

Safety Data Sheet



Product name:

Brass Starter

Document N°: LB01-00411

Issue: 1

Revision date: 30 August 2021

Compiled in accordance with REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758
Prepared according to GB CLP which is the retained CLP Regulation (EU) No 1272/2008, as amended for Great Britain

1		SECTION 1: IDENTIFICATION OF SUBSTANCE / PREPARATION AND OF THE COMPANY
1.1	Product identifier	Substance name: Brass starter (Red phosphorus) EC No.: 231-768-7 CAS No.: 7723-14-0 Index No.: 015-002-00-7 REACH Registration No.: 01-2119489913-23-XXXX
	Unique Formula Identifier (UFI)	Not applicable as this substance is not a mixture
1.2	Relevant identified uses of the substance or mixture and uses advised against	Relevant identified uses: Initiator mechanism Uses advised against: No data Reason why uses advised against: No data
1.3	Details of the supplier of the safety data sheet	Molecular Products Ltd Parkway, Harlow Business Park, Harlow, Essex, CM19 5FR, UK +44 (0) 1279 445111 (I) sds@molprod.com (I) Only available during office hours 0900 – 1700 GMT
1.4	Emergency telephone number	+44 (0) 1865 407333 (24 hr, English speaking) +86 400 120 6011 (China) +52 555 004 8763 (Mexico) +56 225 829 336 (Chile) +55 11 3197 5891 (Brazil)

2		SECTION 2: HAZARDS IDENTIFICATION
2.1	Classification of the substance or mixture	
2.1.1	Classification according to Regulation (EC) No 1272/2008 (CLP/GHS)	Not classified
2.1.2	See section 16 for full text of H statements	
2.2	Label elements	
2.2.1	Labelling in accordance with EC Regulation No 1272/2008 (CLP/GHS)	
	Hazard pictogram	None
	Signal word	None
	Hazard statements	None
	Precautionary statements	None
	Supplemental Hazard information (EU):	None
2.3	Other hazards	
	None known	

3		SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS
3.2	Mixtures	
	Chemical characterisation	An article containing red phosphorus, ground glass and glue
	Chemical name	CAS No. Index No. REACH registration No. EC No. Classification % [weight] SCL, M-factor, ATE
	Phosphorus (red)**	7723-14-0 015-002-00-7 01-2119489913-23-XXXX 231-768-7 Flam. Sol I H228 Aquatic Chronic 3 H412 < 0.1% w/w No data

4		SECTION 4: FIRST AID MEASURES
4.1	Description of measures	
	General notes	
	Following inhalation	Not a normal route of exposure
	Following skin contact	Clean areas of skin affected with soap and plenty of water. If necessary, seek medical advice

	Following eye contact	Wash out eye thoroughly with plenty of water until irritation subsides; if necessary, consult an eye specialist/ophthalmologist
	Following ingestion	If product is swallowed, do NOT induce vomiting. Drink plenty of water; if necessary, seek medical advice
	Self-protection of the first aider	If the atmosphere is dusty ensure that there is sufficient LEV or suitable respiratory protective equipment is used.
4.2	Most important symptoms and effects, both acute and delayed	There is little risk to health unless large quantities >10 match heads are ingested
4.3	Indication of any immediate medical attention and special treatment needed	Treatment as described above

5 SECTION 5: FIRE FIGHTING MEASURES		
5.1	Extinguishing media	Suitable extinguishing media: Water only suitable. Unsuitable extinguishing media: Do not use foam
5.2	Special hazards arising from the substance or mixture	May cause fire or explosion in contact with combustible materials. Containers near heat source should be removed or cooled with water Hazardous combustion products: phosphorus oxides
5.3	Advice for fire fighters	Self-contained breathing apparatus, boots and gloves may be required

