ZYTEL® 3D12G50PT BK309 pellets for 3D printing

Version 2.0 Revision Date 2019/05/13
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This SDS adheres to the standards and regulatory requirements of China and may not meet the regulatory requirements in other countries.

Section 1 - Chemical and Enterprise Identification

Product name : ZYTEL® 3D12G50PT BK309 pellets for 3D printing

Product name in English : ZYTEL® 3D12G50PT BK309 pellets for 3D printing

Recommended use of the chemical and restriction on use

Recommended use : Polymer

Restrictions on use : For manufacturing and research use only

Manufacturer, importer, supplier

Company : Celanese (Shanghai) International Trading Co., Ltd
Street address : 4560 Jinke Road, Zhangjiang, Pudong Shanghai, China 201210

E-mail address : HazCom@celanese.com

Emergency telephone number : CHEMTREC International: +1-703-527 3887, +86 532 8388-9090 (China, 24h)

Date of first preparation : 2019/05/13

Section 2 - Hazard Identification

GHS Hazard Category

Not a hazardous substance or mixture according to the Globally Harmonised System (GHS).
Endpoints which are not classified, cannot be classified or are not applicable are not shown.

Main Symptom After Contact

No information available.

Section 3 - Ingredients/Composition Information

Chemical nature : Mixture

Components

This product does not contain any components that require disclosure according to country regulations.

Section 4 - First-aid Measures

Inhalation : Move to fresh air in case of accidental inhalation of fumes from overheating or combustion. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

Skin contact	:	The material is not likely to be hazardous by skin contact, but cleaning the skin after use is advisable. Cool skin rapidly with cold water after contact with molten material. Do not peel polymer from the skin. Obtain medical treatment for thermal burn.
Eye contact	:	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.
Ingestion	:	No specific intervention is indicated. Consult a physician if necessary.
Most important symptoms/effects, acute and delayed	:	No information available.
Protection of first-aiders	:	No information available.
Notes to physician	:	No information available.

Section 5 - Fire-fighting Measures

Suitable extinguishing media	:	Water, Foam, Dry chemical, Carbon dioxide (CO2)
Specific hazards	:	Combustible . Large molten masses may ignite spontaneously in air. Water quenching is good practice. Minimize the generation and accumulation of dust. Failure or malfunction of temperature control systems on processing equipment, such as extruders, may create explosion hazards. Hazardous combustion products may include: (see also section 10) Carbon monoxide, Carbon dioxide
Special protective equipment for firefighters	:	Wear self-contained breathing apparatus and protective suit.
Specific extinguishing methods	:	No information available.
Further information	:	Evacuate personnel and keep upwind of fire.

Section 6 - Leak Emergency Treatment

Protective measures, devices and emergency treatment procedure for workers	:	Spilled material is a slipping hazard.
Environmental precautions	:	Do not discharge to streams, ponds, lakes or sewers.

Methods and materials for containment and cleaning up : Spills of fine material should be cleaned using gentle sweeping or vacuuming. Cleaning methods (e.g. compressed air) which can generate potentially combustible dust clouds should not be used. Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Use only non-sparking tools.

Prevention of secondary hazards : No information available.

Section 7 - Operation Handling and Storage

Operation Handling

Technical measures/Precautions : Open container only in well-ventilated area. Wash hands thoroughly after handling. Provide appropriate exhaust ventilation at dryers, machinery and at places where dust or volatiles can be generated. Do not breathe dust. Minimize the generation and accumulation of dust. Pneumatic conveying and other mechanical handling operations can generate combustible dust. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces.

Precautions for safe handling : No information available.

Storage

Suitable storage conditions : Store in a cool, dry place. Keep container closed to prevent contamination. Keep in an area equipped with sprinklers.

Section 8 - Exposure Control and Personal Protection

Control parameters

Applicable occupational exposure limits are listed below.

Dust (inhalable and respirable fraction)		
TWA	3 mg/m3 (Respirable fraction)	ACGIH (03 2014)
TWA	10 mg/m3 (Inhalable fraction)	ACGIH (03 2014)

Engineering controls : General mechanical ventilation is normally adequate but use local exhaust where necessary to maintain exposures below acceptable limits. Use local exhaust to completely remove vapors and fumes liberated during hot processing from the work area.

Biological occupational exposure limits : No information available.

Personal protective equipment

Respiratory protection	:	A respiratory protection program that meets country requirements must be followed whenever workplace conditions warrant respirator use. Consult the respirator manufacturer to determine the appropriate type of equipment for a given application. Observe respirator use limitations specified by the manufacturer. Where there is potential for airborne exposures in excess of applicable limits, wear approved respiratory protection with dust/mist cartridge.
Hand protection	:	Wear leather or cotton gloves when grinding, sawing, routing, drilling or sanding., When handling hot material, use heat resistant gloves.
Eye protection	:	Wear safety glasses with side shields. Wear tightly fitting chemical splash goggles and face shield when possibility exists for eye and face contact due to spattering or splashing of molten material. A full-face mask respirator provides protection from eye irritation.
Skin protection	:	If there is a potential for contact with hot/molten material wear heat resistant clothing and footwear.
Hygiene measures	:	No information available.

