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### 1 Identification of the substance / preparation and of the company

**Product:** Tenax®-E HTS40 F11  
**Registration number:** not applicable  
**Use:** filament yarn  
**Identified use:** none  
**Method of operation:** See product information.  
**Company:** Toho Tenax Europe GmbH  
 Kasinostr. 19-21  
 42103 Wuppertal / Deutschland  
**Phone:** +49 202 32-3435  
**Fax:** +49 202 32-3303  
**Homepage:** www.tohotenax-eu.com  
**Emergency phone:** +49 (0) 2452 15-2444  
**Responsible:** safety@tohotenax-eu.com

### 2 Hazards identification

**Physico-chemical hazards:** In the supplied form the product isn't not explosive at all ; however the build-up of fine dust can lead to a risk of dust explosions. See chapter 10.  
**Human health dangers:** See chapter 11.  
**Environmental hazards:** No particular hazards known.  
**Other hazards:** none  
**Hazard symbols:**  
  
**R-phrases:** none

### 3 Composition / Information on ingredients

Carbon fiber on basis polyacrylonitrile (Carbon)	> 95%
CAS: 308063-67-4(7440-44-0), EINECS/ELINCS: Polymer (231-153-3), EU-INDEX: , ECBnr:	
No dangerous components.	

### 4 First aid measures

**General information:** Change soaked clothing.  
**Inhalation:** In the event of symptoms seek for medical treatment. Ensure supply of fresh air.  
**Skin contact:** In case of contact with skin wash off immediately with soap and water. Consult a doctor if skin irritation persists.  
**Eye contact:** In case of contact with eyes rinse thoroughly with plenty of water and seek medical advice.  
**Ingestion:** Supply with medical care. Induce the patient to vomit of his own accord only if fully conscious. Rinse out mouth and give plenty of water to drink.  
**Advice to doctor:** treat symptomatically

### 5 Fire-fighting measures

**Suitable extinguishing media:** foam, dry powder, water spray jet, carbon dioxide  
**Extinguishing media that must not be used:** full water jet  
**Special exposure hazards arising from the substance or preparation itself or combustion products:** risk of formation of toxic pyrolysis products, carbon monoxide (CO), not combusted hydrocarbons  
**Special protective equipment for firefighters:** Use self-contained breathing apparatus. Do not inhale explosion and/or combustion gases.  
**Additional information:** Fire residues and contaminated firefighting water must be disposed of in accordance within the local regulations.

### 6 Accidental release measures

**Personal precautions:** not applicable  
**Environmental precautions:** not applicable  
**Methods for cleaning up:** Dispose of absorbed material in accordance within the regulations. Take up mechanically.

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### 7 Handling and storage

<b>Advice on safe handling:</b>	No special measures necessary if used correctly.
<b>Advice on protection against fire and explosion:</b>	Keep away from sources of ignition - refrain from smoking. Dust can form an explosive mixture with air.
<b>Requirements for storage rooms and vessels:</b>	No special measures necessary.
<b>Advice on storage compatibility:</b>	Do not store together with oxidizing agents.
<b>Further information on storage conditions:</b>	store in a dry place, recommended storage temperature: < 50 °C, relative humidity: < 85 %

### 8 Exposure controls / personal protection

**Additional advice on system design:** Ensure adequate ventilation on workstation.

#### Ingredients with occupational exposure limits to be monitored: (GB)

Carbon fiber on basis polyacrylonitrile (Carbon)	> 95%
0,5mg/m <sup>3</sup> *, General remarks: fibres/ml (respirable fibres)	

<b>Respiratory protection:</b>	short term: filter apparatus, filter P1
<b>Hand protection:</b>	butyl rubber, > 120 min (EN 374)
<b>Eye protection:</b>	safety glasses
<b>Skin protection:</b>	light protective clothing
<b>General protective measures:</b>	Do not inhale dust. Avoid contact with eyes and skin.
<b>Hygiene measures:</b>	Do not eat, drink, smoke or take drugs at work. Wash hands before breaks and after work. Use barrier skin cream.
<b>Delimitation and monitoring of the environmental exposition:</b>	not determined

