

SAFETY DATA SHEET		
TECHNYL 2710 ST BLACK		
Revision: 1.01 CN (EN)	Issuing date: 2014-05-16	

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name : TECHNYL 2710 ST BLACK

1.2 Relevant identified uses of the substance or mixture and uses advised against

Uses of the Substance/Mixture : Specific use(s): Manufacture of articles by injection and extrusion

Uses advised against : Not permitted in toys or part of toys, Medical devices, Do not use where contact with food or drinking water is possible.

1.3 Details of the supplier of the safety data sheet

Company : Solvay (Shanghai) Engineering Plastic Co., Ltd
No. 3966 Jindu Road, Xinzhuang Industrial Zone Shanghai 201108 China
Tel : +86 21 54 83 17 62
Fax : +86 21 54 42 71 07

E-mail address : information.fds@solvay.com

1.4 Emergency telephone number

MULTI LINGUAL EMERGENCY NUMBER (24/7)
Europe/America/Africa : +44 1235 239 670 (UK)
Middle East/Africa speaking Arabic : +44 1235 239 671 (UK)
Asia Pacific : +65 3158 1074 (Singapore)
China : +86 10 5100 3039 (Beijing)

China (Domestic Only): +86 532 8388 9090 (Qingdao)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification and labeling: Follow GB 13690, GB 20576-GB 20602 and GB 15258 (GHS 2011)

Not a hazardous product according to Globally harmonized System (GHS)

2.2 Label elements

GHS Classification and labeling: Follow GB 13690, GB 20576-GB 20602 and GB 15258 (GHS 2011)

Not a hazardous product according to Globally harmonized System (GHS)

2.3 Other hazards which do not result in classification

On thermal decomposition (pyrolysis) releases:
toxic gases

SECTION 3: Composition/information on ingredients

3.1 Substance

Not applicable, this product is a mixture.

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3.2 Mixture

Chemical nature : Product based on polyamide 6.6 (CAS: 32131-17-2)

Information on Components and Impurities

Chemical Name	CAS-No.	Identification number	GHS Classification	Concentration [%]
1-Propene, homopolymer	9003-07-0	not applicable	not classified	>= 5 - < 10
Poly(ethene)	9002-88-4	not applicable	not classified	>= 0.5 - < 1
Carbon black	1333-86-4	not applicable	not classified	>= 0.3 - < 0.5

SECTION 4: First aid measures

4.1 Description of first aid measures

- General advice : Show this safety data sheet to the doctor in attendance.
First aider needs to protect himself.
- If inhaled : If breathed in, move person into fresh air.
Move to fresh air.
If symptoms persist, call a physician.
- Skin contact : Cool skin rapidly with cold water after contact with molten polymer.
Do not peel solidified product off the skin.
Consult a physician if necessary.
- Eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Seek medical advice.
- Ingestion : Do NOT induce vomiting.
Rinse mouth with water.
Consult a physician if necessary.

4.2 Most important symptoms and effects, both acute and delayed

no data available

4.3 Indication of any immediate medical attention and special treatment needed

no data available

SECTION 5: Firefighting measures

- Flash point : 350 °C
- Auto-ignition temperature : > 450 °C
- Flammability/Explosive limit : no data available

5.1 Extinguishing media

- Suitable extinguishing media : All extinguishing agents can be used.

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Unsuitable extinguishing media : None known.

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting : Combustible product, melts on heating.
Risk of fire spreading due to the flow of liquid which is already alight.
Harmful or toxic vapours are released.

5.3 Advice for firefighters

Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.
Specific fire fighting methods : Cool the molten product.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

no data available

6.2 Environmental precautions

Environmental precautions : Do not allow uncontrolled discharge of product into the environment.
The product should not be allowed to enter drains, water courses or the soil.

6.3 Methods and materials for containment and cleaning up

Recovery : Sweep up and shovel.
Additional advice : Use mechanical handling equipment.

6.4 Reference to other sections

no data available

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Technical measures : Ground/bond container and receiving equipment.
Advice on safe handling and usage : Ensure all equipment is electrically grounded before beginning transfer operations.
Hygiene measures : Handle in accordance with good industrial hygiene and safety practice.
When using do not eat, drink or smoke.

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7.2 Conditions for safe storage, including any incompatibilities

Technical Measures for storage : No special storage conditions required.

