

MATERIAL SAFETY DATA SHEET

TORLON® 4203L

MSDS No. 01402800 EC/ENGLISH

1.0 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: TORLON® 4203L

MANUFACTURER/SUPPLIER:
Solvay Advanced Polymers, L.L.C.
4500 McGinnis Ferry Road
Alpharetta, Georgia 30005
USA

EMERGENCY INFORMATION:

+49 894 556 0321
800 76 76 7600

OTHER PRODUCT INFORMATION:

+32 5 533 9505

Solvay Advanced Polymers Belgium
Industriepark De Bruwaan 9
BE-9700 Oudenaarde
Belgium

2.0 COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS#	Range % by Wt.	R-Groups
Polyamide-imide polymer			
Titanium dioxide	13463-67-7	0-5	

(See Section 8.0, "Exposure Controls/Personal Protection", for exposure guidelines)

3.0 HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: This product has been evaluated and does not require any hazard warning on the label under EC criteria. Handling and/or processing of this material may generate a dust which can cause mechanical irritation of the eyes, skin, nose and throat.

POTENTIAL HEALTH EFFECTS:

EYE CONTACT: No significant health hazards identified. Particles or fibers may cause slight discomfort similar to getting dust in the eye.

SKIN CONTACT: No significant health hazards identified. Particles or fibers may cause slight discomfort similar to rubbing sand against the skin.

INHALATION: No significant irritation expected other than possible mechanical irritation.

INGESTION: No significant health hazards identified.

4.0 FIRST AID MEASURES

EYE: Flush eyes with plenty of water. Get medical attention if irritation persists.

SKIN: Wash exposed skin with soap and water.

INHALATION: If adverse effects occur, remove to uncontaminated area. Get medical attention.

INGESTION: If a large amount is swallowed, get medical attention.

5.0 FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Agents approved for Class A hazards (e.g., foam, steam) or water fog.

UNUSUAL FIRE AND EXPLOSION HAZARDS: High dust concentrations have a potential for combustion or explosion.

FIRE-FIGHTING EQUIPMENT: Firefighters should wear full bunker gear, including a positive pressure self-contained breathing apparatus.

HAZARDOUS COMBUSTION PRODUCTS: Incomplete burning can produce carbon monoxide and/or carbon dioxide and other harmful products. Heating can produce toxic fumes of metal oxides.

6.0 ACCIDENTAL RELEASE MEASURES

Contain and remove by mechanical means. Vacuum or sweep out; avoid producing dust.

7.0 HANDLING AND STORAGE

HANDLING: Minimize dust generation and accumulation.

STORAGE: No special requirements.

8.0 EXPOSURE CONTROLS / PERSONAL PROTECTION

EYE: None required; however, use of eye protection is good industrial practice. Use dust goggles if high dust concentration is generated.

SKIN: None required; however, use of protective gloves/clothing is good industrial practice.

INHALATION: None required; however, use of adequate ventilation is good industrial practice. Do not breathe dust. If ventilation is inadequate, use respirator that will protect against dust/mist.

ENGINEERING CONTROLS: No special controls necessary.

EXPOSURE GUIDELINES:

Component	CAS#	Exposure Limits
Polyamide-imide polymer		None Established.
Titanium dioxide	13463-67-7	ACGIH TLV-TWA: 10 mg/m ³ (total dust) U.K. OES (TWA): 10 mg/m ³ (dust) ; 5 mg/m ³ (respirable dust) FRG MAK: 6 mg/m ³ (dust)

9.0 CHEMICAL AND PHYSICAL PROPERTIES

APPEARANCE AND ODOR: Odorless. Green. Brown. Powder or pellets.

FLASHPOINT: Greater than 870°F (500°C)

FLAMMABILITY CLASSIFICATION: Not Flammable.

UEL: Not determined.

LEL: Not determined.

AUTOIGNITION TEMPERATURE: Not determined.

pH: Not determined.

VAPOR PRESSURE: Not determined.

VAPOR DENSITY: Not determined.

BOILING POINT: Not determined.

MELTING POINT: 675°F(357°C)

SOLUBILITY IN WATER: Negligible, below 0.1%.

