

# Material Safety Data Sheet

## SONTARA SPUNLACED FABRICS (ALL TYPES)

**Infosafe no.** DU112      **Issue Date** December 1998      **Status** ISSUED by  
DUPONT

**Not classified as hazardous**

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

**Product Name** SONTARA SPUNLACED FABRICS (ALL TYPES)  
**Product Use** Heat resistant applications and other specialist requirements.  
Disposable medical clothing and medical bandages and dressings.  
**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
	SONTARA ARAMID FIBER	
	SONTARA FIBIRDS	
	SONTARA (R) ARAMID SPUNLACED FABRIC	
	SONTARA SL	
	SONTARA (R) FABRIC	
	SONTARA POLYESTER FABRIC	
	SONTARA WOODPULP/POLYESTER FABRIC	
	SONTARA RAYON/POLYESTER FABRIC	
	TAPE SONTARA	

**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** Solid

**Characterization**

<b>Ingredients</b>	<b>Name</b>	<b>CAS</b>	<b>Proportion</b>
	POLY(ISOPHTHALOYL CHLORIDE/M-PHENYLENE DIAMINE)		0-100 %
	POLYETHELENE TEREPHTHALATE (polyester types only)		0-100 %
	RAYON (rayon polyester fabric type)		70 %
	WOOD PULP		55 %
	Acrylic Resin	29354-75-4	0-18 %
	N,N,DIMETHYLACETAMIDE (DAMC-Aramid types only)	127-19-5	0-10 %
	Fibre Lubricants		0-10 %

**Other Information**

Note: The above fibre lubricants typically consist of various formulations of natural oils such as coconut and peanut oils, esters, oleates, palmitates and stearates.

### 3. HAZARDS IDENTIFICATION

### 4. FIRST AID MEASURES

**Inhalation**

Remove victim to fresh air.  
If breathing laboured and patient cyanotic (blue), ensure airways are clear and have a qualified person give oxygen through a face mask. If breathing has stopped apply artificial respiration at once. In the event of cardiac arrest, apply external cardiac massage.  
Seek medical advice.

**Ingestion**

No specific intervention is indicated as compound is not likely to be hazardous by ingestion. However, in case of gastro-intestinal distress following accidental ingestion, call a physician.

**Skin**

If fibers irritate the skin, wash with soap and water.  
Wash contaminated clothing before reuse.  
Use hand creams to sooth and moisten irritated skin.  
Get medical attention if irritation develops or persists.

**Eye**

Irrigate with copious quantity of water for 15 minutes. Seek medical assistance if symptoms persist.

### 5. FIRE FIGHTING MEASURES

**Specific Hazards**

Does not ignite. Non combustible.  
Hazardous Combustion Products: Combustion gases are similar to those from natural fibers such as wool - mostly carbon dioxide, water and oxides of nitrogen. However, carbon monoxide small amounts of hydrogen cyanide and various other toxic gases may be produced depending on the conditions of burning. In insufficient oxygen some toxic gases are produced including carbon monoxide.  
Unusual Fire and Explosion Hazards: SONTARA aramid spunlaceed fabrics are inherently flame resistant but can be ignited (limiting oxygen index for SONTARA is approx. 28 and decreases to 21 as the temperature approaches 300 deg C).  
Burning normally stops when the ignition source is removed.  
Styles R-309 and R313 are somewhat more flammable due to their resin -

pigment coating. However, they pose no unusual flammability hazard. Accumulation of fiber dust and fly at sufficient concentrations could present a fire hazard.

Use extinguishing media suitable for combustible materials in the area.

Extinguishing Media:

Water, foam dry chemical carbon dioxide.

Wear self-contained breathing apparatus.

Wear full protective equipment.

Avoid breathing decomposition products.

