

Printing date 01/27/2016 Version No: 6 Reviewed on 01/27/2016

1 Identification

· Product identifier

· Trade name: SONGSORB® 1000 PW

· CAS Number:

2440-22-4

· EC number:

219-470-5

- · Application of the substance / the mixture Plastic additive
- · Uses advised against: No further relevant information available.
- Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Songwon Industrial Co., Ltd.

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Songwon International – Americas, Inc.

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· 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

Skin Sens. 1 H317 May cause an allergic skin reaction.

- · Label elements
- · GHS label elements

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

· Hazard pictograms



GHS07

- · Signal word Warning
- · Hazard statements

H317 May cause an allergic skin reaction.

· Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapors/spray

P280 Wear protective gloves.

P272 Contaminated work clothing must not be allowed out of the workplace.

P363 Wash contaminated clothing before reuse.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P391 Collect spillage.

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P501 Dispose of contents/container in accordance with local/regional/national/international

- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 1Fire = 1Reactivity = 0

· HMIS ratings (scale 0 - 4)



1 Health = 1Fire = 1

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

3 Composition/information on ingredients

- · Chemical characterization: Substances
- · CAS No. Description

2440-22-4 2-(2H-benzotriazol-2-yl)-p-cresol

- · Identification number(s)
- · EC number: 219-470-5

4 First-aid measures

- · Description of first aid measures
- · General information:

Take affected persons out of danger area and lay down.

In case of irregular breathing or respiratory arrest provide artificial respiration.

- · After inhalation: Supply fresh air.
- · After skin contact: Clean with water and soap. If possible, also wash with polyethylene glycol 400.
- · After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

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

- · After swallowing: Rinse out mouth and then drink plenty of water.
- Information for doctor:
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- · 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

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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

Nitrogen oxides (NOx)

- · Advice for firefighters
- · Protective equipment: Wear self-contained respiratory protective device.
- · 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 to enter sewers/ surface or ground water.
- · Methods and material for containment and cleaning up:

Pick up mechanically.

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

8 Exposure controls/personal protection

- · Control parameters
- · Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

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· Additional Occupational Exposure Limit Values for possible hazards during processing:

PEL: $15*5**mg/m^3$

* total dust **respirable fraction

REL: $10*5**mg/m^3$

* 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.

Immediately remove all soiled and contaminated clothing.

The usual precautionary measures for handling chemicals should be followed.

- · Breathing equipment: Not necessary if room is well-ventilated.
- Protection of hands:



Protective gloves

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

9 Physical and chemical properties

Information on basic physical and chemical properties		
· General Information · Appearance:		
Form:	Powder	
Color:	Yellowish	
· Odor:	Odorless	
· Odor threshold:	Not determined.	
· pH-value:	Not applicable.	
· Change in condition Melting point/Melting range: Boiling point/Boiling range:	128-132 °C (262-270 °F) Not determined.	
· Flash point:	205 °C (401 °F)	
· Flammability (solid, gaseous):	Product is not flammable.	
· Ignition temperature:	Not determined.	
Decomposition temperature:	Not determined.	

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· Auto igniting:	Not determined.	
Danger of explosion:	Product does not present an explosion hazard.	
Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
Oxidizing properties	No	
Vapor pressure:	Not applicable.	
Density at 20 °C (68 °F):	1.38 g/cm³ (11.516 lbs/gal)	
Relative density	Not determined.	
Vapor density	Not applicable.	
Evaporation rate	Not applicable.	
Solubility in / Miscibility with		
Water at 20 °C (68 °F):	0.00017~g/L	
Partition coefficient (n-octanol/wa	t ter): 4.2 @ 25 °C (OECD Guideline 107) (logPow)	
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: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:

· LD/LC50 values that are relevant for classification:		
Oral	LD50	10000 mg/kg (Rat) (OECD Guideline 423)
Dermal	LD50	> 2000 mg/kg (Rat) (US AFDO)
Inhalative	LC50 (4h)	> 590 mg/L (Rat) (OECD Guideline 403, inhalation:aerosol)

- · Primary irritant effect:
- · on the skin: No irritant effect.
- on the eye: No irritating effect.
- · Sensitization: Sensitization possible through skin contact.
- · Additional toxicological information:
- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer) Substance is not listed.
- · NTP (National Toxicology Program) Substance is not listed.

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· OSHA-Ca (Occupational Safety & Health Administration) Substance is not listed.