Section 9 - Physical and Chemical Properties

Appearance (Physical state, form, colour, etc.)

Physical state	:	solid
Form	:	pellets
Colour	:	black

Odour	:	none
Odour Threshold	:	Not applicable
pH	:	Not applicable

Melting point/freezing point

Melting point/range	:	> 200 °C

Boiling point, initial boiling point and boiling range

Boiling point/boiling range	:	Not applicable

Flash point	:	Not applicable
Evaporation rate	:	Not applicable
Flammability (solid, gas)	:	May form combustible dust concentrations in air during processing, handling or other means.

Upper/lower flammability or explosive limits

Upper explosion limit	:	Not applicable
Lower explosion limit	:	Not applicable

Vapour pressure	:	Not applicable

Vapour density	:	Not applicable
Density		
Specific gravity (Relative density)	:	> 1
Solubility(ies)		
Water solubility	:	insoluble
Partition coefficient: n-octanol/water	:	Not applicable
Auto-ignition temperature		
Auto-ignition temperature	:	Not applicable
Decomposition temperature	:	>360 °C Thermal decomposition of the resin accelerates above temperature listed. Decomposition can occur below the recommended processing temperature limit. Decomposition is a function of both processing temperature and time at that temperature.
Viscosity		
Viscosity, kinematic	:	Not applicable
Viscosity, dynamic	:	Not applicable
Molecular weight	:	No information available.
Oxidizing properties	:	No information available.

Section 10 - Stability and Reactivity

Reactivity	:	Stable at normal ambient temperature and pressure.
Chemical stability	:	Stable at normal ambient temperature and pressure.
Possibility of hazardous reactions	:	Polymerization will not occur.
Conditions to avoid	:	Temperature: > 360°C Avoid prolonged exposure at or above the recommended processing temperatures. Decomposes on heating. At temperatures above the "conditions to avoid" temperature, thermal decomposition of the resin accelerates. Decomposition can occur below the recommended processing temperature limit. Decomposition is a function of both processing temperature and time at that temperature.
Materials to avoid	:	Strong acids, Strong bases, Strong oxidizing agents

Hazardous decomposition products : Hazardous thermal decomposition products may include:

Aldehydes, Respirable particles., Nitrogen oxides (NOx), traces of hydrogen cyanide, Ammonia Carbon monoxide, Carbon dioxide

Section 11 - Toxicological Information

Acute toxicity
No information available.

Skin corrosion/irritation
No information available.

Serious eye damage/eye irritation
No information available.

Respiratory or skin sensitisation
No information available.

Germ cell mutagenicity
No information available.

Carcinogenicity
No information available.

Reproductive toxicity
No information available.

Specific Target Organ Toxicity
No information available.

Aspiration hazard
No information available.

Other

ZYTEL® 3D12G50PT BK309 pellets for 3D printing : No data is available on the product itself.
For additional toxicity data, write to the company address or call the non-emergency number shown in Section 1.

Section 12 - Ecological Information

Ecotoxicity effects
No information available.

Persistence and degradability
No information available.

Bioaccumulation
No information available.

Mobility in soil
No information available.

Other adverse effects

ZYTEL® 3D12G50PT BK309 pellets for 3D printing	:	No data is available on the product itself. Toxicity is expected to be low based on insolubility in water.

Section 13 - Waste Disposal

Waste disposal methods	:	Preferred options for disposal are recycling or incineration with energy recovery. The high fuel value of this product makes incineration very desirable for material that cannot be recycled. Treatment, storage, transportation, and disposal must be in accordance with applicable federal, state/provincial, and local regulations.
Contaminated packaging	:	Dispose of in accordance with local regulations.

Section 14 - Transport Information

Not classified as dangerous in the meaning of transport regulations.

China Dangerous Goods Regulation

UN number	:	Not applicable
Proper shipping name	:	Not applicable
Class	:	Not applicable
Packing group	:	Not applicable

IMDG

UN number	:	Not applicable
UN proper shipping name	:	Not applicable
Transport hazard class	:	Not applicable
Packing group	:	Not applicable
Marine pollutant	:	Not applicable

IATA

UN number	:	Not applicable
UN proper shipping name	:	Not applicable
Transport hazard class	:	Not applicable
Packing group	:	Not applicable

Matters needing attention for transportation : Not applicable

Section 15 - Regulatory Information

not regulated

Section 16 - Other Information

References

SDS Number: 130000151955

Revision Date/Version

Date of first preparation	:	2019/05/13
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Version	:	2.0

Read the product information datasheet for this product or the molding guide for this resin family.
Refer to NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids, for safe handling.

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

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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The above information relates only to the specific material(s) designated herein and may not be valid for such material(s) used in combination with any other materials or in any process or if the material is altered or processed, unless specified in the text.