

SAFETY DATA SHEET

according to 1907/2006/EC, Article 31

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Heat Spreader (PH3)

Revision 0
Revision date 2012-03-08

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

1.1. Product identifier

Product name	Heat Spreader (PH3)
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1.2. Relevant identified uses of the substance or mixture and uses advised against

Description	Heat spreader.
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1.3. Details of the supplier of the safety data sheet

Company	T-Global Technology Limited
Address	40 Centenary Business Centre Hammond House Nuneaton Warwickshire CV11 6RY United Kingdom
Telephone	+44 (0) 20 8133 2062

1.4. Emergency telephone number

Emergency telephone number	+44 (0) 20 8133 2062
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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Main hazards	No Significant Hazard
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2.2. Label elements

Risk phrases	No Significant Hazard.
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2.3. Other hazards

Other hazards	Not determined.
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SECTION 3: Composition/information on ingredients

3.2. Mixtures

67/548/EEC / 1999/45/EC

Chemical Name	Index No.	CAS No.	EC No.	REACH Registration Number	Conc. (%w/w)	Classification
Copper (Copper fume)		7440-50-8			70 - 80%	
Aluminium oxide (Aluminium oxides total inhalable dust)		1344-28-1			10 - 20%	

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	Move the exposed person to fresh air.
Eye contact	Rinse immediately with plenty of water for 15 minutes holding the eyelids open.
Skin contact	Wash off immediately with plenty of soap and water. Remove contaminated clothing.
Ingestion	If swallowed, rinse mouth with water (only if the person is conscious). DO NOT INDUCE

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4.1. Description of first aid measures

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

Inhalation	May cause irritation to respiratory system.
Eye contact	May cause irritation to eyes.
Skin contact	May cause irritation to skin.
Ingestion	Ingestion may cause nausea and vomiting.

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

Inhalation	Get medical advice/attention if you feel unwell.
Eye contact	Seek medical attention if irritation or symptoms persist.
Skin contact	Seek medical attention if irritation or symptoms persist.
Ingestion	If swallowed, seek medical advice immediately and show this container or label.

SECTION 5: Firefighting measures**5.1. Extinguishing media**

	Use extinguishing media appropriate to the surrounding fire conditions.
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5.2. Special hazards arising from the substance or mixture

	Burning produces irritating, toxic and obnoxious fumes.
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5.3. Advice for firefighters

	Wear self contained breathing apparatus and protective clothing.
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SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

	Ensure adequate ventilation of the working area. Keep public away from danger area. Keep upwind. Wear suitable protective equipment.
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6.2. Environmental precautions

	Do not allow product to enter drains. Prevent further spillage if safe. Advise local authorities if large spills cannot be contained.
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6.3. Methods and material for containment and cleaning up

	Transfer to suitable, labelled containers for disposal. Clean spillage area thoroughly with plenty of water.
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6.4. Reference to other sections

	See section 13. DISPOSAL CONSIDERATIONS for further information.
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SECTION 7: Handling and storage**7.1. Precautions for safe handling**

	Avoid contact with eyes and skin. Ensure adequate ventilation of the working area. Adopt best Manual Handling considerations when handling, carrying and dispensing.
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7.2. Conditions for safe storage, including any incompatibilities

	Keep in a cool, dry, well ventilated area. Keep containers tightly closed. Store in correctly labelled containers.
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7.3. Specific end use(s)

	No data is available on this product.
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SECTION 8: Exposure controls/personal protection**8.1. Control parameters****8.1.1. Exposure Limit Values**

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8.1.1. Exposure Limit Values

Aluminium oxide (Aluminium oxides respirable dust)	WEL 8-hr limit ppm: -	WEL 8-hr limit mg/m3: 4
	WEL 15 min limit ppm: -	WEL 15 min limit mg/m3: -
Aluminium oxide (Aluminium oxides total inhalable dust)	WEL 8-hr limit ppm: -	WEL 8-hr limit mg/m3: 10
	WEL 15 min limit ppm: -	WEL 15 min limit mg/m3: -
Copper (Copper dusts and mists (as Cu))	WEL 8-hr limit ppm: -	WEL 8-hr limit mg/m3: 1
	WEL 15 min limit ppm: -	WEL 15 min limit mg/m3: 2
Copper (Copper fume)	WEL 8-hr limit ppm: -	WEL 8-hr limit mg/m3: 0.2
	WEL 15 min limit ppm: -	WEL 15 min limit mg/m3: -

8.2. Exposure controls

8.2.1. Appropriate engineering controls	Ensure adequate ventilation of the working area.
8.2.2. Individual protection measures	Wear suitable protective clothing.
Eye / face protection	Approved safety goggles.
Skin protection - Handprotection	Wear suitable gloves.
Skin protection - Other	Wear suitable protective equipment.
Respiratory protection	Wear suitable respiratory equipment when necessary.
Occupational exposure controls	Keep away from food, drink and animal feedingstuffs. Wash hands after handling the product.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State	Solid
Colour	Black
Odour	Odourless
Relative density	7.5
Solubility	Insoluble in water

9.2. Other information

	No data available.
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SECTION 10: Stability and reactivity

10.1. Reactivity

	No data is available on this product.
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10.2. Chemical stability

	Stable under normal conditions.
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10.3. Possibility of hazardous reactions

	No data is available on this product.
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10.4. Conditions to avoid

	No data is available on this product.
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10.5. Incompatible materials

	No data is available on this product.
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10.6. Hazardous decomposition products

	No data is available on this product.
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SECTION 11: Toxicological information

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11.1. Information on toxicological effects

Skin corrosion/irritation	May cause irritation to skin.
Serious eye damage/irritation	May cause irritation to eyes.
Respiratory or skin sensitisation	No sensitization effects reported.
Germ cell mutagenicity	No mutagenic effects reported.
Carcinogenicity	No carcinogenic effects reported.

11.1.4. Toxicological Information

	No data available
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SECTION 12: Ecological information

12.1. Toxicity

	No data available
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12.2. Persistence and degradability

	No data is available on this product.
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12.3. Bioaccumulative potential

	No data is available on this product.
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12.4. Mobility in soil

	Insoluble in water.
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12.5. Results of PBT and vPvB assessment

	No data is available on this product.
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12.6. Other adverse effects

	No data is available on this product.
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SECTION 13: Disposal considerations

13.1. Waste treatment methods

	Do not empty into drains; dispose of this material and its container in a safe way.
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General information

	Dispose of in compliance with all local and national regulations.
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Disposal methods

	Contact a licensed waste disposal company.
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SECTION 14: Transport information

ADR/RID

	The product is not classified as dangerous for carriage.
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IMDG

	The product is not classified as dangerous for carriage.
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IATA

	The product is not classified as dangerous for carriage.
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SECTION 15: Regulatory information

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

	REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC.
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15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

COMMISSION REGULATION (EU) No 453/2010 of 20 May 2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC.

15.2. Chemical safety assessment

No data available.

SECTION 16: Other information**Further information**

The information supplied in this Safety Data Sheet is designed only as guidance for the safe use, storage and handling of the product. This information is correct to the best of our knowledge and belief at the date of publication however no guarantee is made to its accuracy. This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any other process.