

ZNT Boost (Solid)

Safety Data Sheet

according to GHS

Date of issue:7/2/2015 Revision date:8/12/2015 Supersedes:7/2/2015 Version: 1.1

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture
Product name : ZNT Boost (Solid)

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Use of the substance/mixture : The product is used in epoxy resin and composite applications.

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Zyvex Technologies
1255 Kinnear Road
43212 Columbus, OH
T 614-481-2222 - F 614-481-2260
cballard@zyvextech.com

1.4. Emergency telephone number

Emergency number : Chemtrec (North America): 800.424.9300 Chemtrec (International): 703.527.3887
CHEMTREC (24 HOURS)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to GHS

Skin Sens. 1 H317

Full text of H-statements: see section 16

2.2. Label elements

Labelling according to GHS

Hazard pictograms :



GHS07

Signal word : Warning

Hazard statements : H317 - May cause an allergic skin reaction

Precautionary statements : P261 - Avoid breathing mist, vapours
P272 - Contaminated work clothing should not be allowed out of the workplace
P280 - Wear protective gloves
P302+P352 - IF ON SKIN: Wash with plenty of water
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention
P337+P313 - If eye irritation persists: Get medical advice/attention
P362+P364 - Take off contaminated clothing and wash it before reuse
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

2.3. Other hazards

No additional information available

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SECTION 3: Composition/information on ingredients

3.1. Substance

Name	Product identifier	%	Classification according to GHS
Proprietary resin-polymer mixture (fully reacted)	Not established	>96	Skin Sens. 1, H317
Kentera Functionalized Carbon nanotubes	(CAS No) Not established (CAS No) Carbon: 7440-44-0	<= 4	Not classified

Full text of H-phrases: see section 16

3.2. Mixture

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures after inhalation : If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
- First-aid measures after skin contact : Gently wash with plenty of soap and water. Wash contaminated clothing before reuse.
- First-aid measures after eye contact : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- First-aid measures after ingestion : Not expected to present a significant ingestion hazard under anticipated conditions of normal use.

4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries after inhalation : None under normal use.
- Symptoms/injuries after skin contact : May cause an allergic skin reaction. May cause slight irritation.
- Symptoms/injuries after eye contact : May cause minor eye irritation.

4.3. Indication of any immediate medical attention and special treatment needed

All treatments should be based on observed signs and symptoms of distress in the patient.

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : alcohol resistant foam. Carbon dioxide. Water spray.
- Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : No particular fire or explosion hazard.

5.3. Advice for firefighters

- Firefighting instructions : Do not allow run-off from fire fighting to enter drains or water courses.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- Emergency procedures : Avoid all unnecessary exposure.

6.1.2. For emergency responders

- Protective equipment : Avoid contact with skin and eyes. Wear suitable gloves. Nitrile rubber.
- Emergency procedures : Avoid contact with skin and eyes. Evacuate unnecessary personnel. Stop leak if safe to do so. Small quantities of liquid spill: take up in non-combustible absorbent material and shovel into container for disposal. Impound and recover large spill by mixing it with inert granular solids.

6.2. Environmental precautions

Do not discharge into drains or the environment.

6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Take up in non-combustible absorbent material and shovel into container for disposal.

6.4. Reference to other sections

See Section 8

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Avoid contact with skin and eyes.
Hygiene measures : Do not eat, drink or smoke when using this product. Always wash your hands immediately after handling this product, and once again before leaving the workplace.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep container closed when not in use. Keep only in original container. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight.
Incompatible products : Strong acids. Strong bases. Strong oxidizing agents.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Carbon (7440-44-0)		
United Kingdom	WEL TWA (mg/m ³)	10 mg/m ³ (inhalable dust) 4 mg/m ³ (respirable dust)
USA - OSHA	OSHA PEL (TWA) (mg/m ³)	15 mg/m ³ (total dust) 5 mg/m ³ (respirable dust)