Storage conditions

Recommended : Protect from moisture.
Store away from heat.

Incompatible products : Oxidizing materials.

Packaging Measures

Packaging materials - Recommended : Fibreboard, Paper bags

Packaging conditions : Paper bag lined with a plastic film., Cardboard container lined with a plastic film., Big-bag

Storage stability

Storage temperature : no data available

7.3 Specific end use(s)

no data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Components with workplace control parameters

Components	Value type	Value	Basis
1-Propene, homopolymer	PC-TWA	5 mg/m3	Occupational exposure limits for hazardous agents in the workplace - Chemical hazardous agents.
	Form of exposure : Total		
Poly(ethene)	PC-TWA	5 mg/m3	Occupational exposure limits for hazardous agents in the workplace - Chemical hazardous agents.
	Form of exposure : Total		
Carbon black	PC-TWA	4 mg/m3	Occupational exposure limits for hazardous agents in the workplace - Chemical hazardous agents.
	Form of exposure : Total Possibly carcinogenic to humans		

Components with workplace foreign Control Parameters

Components	Value type	Value	Basis
Carbon black	TWA	3 mg/m3	USA. ACGIH Threshold Limit Values (TLV)

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		Form of exposure : Inhalable fraction Bronchitis, Confirmed animal carcinogen with unknown relevance to humans

8.2 Exposure controls

Control measures

Engineering measures : Vapour extraction at source

Personal protective equipment

Hand protection : Wear suitable gloves.
When handling hot material, use heat resistant gloves.

Eye protection : Safety glasses

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice.
When using do not eat, drink or smoke.

Protective measures : The protective equipment must be selected in accordance with current CEN standards and in cooperation with the supplier of the protective equipment.

Selection of appropriate personal protective equipment should be based on an evaluation of the performance characteristics of the protective equipment relative to the task(s) to be performed, conditions present, duration of use, and the potential hazards and/or risks that may occur during use.

Environmental exposure controls

General advice : Do not allow uncontrolled discharge of product into the environment.
The product should not be allowed to enter drains, water courses or the soil.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : Form : pellets
Physical state: solid
Colour: black

Odour : no data available

Odour Threshold : no data available

pH : no data available

Melting point/range : 255 - 265 °C

Flash point : 350 °C

Evaporation rate (Butylacetate = 1) : no data available

Flammability (solid, gas) : The product itself does not burn, but it is slightly oxidising (active oxygen content ca. 2%).

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10.6 Hazardous decomposition products

Decomposition products : On combustion or on thermal decomposition (pyrolysis) releases:
highly toxic gases.
(Carbon oxides (CO + CO₂)).
Nitrogen oxides (NO_x)
Hydrogen cyanide (hydrocyanic acid)

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Acute oral toxicity : According to the data on the components
Not classified as harmful if swallowed
According to the classification criteria for mixtures.

Acute inhalation toxicity : According to the data on the components
Not classified as harmful by inhalation
According to the classification criteria for mixtures.

Acute dermal toxicity : According to the data on the components
Not classified as harmful by contact with skin
According to the classification criteria for mixtures.

Acute toxicity (other routes of administration) : no data available

Skin corrosion/irritation

Skin irritation

Poly(ethene) : No skin irritation
Unpublished reports
Published data

Carbon black : rabbit
No skin irritation
Unpublished reports

Serious eye damage/eye irritation

Eye irritation

Carbon black : No eye irritation
Unpublished reports

Respiratory or skin sensitisation

Sensitisation : According to the data on the components
Not classified as sensitising by skin contact
According to the classification criteria for mixtures.

Mutagenicity

Genotoxicity in vitro : No information available.

Genotoxicity in vivo : No information available.

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Carcinogenicity

Carcinogenicity
Carbon black : Not classifiable as a human carcinogen.
Dust causes lung tumours in rats.
Lung tumours observed in rat following long-term inhalation exposure to poorly soluble particles of low toxicity are the result of a species-specific mechanism known as "lung overload". The formation of tumours is not observed in other species under similar exposure conditions and is considered not predictive of the effects in humans.
Note: IARC Classification: Group 2B

Toxicity for reproduction and development

Toxicity to reproduction/Fertility : no data available

Developmental Toxicity/Teratogenicity
Carbon black : rat , female
Application Route: Inhalation
Method: OECD Test Guideline 414
Did not show teratogenic effects in animal experiments.

rabbit , female
Application Route: Inhalation
Method: OECD Test Guideline 414
Did not show teratogenic effects in animal experiments.

