

Version 4.1

Issue Date : 05/24/2022 Ref. 130000022400

Revision Date : 05/24/2022

This SDS adheres to the standards and regulatory requirements of the United States and may not meet the regulatory requirements in other countries.

#### SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : ZYTEL® 101F NC010 nylon resin

Product Use : Polymer

Restrictions on use : For manufacturing and research use only

Manufacturer/Supplier : DuPont

974 Centre Road

Wilmington, DE 19805, USA

Product Information : +1-833-338-7668 (outside the U.S. +1-302-996-8439)
Medical Emergency : 1-800-441-3637 (outside the U.S. 1-302-774-1139)

Transport Emergency : +1-800-424-9300 (outside the U.S. & Canada +1-703-527-3887)

#### SECTION 2. HAZARDS IDENTIFICATION

### Product hazard category

Combustible dust

Label content

Pictogram : not required

Signal word : Warning

Hazardous warnings : If small particles are generated during further processing, handling or by other

means, may form combustible dust concentrations in air.

Hazardous prevention

measures

: not required

Other hazards

No applicable data available.



Version 4.1

Issue Date : 05/24/2022 Ref. 130000022400

Revision Date : 05/24/2022

#### **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

This product does not contain any components that require disclosure according to OSHA Hazard Communication Standard 2012.

#### **SECTION 4. FIRST AID MEASURES**

General advice : No applicable data available.

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

Protection of first-aiders Notes to physician : No applicable data available.

No applicable data available.No applicable data available.

#### **SECTION 5. FIREFIGHTING MEASURES**

Suitable extinguishing media : Water, Foam, Dry chemical, Carbon dioxide (CO2)

Unsuitable extinguishing

media

: No applicable data available.



Version 4.1

Issue Date : 05/24/2022 Ref. 130000022400

Revision Date : 05/24/2022

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.

Further information : Evacuate personnel and keep upwind of fire.

### **SECTION 6. ACCIDENTAL RELEASE MEASURES**

NOTE: Review FIRE FIGHTING MEASURES and HANDLING (PERSONNEL) sections before proceeding with clean-up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean-up.

Safeguards (Personnel) : Spilled material is a slipping hazard.

Environmental precautions : Do not discharge to streams, ponds, lakes or sewers.

Spill Cleanup : 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.

Accidental Release Measures : No applicable data available.

### SECTION 7. HANDLING AND STORAGE

Handling (Personnel) : 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.



Version 4.1

Issue Date : 05/24/2022 Ref. 130000022400

Revision Date : 05/24/2022

Handling (Physical Aspects) : No applicable data available.

Dust explosion class : No applicable data available.

Storage : Store in a cool, dry place. Keep container closed to prevent contamination.

Keep in an area equipped with sprinklers.

Storage period : No applicable data available.

Storage temperature : No applicable data available.

#### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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.

Personal protective equipment

Respiratory protection : Additives in this product do not present a respiration hazard unless the

product is ground to a powder of respirable size and the dust is inhaled. All dusts are potentially injurious to the respiratory tract if respirable particles are generated and inhaled. 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. Use a positive pressure air supplied

respirator if exposure levels are not known or there are any other

circumstances where air purifying respirators may not provide adequate

protection.

Consult the OSHA respiratory protection information located at 29CFR

1910.134.

Hand protection : Additional 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 and body protection : If there is a potential for contact with hot/molten material wear heat resistant

clothing and footwear.

Exposure Guidelines
Exposure Limit Values



Version 4.1

Issue Date : 05/24/2022 Ref. 130000022400

Revision Date : 05/24/2022

This product does not contain any exposure limits that require disclosure according to OSHA Hazard Communication Standard 2012.

Non-Constituent(s)

Dust (inhalable and respirable fraction)

PEL (Permissible (OSHA) 50 Million particles per cubic foot TWA total dust

Exposure Limit)

PEL (Permissible (OSHA) 15 mg/m3 TWA total dust

Exposure Limit)

PEL (Permissible (OSHA) 5 mg/m3 TWA respirable fraction

**Exposure Limit)** 

PEL (Permissible (OSHA) 15 Million particles per cubic foot TWA respirable

Exposure Limit) fraction

TLV (ACGIH) 3 mg/m3 TWA Respirable particulate matter

TLV (ACGIH) 10 mg/m3 TWA Inhalable particulate matter

### **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance

Physical state : solid
Form : pellets
Color : natural

Odor : none

Odor threshold : Not applicable

pH : Not applicable

Melting point/freezing point : Melting point/range

> 200 °C (> 392 °F)

