R) whether they contain an antistatic coating or not, can build a static charge.

<b>Personal Protective Equipment</b>	Eye/Face	: None normally needed.
	Respirator	: None normally needed.
	Protective Gloves	: None normally needed.
<b>Eng. Controls</b>	No data supplied.	

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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<b>Appearance</b>	White sheets or rolls.
<b>Odour</b>	Odourless.
<b>Melting Point</b>	110-140 C (230-284 F) @ 760 mm Hg
<b>Solubility in Water</b>	Insoluble.
<b>Specific Gravity (H<sub>2</sub>O=1)</b>	0.95-1.00 g/cc (Will float on water)
<b>Flammability</b>	<p>Tyvek products are not intended for use in fire-retardant garments. Hazardous gases/vapors produced in fire from complete combustion are CO<sub>2</sub> and water. Incomplete combustion results in production of CO, acrolein, other aldehydes, ketones, fatty acids and short-chain hydrocarbons.</p> <p>When exposed to a flame, Tyvek (R) shrinks away rapidly. If the flame is made to follow the shrinking sheet, Tyvek (R) will melt at 275 F (135 C) and if the auto-ignition temperature of (625-660 C) is reached, Tyvek (R) will burn.</p> <p>Type 14 and 16 Tyvek (R) is rated '*Class 1-Normal Flammability' by the US Federal Flammable Fabrics Act for Clothing Textiles (16CFR-1610). Tyvek (R) does not pass US DOC FF 3-71, Children's Sleepwear Test.</p> <p>Tyvek (R) and laminates of Tyvek (R) are not intended for use in fire-retardant garments. Fabrics of Tyvek (R) should not be used near heat, flame, sparks nor in explosive environments.</p> <p>Static Discharge: Some styles of Tyvek (R) do not contain an antistatic agent. These styles can build a static charge during roll or sheet handling operations and care should be used when handling in areas where potential for flammable or explosive vapor/air mixtures exist. In low humidity conditions, all styles of Tyvek (R) whether they contain an antistatic coating or not, can build a static charge.</p>
<b>Other Information</b>	% volatiles: < 0.1 wt% @ 25 degC (77 degF)

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## 10. STABILITY AND REACTIVITY

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<b>Stability</b>	<p>Stable.</p> <p>Aromatic hydrocarbons, gasoline, lubricating oils, halogenated hydrocarbons will soften and swell Tyvek.</p>
<b>Hazardous Polymerization Materials to Avoid</b>	<p>Polymerization will not occur.</p> <p>Incompatible with liquid chlorine, fluorine gas, strong oxidizing acids (eg. concentrated sulfuric acid, concentrated nitric acid, etc.), magnesium, aluminum, and alum and ammonium salts.</p>
<b>Hazardous Decomposition</b>	<p>Exothermic oxidation starts to occur at 335 C (635 F).</p> <p>Autoignition occurs at 400 degC.</p>

**Products** Incomplete combustion yields hazardous gases/vapors including CO, acrolein, other aldehydes, ketones, fatty acids, and short-chain hydrocarbons.

**Hazardous Reaction**

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## 11. TOXICOLOGICAL INFORMATION

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**Inhalation** Improbable route of exposure.  
Normally, converting presents no dust hazard from Tyvek (R) because it is composed of continuous fiber.

**Ingestion** Improbable route of exposure.

**Skin** Skin contact should produce no skin irritation, swelling or sensitization.

**Eye** Physical mechanical irritation only.

**Chronic Effects** None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

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## 12. ECOLOGICAL INFORMATION

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**Environment Protection** Ecotoxicological Information  
Aquatic Toxicity  
Non-toxic - insoluble  
Avoid contact with eyes.  
Tyvek (R) is slippery. Care should be used in moving it.  
It should not be left in a walkway where it may be walked upon and a person could slip and fall.  
Keep away from heat, sparks and flames.  
In low humidity conditions, all styles of Tyvek (R) whether they contain an antistatic coating or not, can build a static charge.  
should be ventilated.  
Do not stick rolls more than four (4) units high. Rolls should be stored vertically on their pallets.

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## 13. DISPOSAL CONSIDERATIONS

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**Waste Disposal** Waste Disposal:  
Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations.  
See Section on Regulatory Information under RCRA.  
Not applicable.

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## 14. TRANSPORT INFORMATION

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**U.N. Number** None Allocated

**Proper Shipping Name** None Allocated

**DG Class** None Allocated

**Hazchem Code** None Allocated

**Packing Group** None Allocated

**Storage and Transport** Do not store with strong oxidizing acids.  
Keep from excessive heat and flames.  
Do not expose to exhaust gases from internal combustion engines or heaters. Prolonged exposure will cause outer warp and edges to turn yellow or pink. Storage area should be ventilated.  
Avoid contact with eyes.

Tyvek (R) is slippery. Care should be used in moving it. It should not be left in a walkway where it may be walked upon and a person could slip and fall.

Keep away from heat, sparks and flames.

In low humidity conditions, all styles of Tyvek (R) whether they contain an antistatic coating or not, can build a static charge. Should be ventilated.

Do not stick rolls more than four (4) units high. Rolls should be stored vertically on their pallets.

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## 15. REGULATORY INFORMATION

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### **Packaging & Labelling**

#### Shipping Information

DOT/IMO

Proper Shipping Name : DuPont Tyvek (R)

DOT

Hazard Class : Not regulated material

I.D. No. (UN/NA) : Not regulated material

DOT Label(s) : Not regulated material

Subsidiary Hazard Class : Not regulated material

Reportable quantity : Not regulated material

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## 16. OTHER INFORMATION

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### **Contact Person/Point**

MSDS=SP6013 , Revised: =9-AUG-1995 Loaded 12/01/1996

For sales, technical, and all product related enquiries contact Du Pont's North Sydney office on 9923 6111. Outside Sydney metropolitan area 1800 252 997 is a toll free number to North Sydney office to assist communications, ask for the customer service, Technical, or marketing personnel for the product family relative to the enquiry.

Telephone numbers for other offices are:

North Sydney: (02) 9923-6111

Melbourne: (03) 9935-5666

The data in this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.

**Poisons Schedule** Not Scheduled

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End of MSDS

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