12 Ecological information

· Toxicity

· Aquatic toxicity:	
EC50 (24h) (static)	> 1000 mg/L (Daphnia) (OECD Guideline 202, Daphnia magna)
EC50 (3h) (static)	> 100 mg/L (Bacteria) (OECD Guideline 209, activated sludge)
EC50 (72h) (static)	> 100 mg/L (Algae) (87/302/EEC, Desmodesmus subspicatus) Read-across to CAS 3896-11-5
	Read-across to CAS 3896-11-5
LC50 (96h) (static)	> 0.17 mg/L (Fish) (OECD Guideline 203, Oncorhynchus mykiss)
NOEC (21d) (static)	0.013 mg/L (Daphnia) (OECD Guideline 211, Daphnia magna)
NOEC (72h) (static)	33 mg/L (Algae) (87/302/EEC, Desmodesmus subspicatus) Read-across to CAS 3896-11-5
	Read-across to CAS 3896-11-5

· Persistence and degradability

Not readily biodegradable

0 - 2 % @ 28 d, OECD Guideline 301B (CO2 evolution)

- Behavior in environmental systems:
- · Bioaccumulative potential

Due to the distribution coefficient n-octanol/water an accumulation in organisms is possible.

- · Mobility in soil $\geq 425 \leq 2704$ (calculated) Koc
- · Ecotoxical effects:
- · Remark:

The declaration of the toxic action refers to the nominal concentration.

Tested above the maximum solubility.

· Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
- $\cdot \textit{Recommendation:} \ \textit{Must be specially treated adhering to official regulations.}$
- · Uncleaned packagings
- · Recommendation: Disposal must be made according to official regulations.

4 Transport information		
· UN-Number · DOT, ADR,RID,ADN, IMDG, IATA	UN3077	
· UN proper shipping name		
· DOT	Environmentally hazardous substances, solid, n.o.s. (2-(2H-benzotriazol-2-yl)-p-cresol)	
· ADR/RID/ADN	3077 Environmentally hazardous substances, solid, n.o.s. (2-(2H-henzotriazol-2-yl)-n-cresol)	

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· IMDG	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLIL N.O.S. (2-(2H-benzotriazol-2-yl)-p-cresol), MARIN POLLUTANT
· IATA	Environmentally hazardous substance, solid, n.o.s. (2-(2H benzotriazol-2-yl)-p-cresol)
· Transport hazard class(es)	
· DOT, ADR,RID,ADN, IMDG, IATA	
· Class · Label	9 Miscellaneous dangerous substances and articles 9
· Packing group · DOT, ADR,RID,ADN, IMDG, IATA	III
· Environmental hazards: · Marine pollutant: · Special marking (ADR/RID/ADN):	Yes (P) Symbol (fish and tree) Symbol (fish and tree)
Special marking (IATA):	Symbol (fish and tree)
· Special precautions for user · Danger code (Kemler): · EMS Number: · Stowage Category · Stowage Code	Warning: Miscellaneous dangerous substances and articles 90 F-A,S-F A SW23 When transported in BK3 bulk container, see 7.6.2.1
· Transport in bulk according to Annex I. MARPOL73/78 and the IBC Code:	and 7.7.3.9. I of Not applicable.
· Transport/Additional information:	11
· DOT	
· Remarks:	Special marking with the symbol (fish and tree).
· UN "Model Regulation":	UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE SOLID, N.O.S. (2-(2H-BENZOTRIAZOL-2-YL)-P-CRESOL), III

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- ·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): Substance is 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.

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- · 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.
- · Cancerogenity categories
- · EPA (Environmental Protection Agency) Substance is not listed.
- · TLV (Threshold Limit Value established by ACGIH) Substance is not listed.
- · NIOSH-Ca (National Institute for Occupational Safety and Health) Substance is not listed.

· Chemical Inventories:

Australia - AICS

Canada - DSL

EU - EINECS

China - IECSC

Japan - ENCS

New Zealand - NZIoC

Korea - ECL

USA - TSCA

Philippines - PICCS

16 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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· 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

OECD: Organisation for Economic Co-operation and Development

ASTM: American Society for Testing and Materials

WAF: Water Accommodated Fraction

ADR: Accord européen sur le transport 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

P: Marine Pollutant

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

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

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TLV: Threshold Limit Value PEL: Permissible Exposure Limit REL: Recommended Exposure Limit

Skin Sens. 1: Sensitisation - Skin, Hazard Category 1

· * Data compared to the previous version altered.

TC