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SAFETY DATA SHEET

Classified in accordance 29 CFR 1910.1200

1. Identification

Product identifier: VESTOSINT® Z2657

Other means of identification

None.

Recommended restrictions

Recommended use: Powder for coating metallic and non-metallic surfaces

Restrictions on use: Not determined.

Manufacturer/Importer/Distributor Information

Company Name : Evonik Corporation

299 Jefferson Road Parsippany, NJ 07054

USA

Telephone : +1 973 929 8000

Fax : +1 973 929 8040

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

Emergency telephone number:

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

Emergency +1 800 681 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.



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Response: If inhaled, remove to fresh air. If symptoms persist, consult a physician for

treatment. IN CASE OF FIRE, use water spray or fog, foam, dry chemical or CO2. Collect in a chemical waste container. Use only vacuum cleaners

approved for combustible dust collection.

Hazard(s) not otherwise classified (HNOC):

None.

3. Composition/information on ingredients

Mixtures

Composition Comments: moulding compound on the base: polyamide depending on grade: modified,

polymer-modified

Composition Comments: This sheet describes a group of products. It only contains safety-relevant

data. For specific data, see Product Information sheet.

4. First-aid measures

Description of necessary first-aid measures

General information: Pay attention to self-protection. Move out of dangerous area. Keep warm,

position comfortably, and cover well. Do not leave affected persons

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: Cool melted product on skin with plenty of water. Do not remove

solidified product. In case of burns by molten product medical

treatment is necessary.

Eye contact: Rinse with plenty of water. Obtain medical attention if irritation

develops.

Ingestion: If swallowed, get medical attention immediately. Only induce

vomiting if directed by a physician. Never give anything by mouth to

an unconscious person.

Personal Protection for First-

aid Responders:

As in any fire, wear self-contained positive-pressure breathing

apparatus, (MSHA/NIOSH approved or equivalent) and full protective

gear.

Most important symptoms/effects, 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

Specific hazards arising from

the chemical:

May be released in case of fire: carbon monoxide, carbon dioxide, nitric oxides, organic products of decomposition. Under certain fire conditions,

traces of other toxic products may occur.

Special protective equipment and precautions for firefighters

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:

In case product dust is released: Dust mask

Accidental release measures:

If dust is present, control smoking, open flames, sparks, static electricity

and friction heat.

Methods and material for containment and cleaning

up:

Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid dust formation. Dusts might form explosive mixtures with air. Use only vacuum cleaners approved for combustible dust collection. Use cleaning techniques that do not generate dust clouds if ignition sources

are present.

Environmental Precautions:

Do not release into the environment. Obey relevant local, state, provincial and federal laws and regulations. Do not contaminate any lakes, streams,

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ponds, groundwater or soil.

7. Handling and storage

Handling



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

In case of thermal processing, provide for extraction of the vapours or adequate ventilation. In case of dust being formed, provide for adequate extraction. 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.

To identify additional system design issues with respect to dust hazards, it is recommended to conduct a dust hazard analysis using information and sources provided in the OSHA Fact Sheet on combustible dusts (DSG 3/2008) and addressing enforcement issues identified in the Combustible Dust National Emphasis Program (Reissued) (CPL 03-00-008, 3/11/08)

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.

Hygiene measures: Smoking, eating and drinking should be prohibited in the application area.

Storage

Safe storage conditions: General rules of fire prevention should be observed. If dusts are formed:

Take precautionary measures against static charges, keep away from sources of ignition. Keep containers tightly closed in a dry, cool and well-ventilated place. Do not allow dust to collect in open or hidden areas. In product transfer systems involving the use of air as a fluidizing medium, the user must be sure to dissipate static charge by careful bonding and grounding of all equipment and personnel involved in fluid transfer, with

continuity checks to prove effectiveness.

Additional guidance on fire and explosion protection may be found in the

consensus standard NFPA 654 for chemical dusts.

Safe packaging materials: No data available.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

| Chemical Identity | Туре | Exposure Limit Values | Source |
|---------------------------------|------|-----------------------|---|
| exposure limit for dust - | TWA | 3 mg/m3 | US. ACGIH Threshold Limit Values, as |
| Respirable particles. | | | amended (03 2016) |
| exposure limit for dust - | TWA | 10 mg/m3 | US. ACGIH Threshold Limit Values, as |
| Inhalable particles. | | | amended (03 2016) |
| exposure limit for dust - Total | TWA | 50 millions | US. OSHA Table Z-3 (29 CFR 1910.1000), as |
| dust. | | of particles | amended (03 2016) |
| | | per cubic | |
| | | foot of air | |
| exposure limit for dust - | TWA | 15 millions | US. OSHA Table Z-3 (29 CFR 1910.1000), as |
| Respirable fraction. | | of particles | amended (03 2016) |
| | | per cubic | |
| | | foot of air | |
| exposure limit for dust - Total | TWA | 15 mg/m3 | US. OSHA Table Z-3 (29 CFR 1910.1000), as |
| dust. | | | amended (03 2016) |



