

SAFETY DATA SHEET		
TECHNYL A 20 V25 NATURAL		
Revision: 2.01 CN (EN)	Issuing date: 2014-01-03	

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

1.1 Product identifier

Trade name : TECHNYL A 20 V25 NATURAL

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

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)

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

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Globally Harmonized System of Classification and Labelling of Chemicals (GHS)

Not a dangerous substance or mixture according to the Globally Harmonised System (GHS).

2.2 Label elements

Globally Harmonized System of Classification and Labelling of Chemicals (GHS)

Not a dangerous substance or mixture according to the Globally Harmonised System (GHS).

2.3 Other hazards which do not result in classification

SAFETY DATA SHEET		
TECHNYL A 20 V25 NATURAL		
Revision: 2.01 CN (EN)	Issuing date: 2014-01-03	

On thermal decomposition (pyrolysis) releases:
toxic gases

SECTION 3: Composition/information on ingredients

3.1 Substance

Not applicable, this product is a mixture.

3.2 Mixture

Information on Components and Impurities

Chemical Name	CAS-No.	Identification number	GHS Classification	Concentration [%]
glass, oxide, chemicals	65997-17-3	not applicable	not classified	>= 20 - < 25
red phosphorus	7723-14-0	not applicable	Flammable solids , Category 2 ; H228 Acute aquatic toxicity , Category 3 ; H402 Chronic aquatic toxicity , Category 3 ; H412	>= 5 - < 10
Phenol, formaldehyde polymer	9003-35-4	not applicable	Acute toxicity , Category 5 ; H313 Skin sensitization , Category 1 ; H317	>= 1 - < 5
hydroxyaluminium distearate	300-92-5	not applicable	Acute toxicity , Category 5 ; H313 Acute aquatic toxicity , Category 2 ; H401	>= 0.3 - < 0.5

For the full text of the H-Statements mentioned in this Section, see Section 16.

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.

SAFETY DATA SHEET		
TECHNYL A 20 V25 NATURAL		
Revision: 2.01 CN (EN)	Issuing date: 2014-01-03	

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 : > 400 °C closed cup
Molten form
- Auto-ignition temperature : > 450 °C
- Flammability/Explosive limit : Lower flammability/explosion limit : not applicable, solid
Upper flammability/explosion limit : not applicable, solid

5.1 Extinguishing media

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

SAFETY DATA SHEET		
TECHNYL A 20 V25 NATURAL		
Revision: 2.01 CN (EN)	Issuing date: 2014-01-03	

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.
- Local ventilation required when opening the packaging.
Use only in area provided with appropriate exhaust ventilation.
During the transformation process (melting) monitor the level of phosphine in the atmosphere (use a suitable detection device).
- Hygiene measures : Handle in accordance with good industrial hygiene and safety practice.
When using do not eat, drink or smoke.

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.
- Local ventilation required when opening the packaging.
- 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 foreign Control Parameters

Components	Value type	Value	Basis
glass, oxide, chemicals	TWA	1fibre/cm3	USA. ACGIH Threshold Limit Values (TLV)

SAFETY DATA SHEET			
TECHNYL A 20 V25 NATURAL			
Revision: 2.01 CN (EN)		Issuing date: 2014-01-03	
		Form of exposure : Glass wool fibers Respirable fibers:length > 5 µm; aspect ratio >= 3:1, as determined by the membrane filter method at 400-450X magnification (4-mm objective), using phase-contrast illumination., Confirmed animal carcinogen with unknown relevance to humans	
glass, oxide, chemicals	TWA	1 fibre/cm3	USA. ACGIH Threshold Limit Values (TLV)
		Form of exposure : Continuous filament glass fibers Upper Respiratory Tract irritation, Respirable fibers:length > 5 µm; aspect ratio >= 3:1, as determined by the membrane filter method at 400-450X magnification (4-mm objective), using phase-contrast illumination., Not classifiable as a human carcinogen	
glass, oxide, chemicals	TWA	5 mg/m3	USA. ACGIH Threshold Limit Values (TLV)
		Form of exposure : Continuous filament glass fibers Inhalable fraction, Upper Respiratory Tract irritation, Not classifiable as a human carcinogen	
hydroxyaluminium distearate	TWA	10 mg/m3	USA. ACGIH Threshold Limit Values (TLV)
		Eye, skin, & Upper Respiratory Tract irritation, Does not include stearates of toxic metals., Not classifiable as a human carcinogen	
hydroxyaluminium distearate	TWA	1 mg/m3	USA. ACGIH Threshold Limit Values (TLV)
		Form of exposure : Respirable fraction Lower Respiratory Tract irritation, Pneumoconiosis, Neurotoxicity, Not classifiable as a human carcinogen, varies	

8.2 Exposure controls

Control measures

Engineering measures : Vapour extraction at source
Apply technical measures to comply with the occupational exposure limits.

