

Printing date 11/08/2022

Version No: 9.07

Reviewed on 11/08/2022

1 Identification

- · Product identifier
- Trade name: SONGNOX[®] 1010

SONGNOX® 1010 PW, SONGNOX® 1010 FF, SONGNOX® 1010 DF, SONGNOX® 1010 GR, SONGNOX® 1010 OPS

- CAS Number: 6683-19-8 • EC number: 229-722-6
- **Recommended use:** Antioxidant Plastic additive
- · Restrictions on use: Uses not specified
- · Details of the supplier of the safety data sheet

· Manufacturer/Supplier:

Songwon Industrial Co., Ltd. 83, Jangsaengpo-ro, Nam-gu, Ulsan, Korea Tel: +82 (0)52-273-9841 Fax: +82 (0)52-272-3528 Email: sds@songwon.com

Songwon International AG Walzmühlestrasse 48 CH-8500 Frauenfeld Tel: +41 (0)52 635 00 00 Fax: +41 (0)52 635 00 01 Email: sds@songwon.com

· Emergency telephone number:

North East Asia / South East Asia: Call Songwon Ind. Tel: +82 (0)52-273-9841 Europe / Middle East / India / Africa: Call BIG Tel: +32 (0)14-584545 Americas: Call CHEMTREC Day or Night DOMESTIC NORTH AMERICA 1-800-424-9300 INTERNATIONAL, CALL USA 703-527-3887 (collect calls accepted)

2 Hazard(s) identification

· Classification of the substance or mixture

Combustible Dust May form combustible dust concentrations in the air.

Additional information:

Granular or free flow product grades may form combustible dust concentrations in air if processing activities significantly reduce the particle size (e.g. mechanical or pneumatic conveying, grinding, pulverizing).

The powder grades of this product may form combustible dust concentrations in air.

· Label elements

· GHS label elements

The substance is classified and labeled according to the Globally Harmonized System (GHS).

- · Hazard pictograms Void
- · Signal word Warning
- · Hazard statements

May form combustible dust concentrations in the air.



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· Additional information:

Granular or free flow product grades may form combustible dust concentrations in air if processing activities significantly reduce the particle size (e.g. mechanical or pneumatic conveying, grinding, pulverizing).

The powder grades of this product may form combustible dust concentrations in air.

- · Other hazards
- · Results of PBT and vPvB assessment
- · PBT: No
- · vPvB: No

3 Composition/information on ingredients

- · Chemical characterization: Substances
- · CAS No. Description
- 6683-19-8

Tetrakis[methylene-3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate] methane

- · Identification number(s)
- EC number: 229-722-6

4 First-aid measures

- · Description of first aid measures
- General information: No special measures required. If symptoms persist consult doctor.
- After inhalation: Supply fresh air.
- After skin contact: Generally the product does not irritate the skin.
- After eye contact:

Rinse opened eye for several minutes under running water.

Remove contact lenses, if present and easy to do. Continue rinsing.

- · After swallowing: Rinse mouth.
- Information for doctor:
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- $^{\rm \cdot}$ Indication of any immediate medical attention and special treatment needed
- No further relevant information available.

5 Fire-fighting measures

- · Extinguishing media
- Suitable extinguishing agents:

CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam. Use fire fighting measures that suit the environment.

· For safety reasons unsuitable extinguishing agents: Water with full jet

• Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

In case of fire, the following can be released: Carbon monoxide

Carbon dioxide

- · Advice for firefighters
- · Protective equipment: Wear self-contained respiratory protective device.

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· Additional information

Cool endangered receptacles with water spray.

Collect contaminated fire fighting water separately. It must not enter the sewage system.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures
 Ensure adequate ventilation.
 Wear protective clothing.
 Avoid formation of dust.
 Keep away from ignition sources.
 Environmental precautions: Do not allow product to reach sewage system or any water course.
 Methods and material for containment and cleaning up:
 Pick up mechanically.
 Disperse of the galles and material precautions to reach any product to reach sewage system.

Dispose of the collected material according to regulations.

Reference to other sections
 See Section 7 for information on safe handling.
 See Section 8 for information on personal protection equipment.
 See Section 13 for disposal information.