Boiling point/boiling range : Boiling point/boiling range

Not applicable



Version 4.1

Issue Date : 05/24/2022 Ref. 130000022400

Revision Date : 05/24/2022

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 explosion limit : Not applicable

Lower explosion limit : Not applicable

Vapor pressure : Not applicable

Vapor density : Not applicable

Specific gravity (Relative

density)

: >1

Water solubility : insoluble

Solubility(ies) : No applicable data available.

Partition coefficient: n-

octanol/water

: Not applicable

Auto-ignition temperature : Not applicable

Decomposition temperature : >340 °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, kinematic : Not applicable

Viscosity, dynamic : Not applicable

### **SECTION 10. STABILITY AND REACTIVITY**

Reactivity : Stable at normal ambient temperature and pressure.

Chemical stability : Stable at normal ambient temperature and pressure.



Version 4.1

Issue Date : 05/24/2022 Ref. 130000022400

Revision Date : 05/24/2022

Possibility of hazardous

reactions

: Polymerization will not occur.

Conditions to avoid : Temperature > 340 °C (> 644 °F)

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.

Incompatible materials : Strong acids Strong bases, Strong oxidizing agents

Hazardous decomposition

products

Hazardous thermal decomposition products may include:

Ammonia, traces of hydrogen cyanide, Nitrogen oxides (NOx), Aldehydes,

Carbon monoxide, Carbon dioxide, Cyclopentanone

#### SECTION 11. TOXICOLOGICAL INFORMATION

ZYTEL® 101F NC010 nylon resin

Further information : 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.

Carcinogenicity

The carcinogenicity classifications for this product and/or its ingredients have been determined according to HazCom 2012, Appendix A.6. The classifications may differ from those listed in the National Toxicology Program (NTP) Report on Carcinogens (latest edition) or those found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs (latest edition).

None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, or OSHA, as a carcinogen.

#### SECTION 12. ECOLOGICAL INFORMATION

Additional ecological information : No data is available on the product itself. Toxicity is expected to be

low based on insolubility in water.



Version 4.1

Ref. 130000022400 : 05/24/2022 Issue Date

Revision Date 05/24/2022

### SECTION 13. DISPOSAL CONSIDERATIONS

Waste disposal methods -

Product

: 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 : No applicable data available.

### SECTION 14. TRANSPORT INFORMATION

Not classified as dangerous in the meaning of transport regulations.

### SECTION 15. REGULATORY INFORMATION

TSCA : In compliance with TSCA-active Inventory requirements for commercial

purposes.

SARA 311/312 Hazard

classification

: Combustible dust

SARA 313 Regulated

Chemical(s)

: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established

by SARA Title III, Section 313.

PA Right to Know

Regulated Chemical(s)

: Substances on the Pennsylvania Hazardous Substances List present at a concentration of 1% or more (0.01% for Special Hazardous Substances):

None known.

NJ Right to Know

Regulated Chemical(s)

: Substances on the New Jersey Workplace Hazardous Substance List present

at a concentration of 1% or more (0.1% for substances identified as

carcinogens, mutagens or teratogens): None known.

California Prop. 65 : This product does not contain any substances requiring a warning under the



Version 4.1

Issue Date : 05/24/2022 Ref. 130000022400

Revision Date : 05/24/2022

Safe Drinking Water and Toxic Enforcement Act.

### **SECTION 16. OTHER INFORMATION**

Restrictions for use : Do not use DuPont materials in medical applications involving implantation

in the human body or contact with internal body fluids or tissues unless the material has been provided from DuPont under a written contract that is consistent with DuPont policy regarding medical applications and expressly acknowledges the contemplated use. For further information, please contact your DuPont representative. You may also request a copy of the DuPont POLICY Regarding Medical Applications and DuPont

**CAUTION** Regarding Medical Applications.

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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.

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



# Warning

**Hazard statements:** If small particles are generated during further processing, handling or by other means, may form combustible dust concentrations in air.

Refer to Safety Data Sheet (SDS) for further information.

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Version 4.1 Revision Date 05/24/2022 Issue Date 05/24/2022 Ref. 130000022400

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