

SAFETY DATA SHEET

Classified in accordance 29 CFR 1910.1200

1. Identification

Product identifier: INFINAM® TPC 8008 P

Other means of identification

None.

Recommended restrictions

Recommended use: Powder for 3D printing Additive Thermoplastic Elastomers (TPE)

Restrictions on use: Not determined.

Manufacturer/Importer/Distributor Information

Company Name : Evonik Corporation
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USA

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E-mail : product-regulatory-services@evonik.com

Emergency telephone number:

24-Hour Health : +1 800 424 9300 (CHEMTREC - US & CANADA)

Emergency : 800 681 9531 (CHEMTREC MEXICO)

+1 703 527 3887 (CHEMTREC WORLD)

2. Hazard(s) identification

Hazard Classification

Physical Hazards

Combustible dust Category 1

Label Elements

Hazard Symbol: No symbol

Signal Word: Warning

Hazard Statement: May form combustible dust concentrations in air.

Precautionary Statements

Prevention: Use with adequate ventilation. Avoid generation or accumulation of dust.

Disposal: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Hazard(s) not otherwise classified (HNOC): None.

3. Composition/information on ingredients

Mixtures

Composition Comments: The components are not hazardous or are below required disclosure limits. Chemical family Polymer

4. First-aid measures

Description of necessary first-aid measures

General information:	Move out of dangerous area. Do not leave the victim unattended.
Inhalation:	In case of symptoms of irritation caused by vapours in thermal processing: Provide fresh air, seek medical advice if necessary. Following inhalation of product dust: See that there is fresh air.
Skin Contact:	Wash off affected area immediately with plenty of water. Get medical attention if any discomfort continues.
Eye contact:	Rinse eyes thoroughly with plenty of water keeping eyelid open. Obtain medical attention.
Ingestion:	Flush mouth immediately, then drink plenty of water, avoid vomiting, consult physician
Personal Protection for First-aid Responders:	No data available.

Most important symptoms and effects, both acute and delayed

Symptoms:	No experiences of acute or chronic damages in humans have been made as yet.
Hazards:	Risk of skin burns caused by hot melt.

Indication of immediate medical attention and special treatment needed

Treatment:	Continue with first aid measures. Depending on the pathology and clinical findings, patient monitoring and symptomatic treatment are necessary.
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5. Fire-fighting measures

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: Water spray, foam, dry powder or carbon dioxide.

Unsuitable extinguishing media: High volume water jet.

Special hazards arising from the substance or mixture:

May be released in case of fire: carbon monoxide, carbon dioxide, nitric oxides, organic products of decomposition. Under certain conditions of combustion traces of other toxic substances cannot be excluded

Special protective equipment and precautions for fire-fighters

Special fire-fighting procedures:

No data available.

Special protective equipment for fire-fighters:

As in any fire, wear self-contained positive-pressure breathing apparatus, (MSHA/NIOSH approved or equivalent) and full protective gear.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Avoid contact with skin and eyes. Assure sufficient ventilation. Avoid dust formation. Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges. In case product dust is released: Dust mask

Accidental release measures:

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). If dust is present, control smoking, open flames, sparks, static electricity and friction heat.

Methods and material for containment and cleaning up:

Use mechanical handling equipment. Avoid dust formation. Dust may form explosive mixture with air. Avoid dispersion of dust. Remove sources of ignition. Use non-sparking tools. Use cleaning techniques that do not generate dust clouds if ignition sources are present. Use only vacuum cleaners approved for combustible dust collection.

Environmental Precautions:

Obey relevant local, state, provincial and federal laws and regulations. Do not contaminate any lakes, streams, rivers, groundwater or soil.

7. Handling and storage

Handling

Technical measures (e.g. Local and general ventilation):

It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen deficient environment. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment). Avoid dust formation and control ignition sources. Employ grounding, venting and explosion relief provisions in accordance with accepted engineering practices in any process capable of generating dust and/or static electricity.

Safe handling advice:

Use dust collection systems and filters. Minimize the

escape of dust from process equipment and ventilation systems. Utilize surfaces that minimize dust accumulation and facilitate cleaning. Dust accumulations should be avoided to prevent secondary dust explosions. Avoid dust formation. Provide for appropriate exhaust ventilation and dust collection at machinery. In case of thermal processing, provide for extraction of the vapours or adequate ventilation. In thermal processing: Risk of skin burns

Contact avoidance measures:

No data available.

