

ZYTEL® HTNWRF51G30S NC010 high performance polyamide resin

Version 5.0

Revision Date 2021/04/19

Document no. 130000155284

Issue Date 2023/07/12

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® HTNWRF51G30S NC010 high performance polyamide resin

Product name in English : ZYTEL® HTNWRF51G30S NC010 high performance polyamide resin

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 : 2021/02/19

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. Symptoms may be delayed for several hours.

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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, Polytetrafluoroethylene
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. Protect from hydrogen fluoride fumes which react with water to form hydrofluoric acid. Wear neoprene gloves when handling refuse from 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.

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Methods and materials for containment and cleaning up : Clean up fines, dusts, and/or fibers with high efficiency particulate air (HEPA) filtered vacuum equipment. 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. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Non-sparking tools should be used.

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. Provide appropriate exhaust ventilation at dryers, machinery and at places where dust or volatiles can be generated. Do not breathe vapor or dust. Keep waste disposal equipment near work areas involving operations where there is potential for dust generation. Wash hands before breaks and immediately after handling the product. Remove and wash contaminated clothing before re-use. Wash thoroughly with soap and water after performing operations that involve fiber or dust handling. Prevent contamination of cigarettes or tobacco with dust from this material. Pneumatic conveying and other mechanical handling operations can generate combustible dust. Minimize dust generation and accumulation. 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/m ³ (Respirable particulate matter)	ACGIH (03 2014)
TWA	10 mg/m ³ (Inhalable particulate matter)	ACGIH (03 2014)

Biological occupational exposure limits

No biological exposure limit values are applicable.

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.

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Personal protective equipment

- Respiratory protection : No information available.
- Hand protection : Wear leather or cotton gloves when grinding, sawing, routing, drilling or sanding.,
When handling hot material, use heat resistant gloves.
- Eye protection : No information available.
- Skin protection : If there is a potential for contact with hot/molten material wear heat resistant
clothing and footwear.
Remove and wash contaminated clothing before re-use.

Hygiene measures : No information available.

Section 9 - Physical and Chemical Properties**Appearance (Physical state, form, colour, etc.)**

- Physical state : solid
- Form : pellets
- Colour : natural colour

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 : > 1

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(Relative density)

Solubility(ies)

Water solubility : insoluble

Partition coefficient: n-octanol/water

: No information available.

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.
 Decomposition is a function of both processing temperature and time at that temperature.
 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.

Materials to avoid : Strong acids, Strong bases, Strong oxidizing agents

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Hazardous decomposition products : Hazardous thermal decomposition products may include:

Nitrogen oxides (NOx), Ammonia, traces of hydrogen cyanide, Respirable particles., Aldehydes, hexanediol, Hydrogen fluoride, Carbonyl fluoride, acid fluorides Carbon monoxide, Carbon dioxide, 3-Methylpiperidine, Methyl acrylate, Benzene

Overheating may generate fluoroplastics fume.

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

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: 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.

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Bioaccumulation

No information available.

Mobility in soil

No information available.

Other adverse effects

ZYTEL® HTNWRF51G30S : No data is available on the product itself. Toxicity is expected to be low
 NC010 high performance based on insolubility in water.
 polyamide resin

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. Incinerator must be capable of scrubbing out acidic combustion products. 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

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not regulated

Section 16 - Other Information**References**

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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.