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

SAFETY DATA SHEET		
TECHNYL A 20 V25 NATURAL		
Revision: 2.01 CN (EN)	Issuing date: 2014-01-03	

standards and in cooperation with the supplier of the protective equipment.

During the transformation process (melting) monitor the level of phosphine in the atmosphere (use a suitable detection device).

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 : granules Physical state: solid Colour: natural colour
Odour	: none to very slight
Odour Threshold	: no data available
pH	: Not applicable insoluble product
Melting point/range	: 250 - 270 °C
Flash point	: > 400 °C closed cup Molten form
Evaporation rate (Butylacetate = 1)	: no data available
Flammability (solid, gas)	: no data available
Flammability (liquids)	: no data available
Flammability/Explosive limit	: Lower flammability/explosion limit: not applicable, solid Upper flammability/explosion limit: not applicable, solid
Auto-ignition temperature	: > 450 °C Relative self-ignition temperature for solids Method: EU Test Guideline A16
Vapour pressure	: no data available
Vapour density	: no data available
Density	: no data available
Solubility	: Water solubility : practically insoluble Solubility in other solvents: common organic solvents : insoluble
Partition coefficient: n-octanol/water	: no data available

SAFETY DATA SHEET		
TECHNYL A 20 V25 NATURAL		
Revision: 2.01 CN (EN)	Issuing date: 2014-01-03	

Thermal decomposition : > 350 °C

Viscosity : Viscosity, dynamic :
not applicable, solid
Viscosity, kinematic :
not applicable, solid

Explosive properties : no data available

Oxidizing properties : no data available

9.2 Other information

no data available

SECTION 10: Stability and reactivity

10.1 Reactivity

no data available

10.2 Chemical stability

no data available

10.3 Possibility of hazardous reactions

no data available

10.4 Conditions to avoid

no data available

10.5 Incompatible materials

no data available

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)
PHOSPHINE

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

SAFETY DATA SHEET		
TECHNYL A 20 V25 NATURAL		
Revision: 2.01 CN (EN)	Issuing date: 2014-01-03	

Not classified as harmful by contact with skin
According to the classification criteria for mixtures.

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

Skin corrosion/irritation

Skin irritation : According to the data on the components
Not classified as irritating to skin
According to the classification criteria for mixtures.

Serious eye damage/eye irritation

Eye irritation : According to the data on the components
Not classified as irritating to eyes
According to the classification criteria for mixtures.

Respiratory or skin sensitization

Sensitisation : Local lymph node assay - mouse
Does not cause skin sensitization.
Simplified study
Unpublished internal reports

Mutagenicity

Genotoxicity in vitro : According to the data on the components
Product is not considered to be genotoxic
According to the classification criteria for mixtures.

Genotoxicity in vivo : According to the data on the components
Product is not considered to be genotoxic
According to the classification criteria for mixtures.

Carcinogenicity

Carcinogenicity : According to the data on the components
The product is not considered to be carcinogenic.
According to the classification criteria for mixtures.

Toxicity for reproduction and development

Toxicity to reproduction/Fertility : According to the data on the components
The product is not considered to affect fertility.
According to the classification criteria for mixtures.

Developmental Toxicity/Teratogenicity : According to the data on the components
The product is not considered to be toxic for development.
The product is not considered to be teratogenic.
According to the classification criteria for mixtures.

SAFETY DATA SHEET		
TECHNYL A 20 V25 NATURAL		
Revision: 2.01 CN (EN)	Issuing date: 2014-01-03	

STOT

STOT - single exposure : Toxicology Assessment:
 The substance or mixture is not classified as specific target organ toxicant, single exposure.
 Remarks: According to the classification criteria for mixtures.

STOT - repeated exposure : Toxicology Assessment:
 The substance or mixture is not classified as specific target organ toxicant, repeated exposure.
 Remarks: According to the classification criteria for mixtures.