8.2. Exposure controls

Appropriate engineering controls : Avoid creating mist or spray. Provide adequate general and local exhaust ventilation.
Hand protection : Nitrile rubber gloves
Eye protection : In case of splashing or aerosol production: protective goggles.
Skin and body protection : Long sleeved protective clothing
Respiratory protection : No special respiratory protection equipment is recommended under normal conditions of use with adequate ventilation

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Appearance : Black flake
Colour : Black
Odour : slight
Odour threshold : No data available
pH : No data available
Relative evaporation rate (butyl acetate=1) : No data available
Melting point : No data available
Freezing point : No data available
Boiling point : > 149 °C
Flash point : > 93.3 °C
Auto-ignition temperature : No data available
Decomposition temperature : No data available
Flammability (solid, gas) : No data available
Vapour pressure : 0.03 mbar @ 77 °C
Relative vapour density at 20 °C : No data available
Relative density : No data available
Solubility : Negligible.
Log Pow : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available
Explosive properties : No data available
Oxidising properties : No data available
Explosive limits : No data available

9.2. Other information

No additional information available

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SECTION 10: Stability and reactivity

10.1. Reactivity

Incompatible materials.

10.2. Chemical stability

Stable at ambient temperature and under normal conditions of use.

10.3. Possibility of hazardous reactions

Hazardous polymerization may occur. Reacts with (some) acids.

10.4. Conditions to avoid

Exposure to extremely high temperatures.

10.5. Incompatible materials

Strong oxidizing agents. Strong mineral acids. Strong bases.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Likely routes of exposure	:	Dermal
Acute toxicity	:	Not classified
Skin corrosion/irritation	:	Not classified
Serious eye damage/irritation	:	Not classified
Respiratory or skin sensitisation	:	May cause an allergic skin reaction.
Germ cell mutagenicity	:	Not classified
Carcinogenicity	:	Not classified
Reproductive toxicity	:	Not classified
Specific target organ toxicity (single exposure)	:	Not classified
Specific target organ toxicity (repeated exposure)	:	Not classified
Aspiration hazard	:	Not classified
Potential adverse human health effects and symptoms	:	May cause an allergic skin reaction.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment

12.2. Persistence and degradability

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Persistence and degradability	Not readily biodegradable.

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

Additional information : Avoid release to the environment

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste) : Disposal must be done according to official regulations.

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Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

UN-No. (ADR) : Not applicable
UN-No. (IMDG) : Not applicable
UN-No. (IATA) : Not applicable
UN-No. (ADN) : Not applicable

14.2. UN proper shipping name

Proper Shipping Name (ADR) : Not applicable
Proper Shipping Name (IMDG) : Not applicable
Proper Shipping Name (IATA) : Not applicable
Proper Shipping Name (ADN) : Not applicable

14.3. Transport hazard class(es)

ADR, IMDG, IATA, ADN
Transport hazard class(es) : Not applicable

14.4. Packing group

Packing group (ADR) : Not applicable
Packing group (IMDG) : Not applicable
Packing group (IATA) : Not applicable
Packing group (ADN) : Not applicable

14.5. Environmental hazards

Dangerous for the environment : No
Marine pollutant : No

14.6. Special precautions for user

None

Rail transport

Carriage prohibited (RID) : No

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

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU-Regulations

Contains no substances with Annex XVII restrictions
Contains no substance on the REACH candidate list
Contains no REACH Annex XIV substances

National regulations

No additional information available

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Indication of changes:

Revision :

9.1	Modified	Appearance
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Abbreviations and acronyms:

CAS	(Chemical Abstracts Service) number
GHS:	Globally Harmonized System (of Classification and Labeling of Chemicals).
SDS	Safety Data Sheet

Data sources : Component Supplier SDSs.
European Chemicals Agency (ECHA) Registered Substances list.
Internal Company test data.
Organisation for Economic Co-operation and Development.
Taiwan Regulation of Labelling and Hazard Communication of Dangerous and Harmful Materials

Full text of H- statements:

Skin Sens. 1	Sensitisation — Skin, category 1
H317	May cause an allergic skin reaction

SDS prepared by:

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This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product