STOT

STOT - single exposure
Carbon black : Toxicology Assessment:
The substance or mixture is not classified as specific target organ toxicant, single exposure.

STOT - repeated exposure
Carbon black : Oral 2 y - mouse , female
NOAEL: 137 mg/kg bw/day
in food
Published data

Inhalation 90 d - rat , males
NOAEC: 0.0011 mg/l
Aerosol

Inhalation 90 d - rat , females
NOAEC: 0.001 mg/l
Aerosol

Dermal 1 y - rat , male
NOAEL: 20 %
Published data

Carcinogenicity
Carbon black : Not classified as a carcinogen according to GHS criteria: the mechanism or mode of action of tumour formation is considered not relevant for humans.

Aspiration toxicity

Aspiration toxicity : no data available

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SECTION 12: Ecological information

12.1 Toxicity

Aquatic Compartment

Acute toxicity to fish

Carbon black : LC50 - 96 h : > 1,000 mg/l - Danio rerio (zebra fish)
Method: OECD Test Guideline 203
Unpublished reports

Acute toxicity to daphnia and other aquatic invertebrates.

Carbon black : EC50 - 24 h : > 5,600 mg/l - Daphnia magna (Water flea)
Method: OECD Test Guideline 202
Unpublished reports

Toxicity to aquatic plants

Carbon black : EC50 - 72 h : > 10,000 mg/l - Desmodesmus subspicatus (green algae)
Method: OECD Test Guideline 201
Growth rate
Unpublished reports

NOEC - 72 h : > 10,000 mg/l - Desmodesmus subspicatus (green algae)
Method: OECD Test Guideline 201
Growth rate
Unpublished reports

Toxicity to microorganisms

Carbon black : EC50 - 3 h : > 800 mg/l - activated sludge
Unpublished reports

Terrestrial Compartment

Toxicity to soil dwelling organisms

Carbon black : This product does not have any known adverse effect on the soil organisms tested.

Ecotoxicity assessment

Acute aquatic toxicity

Carbon black : The product does not have any known adverse effects on the aquatic organisms tested

12.2 Persistence and degradability

Biodegradability

Biodegradability

: Primary biodegradation
Not biodegradable.
According to the data on the components
internal evaluation

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12.3 Bioaccumulative potential

Bioconcentration factor (BCF) : Not bioaccumulable.
internal evaluation

12.4 Mobility in soil

Known distribution to environmental compartments : Ultimate destination of the product : Soil
Ultimate destination of the product : Sediment

12.5 Results of PBT and vPvB assessment

no data available

12.6 Other adverse effects

Environment assessment
Poly(ethene) : Not classified due to lack of data.
Carbon black : Not classified as Dangerous for the Environment

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product Disposal

Advice on Disposal : Dispose of in accordance with local regulations.

Advice on cleaning and disposal of packaging

Other data : Dispose of in accordance with local regulations.

SECTION 14: Transport information

CN_DG

Not Regulated

ADR

Not Regulated

RID

Not Regulated

IMDG

Not Regulated

IATA

Not Regulated

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

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Following last version of regulations are applicable for the chemical classification, SDS and label:

- General Rule for classification and hazard communication of chemicals, GB 13690
- Series standards of Safety rules for classification, precautionary labeling and precautionary statements of chemicals (GB 20576~GB 20602)
- General rules for preparation of precautionary label for chemicals, GB 15258
- Safety data sheet for chemical products—Content and order of sections, GB/T 16483

SECTION 16: Other information

Key or legend to abbreviations and acronyms used in the safety data sheet

Exposure controls/personal protection

PC-TWA	Permissible concentration - time weighted average
TWA	8-hour, time-weighted average

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. Such information is only given as a guidance to help the user handle, use, process, store, transport, dispose and release the product in satisfactory safety conditions and is not to be considered as a warranty or quality specification. It should be used in conjunction with technical sheets but do not replace them. Thus, the information only relates to the designated specific product and may not be applicable if such product is used in combination with other materials or in an other manufacturing process, unless otherwise specifically indicated. It does not release the user from ensuring he is in conformity with all regulations linked to its activity.