6 SECTION 6: ACCIDENTAL RELEASE MEASURES		
6.1	Personal precautions, protective equipment and emergency procedures	For non-emergency personnel: - Protective equipment: Adhere to personal protective measures. Avoid inhalation of dust and skin and eye contact with active head material - Emergency procedures: No data For emergency responders: Adhere to personal protective measures. Avoid inhalation of dust and skin and eye contact with active head material
6.2	Environmental precautions	Do not allow to get into wastewater or waterways; if this occurs, inform the relevant water authority at once
6.3	Methods and materials for containment and cleaning up	For containment: No data For cleaning up: In the event of spillage, add damp sand and take up mechanically (e.g. sweep or vacuum up) into tightly closed containers. Adhere to personal protective measures. Label container and dispose of as prescribed. Do not sweep up dry dust because of risk of ignition Other information: No data
6.4	Reference to other sections	See section 8 for personal protective equipment

7 SECTION 7: HANDLING AND STORAGE		
7.1	Precautions for safe handling	Protective measures: Handle in accordance with good hygiene and safety practice. Avoid direct sunlight or heat and do not drop Measures to prevent fire: Keep away from organic, oxidising combustible materials and strong acids Measures to prevent aerosol and dust generation: Measures to protect the environment: No data Advice on general occupational hygiene: No data
7.2	Conditions for safe storage	Technical measures and storage: No data Packaging materials: No data Requirements for storage rooms and vessels: Ensure adequate ventilation of the storage area. Keep containers tightly closed, cool and dry, avoiding direct sunlight Storage class: No data
7.3	Specific end use(s)	Recommendations: As a safety match, phosphorus match, oxygen generator initiator Industrial sector specific solutions:

8 SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION										
8.1	No OEL data are available. Comply with good practice									
	Substance name	Phosphorus (red)								
	EC number	231-768-7	CAS number	7723-14-0						
	DNELs									
		Workers				Consumers				
	Route of exposure	Acute effect local	Acute effects systemic	Chronic effects local	Chronic effects systemic	Acute effects local	Acute effects systemic	Chronic effects local	Chronic effects systemic	
	Oral	Not required				No data	No data	No data	30 mg/m ³	
	Inhalation	No data	No data	No data	4 mg/m ³	No data	No data	No data	4 mg/m ³	
	Dermal	No data	No data	No data	30 mg/m ³	No data	No data	No data	30 mg/m ³	
	PNECs									
	Environmental protection target						PNEC			
	Fresh water						10.5 µg/L			
	Freshwater sediments						100 mg/kg dw			

	Marine water	1.05 µg/L
	Marine sediments	10 mg.kg dw
	Food chain	No data
	Microorganisms in sewage treatment	10 mg/L
	Soil (agriculture)	12.5 mg/kg soil dw
	Air	No data
8.2	Exposure controls	
	Appropriate engineering controls	Substance/ mixture related measures to prevent exposure during identified uses: Structural measures to prevent exposure: Provide adequate ventilation (e.g. local exhaust ventilation) Organisational measures to prevent exposure: Technical measures to prevent exposure:
	Personal protection equipment	Observe normal standards for handling chemicals Wash hands before breaks and after work Wear personal protective equipment appropriate to the task (see below)
	Eye and face protection	Normally not required
	Skin protection	Hand protection: Normally not required (consider your own risk assessment, e.g. breakthrough times, rates of diffusion and degradation, tasks undertaken) Other skin protection: Protective overalls
	Respiratory protection	Approved dust mask (recommended if handling large quantities)
	Thermal hazards	The auto-ignition temperature of red phosphorus is ca.100°C
	Environmental exposure controls	No data