Neurological effects

Neurological effects
 red phosphorus : no data available

Aspiration toxicity

Aspiration toxicity
 red phosphorus : no data available

SECTION 12: Ecological information

12.1 Toxicity

Aquatic Compartment

Acute toxicity to fish
 glass, oxide, chemicals : LC50 - 96 h : > 1,000 mg/l - Danio rerio (zebra fish)
 Method: OECD Test Guideline 203
 Unpublished reports

red phosphorus : LC50 - 96 h : 33.2 mg/l - Danio rerio (zebra fish)
 Method: OECD Test Guideline 203
 Unpublished reports

hydroxylaluminium distearate : LC50 : > 100 mg/l - Fish
 Published data

LC50 - 96 h : 8.6 mg/l - Oncorhynchus mykiss (rainbow trout)
 By analogy
 Published data

LC50 - 96 h : 12 mg/l - Fish
 By analogy
 Published data

SAFETY DATA SHEET		
TECHNYL A 20 V25 NATURAL		
Revision: 2.01 CN (EN)	Issuing date: 2014-01-03	

Acute toxicity to daphnia and other aquatic invertebrates.

glass, oxide, chemicals : EC50 - 72 h : > 1,000 mg/l - Daphnia magna (Water flea)
Method: OECD Test Guideline 202
Unpublished reports

red phosphorus : EC50 - 48 h : 10.5 mg/l - Daphnia magna (Water flea)
Method: OECD Test Guideline 202
Unpublished reports

hydroxylaluminium distearate : EC50 - 48 h : 1.5 mg/l - Daphnia dubia
By analogy
Published data

Toxicity to aquatic plants

glass, oxide, chemicals : EC50 - 72 h : > 1,000 mg/l - Pseudokirchneriella subcapitata
Method: OECD Test Guideline 201
Growth rate
Unpublished reports

NOEC - 72 h : > 1,000 mg/l - Pseudokirchneriella subcapitata
Method: OECD Test Guideline 201
Growth rate
Unpublished reports

red phosphorus : EC50 - 72 h : 18.3 mg/l - Desmodesmus subspicatus (green algae)
Method: OECD Test Guideline 201
Growth rate
Unpublished reports

Toxicity to microorganisms

red phosphorus : EC50 - 3 h : > 1,000 mg/l - activated sludge
Respiration inhibition
Method: OECD Test Guideline 209
Unpublished reports

Chronic Toxicity to aquatic plants

red phosphorus : EC10: 6.6 mg/l - 72 h - Desmodesmus subspicatus (green algae)
Method: OECD Test Guideline 201
Growth rate
Unpublished reports

Terrestrial Compartment

Toxicity to soil dwelling organisms

red phosphorus : NOEC: 125 mg/kg - 56 Days - Eisenia fetida (earthworms)
Method: OECD Test Guideline 222
Unpublished reports

NOEC: >= 1,000 mg/kg - 28 Days - soil micro-organisms
Method: OECD Test Guideline 216
Unpublished reports

Ecotoxicity assessment

Acute aquatic toxicity

: According to the data on the components
The product does not have any known adverse effects on the aquatic organisms tested
According to the classification criteria for mixtures.

SAFETY DATA SHEET		
TECHNYL A 20 V25 NATURAL		
Revision: 2.01 CN (EN)	Issuing date: 2014-01-03	

12.2 Persistence and degradability

Biodegradability

Biodegradability : Not biodegradable.
internal evaluation

Stability

Stability in water
glass, oxide, chemicals : Not applicable insoluble product
red phosphorus : Hydrolyses slowly on contact with water.

12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water : Not applicable preparation
Bioconcentration factor (BCF) : Bioaccumulation is unlikely.
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

Results of PBT and vPvB assessment : This mixture contains no substance considered to be persistent and bioaccumulating and toxic (PBT)., This mixture contains no substance considered to be very persistent and very bioaccumulating (vPvB).

12.6 Other adverse effects

Environment assessment
glass, oxide, chemicals : Not classified as Dangerous for the Environment
red phosphorus : Harmful to aquatic life with long lasting effects.
Phenol, formaldehyde polymer : Not classified due to lack of data.

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.

SAFETY DATA SHEET		
TECHNYL A 20 V25 NATURAL		
Revision: 2.01 CN (EN)	Issuing date: 2014-01-03	

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

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

Full text of H-Statements

H228	Flammable solid.
H313	May be harmful in contact with skin.
H317	May cause an allergic skin reaction.
H401	Toxic to aquatic life.
H402	Harmful to aquatic life.
H412	Harmful to aquatic life with long lasting effects.

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

Exposure controls/personal protection

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.