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## 6. ACCIDENTAL RELEASE MEASURES

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**Spills & Disposal** Vacuum, shovel, pick up or sweep up material for salvage or disposal. It is stable in all recommended use environments and requires no special spill handling procedures. When Sontara fibre is burnt, no usual combustion gases have been observed, and its combustion products are similar to those of other organic materials composed of the same elements. Sontara is not readily biodegradable, nor radioactive. It contains no significant percentage of materials extractable in water so its effect on ground water in case of landfill should be negligible.

**WASTE DISPOSAL:**  
Sontara fabric is not a hazardous waste as defined by regulations implementing the Resource Conservation and Recovery Act. Since the fibre is essentially nonbiodegradable, do not flush to surface water or sanitary sewer system.  
Place in appropriate container.

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## 7. HANDLING AND STORAGE

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## 8. EXPOSURE CONTROLS, PERSONAL PROTECTION

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**Exposure Limits** SONTARA:  
Worksafe TWA : None established  
Use 10 mg/m<sup>3</sup> for particulates not otherwise classified  
Worksafe STEL : None established  
AEL\* (Du Pont): 10 mg/m<sup>3</sup> - 8 Hr TWA, Total dust  
5 mg/m<sup>3</sup> - 8 Hr TWA, Respirable dust  
TLV (ACGIH) : None established  
PEL (OSHA) : None established  
N,N-Dimethylacetamide:  
Worksafe TWA : 10 ppm, 36 mg/m<sup>3</sup>  
Worksafe STEL : None established  
AEL\* (Du Pont): 10 ppm - 8 & 12 Hr TWA - Skin  
TLV (ACGIH) : 10 ppm, 36 mg/m<sup>3</sup> - 8 Hr TWA - Skin  
PEL (OSHA) : 10 ppm, 35 mg/m<sup>3</sup> - 8 Hr TWA - Skin  
\*AEL is Du Pont's Acceptable Exposure Limit.

**Personal Protective Equipment** **EYE/FACE PROTECTION:**  
Wear safety glasses.  
**SKIN PROTECTION:**  
None required.  
Fabrics being processed at high speeds can cause abrasions or cuts, and can form nips with rolls etc. It is good industrial hygiene to minimize contact.  
**RESPIRATORY PROTECTION:**  
If there is potential for airborne exposures in excess of applicable limits, or if there is potential for irritation of nasal passages to occur due to

mechanical action of the fibers wear an approved organic vapour cartridge respirators if there is potential for airborne exposures in excess of applicable limits.

It is important that exposure to any inhalable material be minimised by the use of adequate ventilation, such as local exhaust, effective containment and personal cleanliness.

**Eng. Controls** Keep containers in a well ventilated area.

Use sufficient ventilation to keep employees exposure below recommended limits.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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<b>Appearance</b>	ODOUR: Odourless, (mild) Solvent FORM: Solid fibre, non woven fabrics some resin coated. COLOUR: Coated fabrics are black 'rubbery' Others are white non-woven textile fabrics.
<b>Melting Point</b>	= OR > than 250 degC
<b>Boiling Point</b>	N/A
<b>Specific Gravity (H2O=1)</b>	0.1-0.3 (Water=1.0)
<b>Vapour Pressure</b>	N/A
<b>Vapour Density (Air=1)</b>	N/A
<b>Flash Point</b>	N/A
<b>Flammability</b>	Sontara is difficult to ignite and if not contaminated with flammable materials or certain metal oxides, will usually self extinguish in absence of an external heat source.
<b>Ignition Temperature</b>	> 300 degC (572 degF)
<b>Explosion Properties</b>	N/A
<b>Other Information</b>	Solubility in water: Insoluble

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## 10. STABILITY AND REACTIVITY