Storage

Safe storage conditions:

Store cool and dry in the closed original packaging. Minimize dust generation and accumulation. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres. Prevent the generation of dust clouds, since dusts can form explosive mixtures with air. If dust forms, remove all sources of ignition and static discharge.

Safe packaging materials:

No data available.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

None of the components have assigned exposure limits.

Biological Limit Values

No biological exposure limits noted for the ingredient(s).

Appropriate Engineering Controls

It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen deficient environment. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment). Avoid dust formation and control ignition sources. Employ grounding, venting and explosion relief provisions in accordance with accepted engineering practices in any process capable of generating dust and/or static electricity.

Individual protection measures, such as personal protective equipment

Eye/face protection:

Safety glasses with side shields

Skin Protection

Hand Protection:	Additional Information: The wearing of protective gloves is not required if the powder in question is handled at room temperature. Additional Information: Protective heat-insulating gloves are to be used during thermal processing.
Skin and Body Protection:	Safety showers and eye showers should be easily accessible. Long sleeved clothing Long sleeved clothing
Respiratory Protection:	Put on dust mask equipped with P1 particle filter if the occupational threshold limit value has been exceeded. Note time limit for wearing respiratory protective equipment. A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 or applicable federal/provincial requirements must be followed whenever workplace conditions warrant respirator use. NIOSH's "Respirator Decision Logic" may be useful in determining the suitability of various types of respirators.
Hygiene measures:	Do not wear contaminated clothing. Wash hands before breaks and at the end of workday. Smoking, eating and drinking should be prohibited in the application area.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance

Physical state:	solid
Form:	Powder
Color:	White
Odor:	Odorless
Odor Threshold:	Not determined., Not required by safety or application considerations.
Melting Point:	356 °F/180 °C (DSC)
Boiling Point:	> 95 °F/> 35 °C
Flammability:	Not classified as a flammability hazard

Upper/lower limit on flammability or explosive limits

Explosive limit - upper:	see Explosiveness
Explosive limit - lower:	see Explosiveness
Flash Point:	(estimated) does not flash
Autoignition Temperature:	The substance or mixture is not classified as self heating. The substance or mixture is not classified as pyrophoric.
Decomposition Temperature:	> 572 °F/> 300 °C
pH:	Not applicable

Viscosity

Dynamic viscosity:	No data available. Not required by safety or application considerations.
Kinematic viscosity:	> 20.5 mm ² /s (104 °F/40 °C)
Flow Time:	No data available.

Solubility(ies)

Solubility in Water:	Insoluble in water
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Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	No data available. Not required by safety or application considerations.
Vapor pressure:	Not applicable
Relative density:	1.0 - 1.2 (68 °F/20 °C)
Density:	1.23 g/cm ³
Bulk density:	450 g/l
Vapor density (air=1):	Not applicable
Particle characteristics	
Particle Size:	<= 500 µm
Particle Size Distribution:	No data available
Specific surface area:	No data available.
Surface charge/Zeta potential:	No data available.
Shape:	No data available
Crystallinity:	No data available
Surface treatment:	No data available

Other information

Explosive properties:	Not explosive Dust may form explosive mixture with air.
Oxidizing properties:	The substance or mixture is not classified as oxidizing.
Minimum ignition temperature:	> 662 °F/> 350 °C
Formation of Flammable Gases:	Substance or mixture, which in contact with water, does not emit flammable gas
Peroxides:	The substance or mixture is not classified as organic peroxide.
Metal Corrosion:	Not corrosive to metals
Evaporation Rate:	Not applicable

10. Stability and reactivity

Reactivity:	No data available.
Chemical Stability:	Stable under recommended storage conditions.
Possibility of hazardous reactions:	No data available.
Conditions to avoid:	Keep away from heat and sources of ignition. Take precautionary measures against static discharges. Decomposition at elevated temperatures.
Incompatible Materials:	Oxidizing agents. Strong acids.
Hazardous Decomposition Products:	Carbon Dioxide. Carbon Monoxide.

11. Toxicological information

Information on toxicological effects

Information on likely routes of exposure

Inhalation:	Information on effects are given below.
Skin Contact:	Information on effects are given below.

Eye contact: Information on effects are given below.

Ingestion: Information on effects are given below.

Acute toxicity (list all possible routes of exposure)

Oral

Product: Not classified for acute toxicity based on available data.