SPECIFIC GRAVITY (WATER=1): 1.38

10.0 STABILITY AND REACTIVITY

STABILITY: Stable.

CONDITIONS TO AVOID: Avoid generating dust.

MATERIALS TO AVOID: None identified.

HAZARDOUS DECOMPOSITION: Incomplete burning can produce carbon monoxide and/or carbon dioxide and other harmful products. Heating can produce toxic fumes of metal oxides.

HAZARDOUS POLYMERIZATION: Will not occur.

11.0 TOXICOLOGICAL INFORMATION

ACUTE TOXICITY DATA:

EYE IRRITATION: Testing not conducted. See Other Toxicity Data.

SKIN IRRITATION: Testing not conducted. See Other Toxicity Data.

DERMAL LD50: Testing not conducted. See Other Toxicity Data.

ORAL LD50: Testing not conducted. See Other Toxicity Data.

INHALATION LC50: Testing not conducted. See Other Toxicity Data.

OTHER TOXICITY DATA: Specific toxicity tests have not been conducted on this product. Our hazard evaluation is based on information from similar products, the ingredients, technical literature, and/or professional experience.

Dense dust generated by the handling and/or processing of this material may be irritating to the eyes, skin, nose, and throat.

Titanium dioxide has been assigned exposure limits by ACGIH and OSHA based on nuisance dust and not toxicity.

No component of this product present at levels greater than 0.1% is identified as a carcinogen by the U.S. National Toxicology Program, the U.S. Occupational Safety and Health Act, or the International Agency on Research on Cancer (IARC).

12.0 ECOLOGICAL INFORMATION

Ecological testing has not been conducted on this product.

13.0 DISPOSAL INFORMATION

Burial at a permitted landfill is recommended. Disposal must be in accordance with applicable federal, state, or local regulations.

14.0 TRANSPORTATION INFORMATION

Sea (IMO/IMDG)

Shipping Name Not Regulated

Air (ICAO/IATA)

Shipping Name Not Regulated

European Road/Rail (ADR/RID)

Shipping Name Not Regulated

U.S. DEPT OF TRANSPORTATION

Shipping Name Not Regulated

Canadian Transportation of Dangerous Goods

Shipping Name Not Regulated

15.0 REGULATORY INFORMATION

EC CLASSIFICATION: This product is not classified as dangerous under the Directives EC/67/548 (the "Dangerous Substances Directive") and EC/88/379 (the "Dangerous Preparations Directive") as amended and adapted.

EC SYMBOL: None required.

RISK PHRASES: None required.

SAFETY PHRASES: None required.

OCCUPATIONAL EXPOSURE LIMITS:

Component	CAS#	Exposure Limits
Polyamide-imide polymer		None Established.
Titanium dioxide	13463-67-7	ACGIH TLV-TWA: 10 mg/m ³ (total dust) U.K. OES (TWA): 10 mg/m ³ (dust) ; 5 mg/m ³ (respirable dust) FRG MAK: 6 mg/m ³ (dust)

EC INVENTORY (EINECS/ELINCS): In compliance.

JAPAN INVENTORY (MITI): Listed on inventory.

AUSTRALIA INVENTORY (AICS): One or more components not listed on inventory
- For research and development purposes only.

U.S. INVENTORY (TSCA): Listed on inventory.

KOREA INVENTORY (ECL): Not determined.

CANADA INVENTORY (DSL): One or more of the components of this product is not listed on the DSL.

PHILIPPINE INVENTORY (PICCS): Not determined.

16.0 OTHER INFORMATION

Issued: February 18, 1994

Supersedes: February 04, 1992

This MSDS is intended for only the selected countries to which it is applicable. For example, this MSDS is not intended for use nor distribution within North America. You should contact Solvay America company representative for the official North America MSDS.

The information given corresponds to the current state of our knowledge and experience of the product, and is not exhaustive. This applies to product which conforms to the specification, unless otherwise stated. In this case of combinations and mixtures one must make sure that no new dangers can arise. In any case, the user is not exempt from observing all legal, administrative and regulatory procedures relating to the product, personal hygiene, and protection of human welfare and the environment.