7 Handling and storage

· Handling:

· Precautions for safe handling

Prevent formation of dust. Any deposit of dust which cannot be avoided must be regularly removed. Ensure good ventilation/exhaustion at the workplace.

• Information about protection against explosions and fires: Dust can combine with air to form an explosive mixture. Keep ignition sources away - Do not smoke. Protect against electrostatic charges.

· Conditions for safe storage, including any incompatibilities

· Storage:

• Requirements to be met by storerooms and receptacles: Store only in the original receptacle.

- Information about storage in one common storage facility: Store away from oxidizing agents.
- Further information about storage conditions:

Store in cool, dry conditions in well sealed receptacles. Protect from heat and direct sunlight.

· Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

· Additional information about design of technical systems: No further data; see item 7.

· Control parameters

Components with limit values that require monitoring at the workplace:				
CAS: 6683-19-8 pentaerythritol tetrakis(3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate)				
PEL	15* 5** mg/m³ * total dust **respirable fraction			
REL	10* 5** mg/m³ * total dust **respirable fraction			
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(Contd. of page 3) TLV 10 mg/m³ **Dust Value** · Additional Occupational Exposure Limit Values for possible hazards during processing: PEL: 15* 5** mg/m³ * total dust **respirable fraction REL: 10* 5** mg/m³ * total dust **respirable fraction TLV: 10 mg/m³ Dust Value · Exposure controls Personal protective equipment: · General protective and hygienic measures: Do not eat, drink, smoke or sniff while working. Keep away from foodstuffs, beverages and feed. The usual precautionary measures for handling chemicals should be followed. Breathing equipment: Not necessary if room is well-ventilated. Protection of hands: Protective gloves and protective skin cream The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation Material of gloves The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. Penetration time of glove material The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed. Eye protection: Safety glasses Body protection: Protective work clothing · Limitation and supervision of exposure into the environment No further relevant information available. 9 Physical and chemical properties · Information on basic physical and chemical properties · General Information

· Appearance:	
Form:	Solid in various forms
Color:	White
· Odor:	Odorless
· Odor threshold:	Not determined.
· pH-value:	Not applicable.
· Change in condition	
Melting point/Melting range:	117.1 °C (242.8 °F) (capillary method)
Boiling point/Boiling range:	281 °C (537.8 °F) (OECD Guideline 103)
· Flash point:	Not applicable.
· Flammability (solid, gaseous):	Product is not flammable.
· Ignition temperature:	> 350 °C (> 662 °F)
· Decomposition temperature:	Not determined.
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· Danger of explosion:	Not determined.		
	Product is not explosive. However, formation of		
Funlacian limita	explosive air/dust mixtures are possible.		
• Explosion limits:	No.4 de terrer in e d		
Lower:	Not determined.		
Upper:	Not determined.		
· Oxidizing properties	No		
[·] Vapor pressure at 20 °C (68 °F):	1.3 - 7 hPa (1 - 5.3 mm Hg) (TGA)		
· Density at 20 °C (68 °F):	1.116 g/cm³ (9.31302 lbs/gal) (OECD Guideline 109)		
· Relative density	Not determined.		
· Vapor density	Not applicable.		
Evaporation rate	Not applicable.		
· Solubility in / Miscibility with			
Water at 20 °C (68 °F):	< 0.0001 g/L		
· Partition coefficient (n-octanol/water) at 25	°C		
(77 °F):	22.7 log Pow (calculated)		
	Not determined.		
· Viscosity:			
Dynamic:	Not applicable.		
Kinematic:	Not applicable.		
· Other information	No further relevant information available.		

10 Stability and reactivity

- · Reactivity No further relevant information available.
- · Chemical stability No decomposition if used and stored according to specifications.
- · Thermal decomposition / conditions to be avoided:
- No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials:
- Strong oxidizing agents
- Strong acids and bases
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

· Information on toxicological effects

· Acute toxicity: Based on available data, the classification criteria are not met.