### 9 Physical and chemical properties

<b>Form:</b>	fibre
<b>Color:</b>	black
<b>Odor:</b>	odourless
<b>pH-value:</b>	not applicable
<b>pH-value [1%]:</b>	not applicable
<b>Boiling point [°C]:</b>	not applicable
<b>Flash point [°C]:</b>	> 100
<b>Flammability [°C]:</b>	not applicable
<b>Lower explosion limit:</b>	not applicable
<b>Upper explosion limit:</b>	not applicable
<b>Oxidizing properties:</b>	no
<b>Vapour pressure [kPa]:</b>	not applicable
<b>Density [g/ml]:</b>	1,7 - 2,0
<b>Density at [°C]:</b>	20°C
<b>Bulk density [kg/m<sup>3</sup>]:</b>	not applicable
<b>Solubility in water:</b>	immiscible
<b>Partition coefficient [n-octanol/water]:</b>	not determined
<b>Viscosity:</b>	not applicable
<b>Relative vapour density determined in air:</b>	not applicable
<b>Evaporation speed:</b>	not applicable
<b>Melting point [°C]:</b>	ca. 3500
<b>Autoignition temperature [°C]:</b>	not applicable
<b>Decomposition temperature [°C]:</b>	> 650 (in air), preparation > 290

### 10 Stability and reactivity

<b>Hazardous reactions:</b>	Reactions with strong oxidizing agents. Accumulation of fine dust may entail the risk of a dust explosion in the presence of air.
<b>Hazardous decomposition products:</b>	No hazardous decomposition products known.

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### 11 Toxicological information

<b>Acute oral toxicity:</b>	not determined
<b>Acute dermal toxicity:</b>	not determined
<b>Acute inhalational toxicity:</b>	not determined
<b>Irritant effect on eye:</b>	not determined
<b>Irritant effect on skin:</b>	not determined
<b>Sensitization:</b>	not determined
<b>Subacute toxicity:</b>	not determined
<b>Chronic toxicity:</b>	not determined
<b>Mutagenicity:</b>	not determined
<b>Reproduction toxicity:</b>	not determined
<b>Carcinogenicity:</b>	not determined
<b>Experiences made in practice:</b>	None fibres with diameter below 3 micrometers. The filament is not breathable (IARC). Fiber abrasion can cause mechanical skin irritation.
<b>General remarks:</b>	Toxicological data are not available. The product was classified on the basis of the calculation procedure of the preparation directive.

### 12 Ecological information

<b>Fish toxicity:</b>	not determined
<b>Daphnia toxicity:</b>	not determined
<b>Behaviour in environment compartments:</b>	not determined
<b>Behaviour in sewage plant:</b>	not applicable
<b>Bacteria toxicity:</b>	not determined
<b>Biological degradability:</b>	not determined
<b>COD:</b>	not determined
<b>BOD 5:</b>	not determined
<b>AOX-advice:</b>	not applicable
<b>2006/11/EC:</b>	none
<b>General information:</b>	Ecological data are not available.

### 13 Disposal considerations

<b>Disposal / Product:</b>	For recycling, consult manufacturer. Coordinate disposal with the authorities if necessary.
<b>Disposal / Contaminated packaging:</b>	Uncontaminated packaging may be taken for recycling. Packaging that cannot be cleaned should be disposed of as for product.
<b>Waste no. (recommended):</b>	160306

### 14 Transport information

<b>Classification according to ADR:</b>	no dangerous goods ,
- Classification Code:	
- ADR Limited Quantities:	
- Label:	
<b>Classification according to IMDG:</b>	not classified as "Dangerous Goods" - -
- IMDG Limited Quantities:	
- EMS:	
- Label:	
<b>Classification according to IATA:</b>	not classified as "Dangerous Goods"
- Label:	

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### 15 Regulatory information

<b>Exposure scenario:</b>	not determinated
<b>Chemical safety report:</b>	not determinated
<b>Labelling:</b>	The product does not require a hazard warning label in accordance with EC-directives. All chemicals in this product are included on the "European Inventory of Existing Commercial Chemical Substances - EINECS or ELINCS".
<b>Hazard symbols:</b>	
<b>R-phrases:</b>	none
<b>S-phrases:</b>	none
<b>Special labelling:</b>	Contains epoxy-containing compounds. Contains isocyanates. Observe manufacturer's instructions.
<b>Authorisation, TITEL VII:</b>	not applicable
<b>Restrictions, TITEL VIII:</b>	not applicable
<b>EEC-REGULATIONS:</b>	1967/548 (2004/73, 29. ATP); 1991/689 (2001/118); 1999/13; 2004/42; 648/2004; 1907/2006.
<b>TRANSPORT-REGULATIONS:</b>	ADR (2007); IMDG-Code (33. Amdt.); IATA-DGR (2008).
<b>NATIONAL REGULATIONS (GB)</b>	EH40/2005 Workplace exposure limits with amendments October 2007.

### 16 Other informations

<b>Modified position:</b>	none
<b>Observe employment restrictions for people:</b>	no
<b>VOC (1999/13/CE):</b>	not applicable
<b>Customs Tariff:</b>	not determinated

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

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