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<b>Hazardous Reaction</b>	Instability : Stable. Incompatibility : None reasonably foreseeable. Polymerization : Polymerization will not occur. Decomposition : Hazardous gases/vapours produced upon decomposition are formaldehyde, ethanol, methanol, acetic acid, acetone, etc. The exact chemical composition of these gases will of course, depend on the conditions of heating, (temperature, duration, availability of oxygen). In our experience we are not aware of chemicals such as these reaching concentrations that present a serious health hazard. CONDITIONS TO AVOID: SONTARA (R) polymer to degrade rapidly above 300 deg C The thermal degradation rate increases with temperatures. The resin coating may soften and thermally decompose at elevated temperatures (above 150 deg C).
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## 11. TOXICOLOGICAL INFORMATION

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**Toxicology Information**

ANIMAL DATA:  
Sontara is not a skin irritant, is untested for eye irritancy and is not a skin sensitizer in animals.  
DMAC toxicology (Aramid types only):  
DMAC possesses a low order of acute toxicity. On the other hand, repeated animal exposures have disclosed that DMAC is capable of producing systemic injury when inhaled or absorbed through the skin in sufficient quantities over a period of time. None of these were at or near exposure levels considered likely in processing Sontara Types E-88, E-88C and E-140 Spunlaced Fabric. For details refer to MSDS for DMAC.  
Inhalation: A two week subchronic test in which mice were exposed to DNMAC via inhalation showed liver and testicular effects at high exposure concentrations (300, 500 and 700 ppm). No adverse effects were observed at 100 ppm.  
ECOTOXICOLOGICAL INFORMATION:  
The polyester is stable in the environment and the cellulose can be microbologically degraded like natural products. The products of incineration with sufficient oxygen are water and carbon dioxide.

**Inhalation  
Ingestion  
Skin**

Inhalation of mist, dust or dried residue may cause respiratory irritation.  
Not likely to be hazardous by ingestion.  
Contact with skin may result in irritation.

**Eye**

May be an eye irritant.

**Chronic Effects**

N,N-DIMETHYLACETAMIDE (DMAC-Aramid types only):  
Animal studies have shown pure DMAC to be slightly toxic by the oral route of administration. It is mildly irritating to the skin and eyes and is moderately toxic by skin absorption. DMAC can be absorbed through the skin in significant amounts. Prolonged dermal and inhalation exposure in animals has produced moderate testicular, embryotoxic, and degenerative liver effects. DMAC is embodied in the fiber to the extent that absorption of DMAC through the skin from handling the fiber itself is not a significant hazard. We believe DMAC does not pose a significant hazard to persons (including the fetus) if exposures are kept below this limit provided there is no opportunity for skin contact.  
FIBRE LUBRICANTS:  
This product contains fiber lubricants, typically consisting of various formulations of natural oils such as coconut and peanut oils, esters, oleates, palmitates, and stearates. These lubricating oils are toxicologically evaluated prior to product commercialization and have been found to be generally of a low order of acute oral and inhalation toxicity in animals and dermal toxicity in humans and do not present a significant health hazard in their normal handling and use.

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## 12. ECOLOGICAL INFORMATION

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**Environment Protection**

Not listed in the Catalogue of aquatic hazardous materials (January 1991). These products are essentially inert in the environment. They do not decompose in landfills and other natural environments, and therefore do not release toxic degradation materials into ecosystem.

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## 13. DISPOSAL CONSIDERATIONS

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## 14. TRANSPORT INFORMATION

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**U.N. Number** None Allocated  
**Proper Shipping** None Allocated

**Name**  
**DG Class** None Allocated  
**Hazchem Code** None Allocated  
**Packing Group** None Allocated  
**Storage and Transport** Keep container tightly closed. Do NOT store or consume food, drink or tobacco in areas where they may become contaminated with this material. Avoid breathing hot vapours, oil mists and airborne fibers.  
Storage: Store all rolls and bales in accord with good material handling practice.

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## 15. REGULATORY INFORMATION

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## 16. OTHER INFORMATION

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**Contact Person/Point** 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  
**Technical Data** SOURCE MSDS: TF0035 E.I. DUPONT de NEMOURS & CO INC WILMINGTON DELAWARE  
USA  
REVISED 13 APRIL 1993

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End of MSDS

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