· LD/LC50 values that are relevant for classification:

Oral LD50 > 5000 mg/kg (Rat) (OECD Guideline 423)

Dermal LD50 > 3160 mg/kg (Rabbit)

- · Primary irritant effect:
- on the skin: Based on available data, the classification criteria are not met.
- · on the eye: Based on available data, the classification criteria are not met.
- \cdot Sensitization: Based on available data, the classification criteria are not met.

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· Additional toxicological information:

- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer) Substance is not listed.
- · NTP (National Toxicology Program) Substance is not listed.
- · OSHA-Ca (Occupational Safety & Health Administration) Substance is not listed.

12 Ecological information

· Toxicity

· Aquatic toxicity:						
LC50 (96h)	> 100 mg/L (Fish) (OECD Guideline 203, Brachydanio rerio)					
EC50 (24h)	> 86 mg/L (Daphnia) (OECD Guideline 202, Daphnia magna)					
EC50 (72h) (static)	> 100 mg/L (Algae) (Guideline 87/302/EEC, Desmodesmus subspicatus)					
NOEC (72h) (static)	100 mg/L (Algae) (87/302/EEC)					

- Persistence and degradability Not readily biodegradable <10 % (28 d, OECD Guideline 301 B)
- · Behavior in environmental systems:
- **Bioaccumulative potential** Not worth-mentioning accumulation in organisms 13.5 L/kg (QSAR)
- Mobility in soil 10 log Koc (QSAR)
- · Other adverse effects No further relevant information available.

13 Disposal considerations

- Waste treatment methods
- · Recommendation: Must be specially treated adhering to official regulations.
- Uncleaned packagings
- · Recommendation: Disposal must be made according to official regulations.

UN-Number		
DOT, ADR/RID/ADN, IMDG, IATA	Void	
UN proper shipping name		
DOT, ADR/RID/ADN, IMDG, IATA	Void	
Transport hazard class(es)		
DOT, ADR/RID/ADN, IMDG, IATA		
Class	Void	
Packing group		
DOT, ADR/RID/ADN, IMDG, IATA	Void	
Environmental hazards:		
Marine pollutant:	No	



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 Special precautions for user 	Not applicable.
 Transport in bulk according to Annex II MARPOL73/78 and the IBC Code: 	of Not applicable.
· Transport/Additional information:	Not dangerous according to the above specifications.
· UN "Model Regulation":	Void

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture No further relevant information available.
- · SARA
- · Section 355 (extremely hazardous substances): Substance is not listed.
- · Section 313 (Specific toxic chemical listings): Substance is not listed.
- TSCA (Toxic Substances Control Act) Inventory: ACTIVE
- · Hazardous Air Pollutants Substance is not listed.
- · Proposition 65
- · Chemicals known to cause cancer: Substance is not listed.
- · Chemicals known to cause reproductive toxicity for females: Substance is not listed.
- · Chemicals known to cause reproductive toxicity for males: Substance is not listed.
- · Chemicals known to cause developmental toxicity: Substance is not listed.
- · New Jersey Right-to-Know List: Substance is not listed.
- · New Jersey Special Hazardous Substance List: Substance is not listed.
- · Pennsylvania Right-to-Know List: Substance is not listed.
- · Pennsylvania Special Hazardous Substance List: Substance is not listed.
- · Carcinogenicity categories
- · EPA (Environmental Protection Agency) Substance is not listed.
- · TLV (Threshold Limit Value) Substance is not listed.
- · NIOSH-Ca (National Institute for Occupational Safety and Health) Substance is not listed.

¹16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Department issuing SDS:

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· Contact:

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• Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail) ICAO: International Civil Aviation Organisation REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals MARPOL: (from Marine Pollutant) International Convention for the Prevention of Marine Pollution from Ships IBC Code: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk UN: United Nations (also UNO: United Nations Organization) NOEC: No Observed Effect Concentration

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(Contd. of page 7) OECD: Organisation for Economic Co-operation and Development ASTM: American Society for Testing and Materials WAF: Water Accommodated Fraction ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation IATA: International Air Transport Association EINECS: European Inventory of Existing Commercial Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety OSHA: Occupational Safety & Health TLV: Threshold Limit Value PEL: Permissible Exposure Limit REL: Recommended Exposure Limit

** Data compared to the previous version altered.