Dermal

Product: Not classified for acute toxicity based on available data.

Inhalation

Product: Not classified for acute toxicity based on available data.

Repeated dose toxicity

Product: No data available.

Skin Corrosion/Irritation

Product: No data available.

Serious Eye Damage/Eye Irritation

Product: No data available.

Respiratory or Skin Sensitization

Product: No data available.

Carcinogenicity

Product: No data available.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogens present or none present in regulated quantities

US. National Toxicology Program (NTP) Report on Carcinogens:

No carcinogens present or none present in regulated quantities

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended:

No carcinogens present or none present in regulated quantities

Germ Cell Mutagenicity

In vitro

Product: No data available.

In vivo

Product: No data available.

Reproductive toxicity

Product: No data available.

Specific Target Organ Toxicity - Single Exposure

Product: No data available.

Specific Target Organ Toxicity - Repeated Exposure

Product: No data available.

Aspiration Hazard

Product: No data available.

Information on health hazards

Other hazards

Product: No toxicological tests have been conducted with the product itself.;

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product: No data available.

Aquatic Invertebrates

Product: No data available.

Toxicity to Aquatic Plants

Product: No data available.

Toxicity to microorganisms

Product: No data available.

Chronic hazards to the aquatic environment:

Fish

Product: No data available.

Aquatic Invertebrates

Product: No data available.

Toxicity to Aquatic Plants

Product: No data available.

Toxicity to microorganisms

Product: No data available.

Persistence and Degradability

Biodegradation

Product: No data available.

BOD/COD Ratio

Product: No data available.

Bioaccumulative potential

Bioconcentration Factor (BCF)

Product: No data available.

Partition Coefficient n-octanol / water (log Kow)

Product: Log Kow: No data available. Not required by safety or application considerations.

Mobility in soil:

Product No data available.

Results of PBT and vPvB assessment:

Product No data available.

Other adverse effects:

Other hazards

Product: No ecotoxicological studies are available.

13. Disposal considerations

Disposal methods: Waste must be disposed of in accordance with federal, state, provincial and local regulations.

Contaminated Packaging: Packaging material should be recycled or disposed of in accordance with federal, state and local regulations.

14. Transport information

Domestic regulation

49 CFR

Not regulated as a dangerous good

International Regulations

UNRTDG

Not regulated as a dangerous good

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

15. Regulatory information

US Federal Regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

None present or none present in regulated quantities.

US. Toxic Substances Control Act (TSCA) Section 5(a)(2) Final Significant New Use Rules (SNURs) (40 CFR 721, Subpt E)

None present or none present in regulated quantities.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended

None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):

None present or none present in regulated quantities.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Not classified

US. EPCRA (SARA Title III) Section 304 Extremely Hazardous Substances Reporting Quantities and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Hazardous Substances

None present or none present in regulated quantities.

US. EPCRA (SARA Title III Section 313 Toxic Chemical Release Inventory (TRI) Reporting

None present or none present in regulated quantities.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):

None present or none present in regulated quantities.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

None present or none present in regulated quantities.

US State Regulations

US. California Proposition 65

No ingredient requiring a warning under CA Prop 65.

Inventory Status:

Australia Industrial Chem. Act (AICC):	On or in compliance with the inventory	
Canada DSL Inventory List:	On or in compliance with the inventory	
China Inv. Existing Chemical Substances:	On or in compliance with the inventory	
Japan (ENCS) List:	On or in compliance with the inventory	
Korea Existing Chemicals Inv. (KECI):	On or in compliance with the inventory	
New Zealand Inventory of Chemicals:	On or in compliance with the inventory	
Philippines PICCS:	Not in compliance with the inventory.	
Taiwan Chemical Substance Inventory:	On or in compliance with the inventory	Pre-registration is requested for specific importer.
US TSCA Inventory:	On or in compliance with the inventory	Commercial Status: Active
Switzerland New Subs Notified/Registered:	On or in compliance with the inventory	
EINECS, ELINCS or NLP:	On or in compliance with the inventory	EU-REACH compliant for Evonik Operations GmbH and its affiliates as EU manufacturer/EU importer.

16. Other information, including date of preparation or last revision

HMIS Hazard ID

Health	1
Flammability	2
Physical Hazards	0
PERSONAL PROTECTION	B

B - Safety Glasses & Gloves

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible; *Chronic health effect

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Version #: 1.1

Further Information: No data available.

Revision Information

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

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