This SDS adheres to the standards and regulatory requirements of Canada and may not meet the regulatory requirements in other countries.

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : KEVLAR® Para-aramid  
Product Grade/Type : Yarn, Staple, Floc, Fabric  
MSDS Number : 150000002634  
Manufacturer : E.I. du Pont Canada Company  
P.O. Box 2200, Streetsville  
Mississauga, ON  
L5M 2H3  
Canada  
Product Information : 1-800-387-2122  
Medical Emergency : 1-800-441-3637 (24 hours)

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview
The hazards of this product are associated mainly with its processing. Processing para-aramid products can release respirable dust and respirable fibre particulate. Dust may form explosive mixture in air. Prolonged inhalation of respirable dust and respirable fibre particulate at high concentrations can cause lung damage. High concentrations of dust can irritate eyes, nose and respiratory system and cause coughing and sneezing. Continual rubbing of fibre particulates and dust on the skin can cause a transitory, mild irritation with redness or itching.

Potential Health Effects
Carcinogenicity
None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, or OSHA, as a carcinogen.
KEVLAR® Para-aramid

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No.</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Para-aramid fiber</td>
<td></td>
<td>100 %</td>
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</tbody>
</table>

Exposure limits may be applicable for the following:

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Para-aramid</td>
<td>26125-61-1</td>
</tr>
</tbody>
</table>

SECTION 4. FIRST AID MEASURES

General advice: No hazards which require special first aid measures. If symptoms persist, call a physician. If irritation occurs, flush area thoroughly with water.

SECTION 5. FIRE-FIGHTING MEASURES

Flammable Properties:
- Flash point: not applicable
- Thermal decomposition: > 300 °C (> 572 °F)

Fire and Explosion Hazard: Hazardous decomposition products formed under fire conditions.

Suitable extinguishing media: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Firefighting Instructions  : Wear self contained breathing apparatus for fire fighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

NOTE: Review FIRE FIGHTING MEASURES and HANDLING (PERSONNEL) sections before proceeding with clean-up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean-up.

Safeguards (Personnel)  : None.

Spill Cleanup  : Avoid dust formation. Clean up dusts and fibres with high efficiency particulate air (HEPA) filtered vacuum equipment, or by wet cleaning.

Accidental Release Measures  : Do not let product enter drains.

SECTION 7. HANDLING AND STORAGE

Handling (Personnel)  : Avoid dust formation. Exposure to fibre fly, dust and decomposition products of spinfinishes should be avoided by ventilation and/or vacuum cleaning. Do not touch moving threadlines. Entanglement with this fibre can severely cut or even sever fingers. Avoid breathing dust.

Storage  : Keep away from direct sunlight.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls  : Ensure adequate ventilation. Recirculated air should be filtered to remove respirable dust. Provide for appropriate exhaust ventilation and dust collection at machinery. Static charges can cause explosions in solvent and dust laden
atmospheres. Provide grounding of equipment to prevent static build-up.

Personal protective equipment
Respiratory protection : When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
Eye protection : Safety glasses with side-shields

Exposure Guidelines
Exposure Limit Values
Para-aramid
AEL * (DUPONT) 2fibers/cm³ 8 & 12 hr. TWA Respirable fibers.
AEL * (DUPONT) 5 mg/m³ 8 & 12 hr. TWA Non-fibrous particulate and/or non-respirable fibres.

* 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.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES
Form : Nonwoven fabric, woven fabric, fibres, yarn
Color : gold
Odor : odourless
Melting point/range : not applicable
Boiling point/boiling range : not applicable
Specific Gravity : 1.44 - 1.45 at 20 °C (68 °F)
Water solubility : insoluble

SECTION 10. STABILITY AND REACTIVITY
**KEVLAR® Para-aramid**

**Incompatibility**
Strong acids and strong bases

**Hazardous decomposition products**
Hazardous thermal decomposition products: Carbon dioxide, nitrogen oxides (NOx), Hydrogen cyanide (gaseous), Ammonia, anhydrous Aldehydes, Hydrocarbons

**SECTION 11. TOXICOLOGICAL INFORMATION**

**KEVLAR® Para-aramid**

**Sensitisation**
Patch test on human volunteers did not demonstrate sensitization properties.

**Further information**
Effects of breathing high concentration of respirable particles may include: Risk of serious damage to the lungs (by inhalation).

**Para-aramid**

**Oral ALD**
> 7,500 mg/kg, rat

**Skin irritation**
No skin irritation, rabbit non-irritant

**Eye irritation**
non-irritant

**Repeated dose toxicity**
Inhalation rat lung effects

**Carcinogenicity**
Animal testing did not show any carcinogenic effects.

**Mutagenicity**
Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

**SECTION 12. ECOLOGICAL INFORMATION**
Additional ecological information : No data is available on the product itself.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste Disposal : Can be landfilled or incinerated, when in compliance with local regulations. Do not flush into surface water or sanitary sewer system.

SECTION 14. TRANSPORT INFORMATION

Not classified as dangerous in the meaning of transport regulations.

SECTION 15. REGULATORY INFORMATION

DSL Status : On the inventory, or in compliance with the inventory
WHMIS Classification : - Not WHMIS controlled.

SECTION 16. OTHER INFORMATION

MSDS preparation date : 12/02/2010
Restrictions for use : Do not use DuPont materials in medical applications involving implantation in the human body or contact with internal body fluids or tissues unless the material has been provided from DuPont under a written contract that is consistent with DuPont policy regarding medical applications and expressly acknowledges the contemplated use. For further information,
please contact your DuPont representative. You may also request a copy of the DuPont POLICY Regarding Medical Applications H-50103-3 and DuPont CAUTION Regarding Medical Applications H-50102-3.

It is recommended that additional information be requested if an unusual application of synthetic fibres is intended.

® DuPont's registered trademark

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Significant change from previous version is denoted with a double bar.