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| exposure limit for dust - | TWA | 5 mg/m3 | US. OSHA Table Z-3 (29 CFR 1910.1000), as |
|---------------------------------|---------|----------|--|
| Respirable fraction. | | | amended (03 2016) |
| exposure limit for dust - Total | TWA | 15 mg/m3 | US. OSHA Table Z-1-A (29 CFR 1910.1000), |
| dust. | | | as amended (1989) |
| exposure limit for dust - | TWA | 5 mg/m3 | US. OSHA Table Z-1-A (29 CFR 1910.1000), |
| Respirable fraction. | | | as amended (1989) |
| exposure limit for dust - Total | TWA | 15 mg/m3 | US. Tennessee. OELs. Occupational Exposure |
| dust. | | | Limits, Table Z1A, as amended (06 2008) |
| exposure limit for dust - | TWA | 5 mg/m3 | US. Tennessee. OELs. Occupational Exposure |
| Respirable fraction. | | | Limits, Table Z1A, as amended (06 2008) |
| exposure limit for dust - Total | TWA PEL | 10 mg/m3 | US. California Code of Regulations, Title 8, |
| dust. | | | Section 5155. Airborne Contaminants, as |
| | | | amended (01 2015) |
| exposure limit for dust - | TWA PEL | 5 mg/m3 | US. California Code of Regulations, Title 8, |
| Respirable fraction. | | | Section 5155. Airborne Contaminants, as |
| | | | amended (01 2015) |

Appropriate Engineering Controls

In case of thermal processing, provide for extraction of the vapours or adequate ventilation. In case of dust being formed, provide for adequate extraction. 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.

To identify additional system design issues with respect to dust hazards, it is recommended to conduct a dust hazard analysis using information and sources provided in the OSHA Fact Sheet on combustible dusts (DSG 3/2008) and addressing enforcement issues identified in the Combustible Dust National Emphasis Program (Reissued) (CPL 03-00-008, 3/11/08)

Individual protection measures, such as personal protective equipment

Eye/face protection: Wear safety glasses with side shields.

Skin Protection

Hand Protection: Additional Information: Any areas of skin covered with dust must be washed

immediately with soap and water as the powder draws out natural moisture from the skin., Use barrier cream regularly. Additional Information: Use impermeable gloves., Protective heat-insulating gloves are to be used

during thermal processing.

Skin and Body Protection: A safety shower and eye wash fountain should be readily available. To

identify additional Personal Protective Equipment (PPE) requirements, it is recommended that a hazard assessment in accordance with the OSHA PPE Standard (29CFR1910.132) be conducted before using this product.

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: Smoking, eating and drinking should be prohibited in the application area.



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9. Physical and chemical properties

Appearance

Physical state: solid
Form: Powder
Color: White
Odor: odourless

Odor Threshold: not determined, Not required by safety or application

considerations.

pH: Not applicableMelting Point: approx. 208 °C

Boiling Point: Not applicable Decomposition

Flash Point: Not applicable Evaporation Rate: Not applicable

Flammability (solid, gas): Not classified as a flammability hazard

Explosive limit - upper (%):

Explosive limit - lower (%):

Vapor pressure:

Vapor density (air=1):

Density:

Relative density:

See Explosiveness

Not applicable

No data available.

No data available.

1.0 - 1.2 (20 °C)

Solubility in Water: Insoluble

Solubility (other): No data available.

Partition coefficient (n-octanol/water): No data available. Not required by safety or application

considerations.

Self Ignition Temperature: The substance or mixture is not classified as self heating.

The substance or mixture is not classified as pyrophoric.

Decomposition Temperature: > 300 °C

Kinematic viscosity: No data available. Not required by safety or application

considerations.

Dynamic viscosity:No data available. Not required by safety or application

considerations.

Other information

Bulk density: 450 g/l

Explosive properties:Not explosive Dusts might form explosive mixtures with

air.

Oxidizing properties: The substance or mixture is not classified as oxidizing.

Minimum ignition temperature: > 350 °C

Formation of Flammable Gases: Substance or mixture, which in contact with water,

does not emit flammable gas

Metal Corrosion: Not corrosive to metals

Peroxides: The substance or mixture is not classified as

organic peroxide.

10. Stability and reactivity

Reactivity: Under normal conditions: stable.

Chemical Stability: Stable under recommended storage conditions.

Possibility of hazardous

reactions:

Do not bring hot smelter into contact with water (steam formation!)



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Conditions to avoid: Keep away from all ignition sources including heat, sparks and flame.

Incompatible Materials: None known.

Hazardous Decomposition

Products:

carbon monoxide, carbon dioxide Nitrogen Oxides organic products of

decomposition

11. Toxicological information

Information on likely routes of exposure

Inhalation: No data available.

Skin Contact: No data available.

Eye contact: No data available.

Ingestion: No data available.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation: No data available.

Skin Contact: No data available.

Eye contact: No data available.

Ingestion: No data available.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral

Product: No data available.

Dermal

Product: No data available.

Inhalation

Product: No data available.

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.



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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):

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.

Other effects: 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.

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.

Persistence and Degradability



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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: No data available.

Other adverse effects: 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

Remarks : Not dangerous according to transport regulations.

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



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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)

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 312 Extremely Hazardous Substances Reporting Quantities (40 CFR 355, Appendix A)

Not regulated. Not regulated.

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required

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.

US. New Jersey Worker and Community Right-to-Know Act

No ingredient regulated by NJ Right-to-Know Law present.

US. Massachusetts RTK - Substance List

No ingredient regulated by MA Right-to-Know Law present.

US. Pennsylvania RTK - Hazardous Substances

No ingredient regulated by PA Right-to-Know Law present.

US. Rhode Island RTK

No ingredient regulated by RI Right-to-Know Law present.

Inventory Status:

US TSCA Inventory: On or in compliance with the

inventory

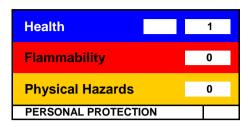
Canada DSL Inventory List: Not in compliance with the inventory.



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

HMIS Hazard ID



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

Issue Date: 10/04/2019

Version #: 1.0

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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