9	SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES			
9.1	Information on basic physical and chemical properties			
	Physical state	Solid powder with light red to dark reddish-brown colour	Colour	Brick red
	Odour	Odourless	pH	Ca. 3
	Decomposition pt/range	Approx. 300°C	Melting pt/range	Ca. 600°C at 42 bar
	Flash point	Not applicable	Relative density	2.2 kg/L
	Solubility	< 0.3 mg/L at 20°C	Odour	No data
	Evaporation rate	Not applicable	Flammability	Highly flammable
	Explosion limits	Not explosive	Vapour pressure	Ca. 0.1 bar at 300°C
	Relative vapour density	Not applicable	Partition coeff. LogPoct/water	Not applicable
	Auto-ignition temperature	Ca. 100°C	Kinematic viscosity	Not applicable
	Explosive properties	Not explosive	Oxidising properties	Not oxidising
	Decomposition temperature	Ca. 300°C	Particle characteristics	
9.2	Other information			

10	SECTION 10: STABILITY AND REACTIVITY	
10.1	Reactivity	Material decomposes to produce oxides of phosphorous on heating or ignition
10.2	Chemical stability	Stable under normal conditions of handling
10.3	Possibility of hazardous reactions	Hazardous polymerisation will not occur
10.4	Conditions to avoid	Ignition can be caused by friction or impact. Can burn if fuels, oxidising or organic materials are present
10.5	Incompatible materials	As above
10.6	Hazardous decomposition products	Oxides of phosphorous

11	SECTION 11: TOXICOLOGICAL INFORMATION						
11.1	Information on hazard classes as defined in Regulation (EC) No 1272/2008						
	Hazard class	Method	Species	Route of exposure	Effective dose	Exposure time	Results
	Acute toxicity	LD ₅₀	Rat (male/female)	Oral	> 10,000 mg/kg bw		Very little data for red phosphorus available
	Skin corrosion/irritation	Not irritating					
	Serious eye damage/irritation	Not irritating					
	Respiratory or skin sensitisation	No data available					

	Germ cell mutagenicity	Not mutagenic
	Reproductive toxicity	No data
	STOT-single exposure	No data
	STOT-repeated exposure	Not systemically available.
	Aspiration hazard	No data
11.2	Information on other hazards	No data

12 SECTION 12: ECOLOGICAL INFORMATION		
12.1 Toxicity		
	Acute (short-term) toxicity	Fish: LC50, <i>Danio rerio</i> > 33.2 mg/L Crustacea: EC50 <i>Daphnia magna</i> 10.5 mg/L Algae/aquatic plants: EC50 <i>Scenedesmus subspicatus</i> 18.3 mg/L Other organisms: EC50 microorganisms 1000 mg/L
	Chronic (long-term) toxicity	Fish: No data Crustacea: No data Algae/aquatic plants: EC50 <i>Scenedesmus subspicatus</i> 18.3 mg/L NOEC <i>Scenedesmus subspicatus</i> 5 mg/L Other organisms: No data
12.2	Persistence and degradability	Abiotic Degradation: No data Physical- and photo-chemical elimination: No data Biodegradation: No data
12.3	Bioaccumulative potential	Partition coefficient n-octanol /water (log Kow): No data Bioconcentration factor (BCF): no data
12.4	Mobility in soil	Known or predicted distribution to environmental compartments: No data Surface tension: No data Adsorption/Desorption: No data
12.5	Results of PBT and vPvB assessment	Not applicable
12.6	Endocrine disrupting properties	Not applicable
12.7	Other adverse effects	None known

13 SECTION 13: DISPOSAL CONSIDERATIONS		
13.1 Waste treatment methods		
	Product/ Packaging disposal	If possible, recycle to supplier or approved recycling company. If not (e.g. designated as waste), dispose of in accordance with national and local authority regulations, e.g. The Hazardous Waste (England & Wales) Regulations 2005. Material is a special waste under UK legislation. Treat empty containers in the same way as the product. If possible, wash out thoroughly and recycle Waste codes/ waste designations according to LoW: No data
	Waste treatment-relevant information	No data
	Sewage disposal-relevant information	No data
	Other disposal recommendations	No data

14 SECTION 14: TRANSPORT INFORMATION					
14.1	UN number or ID number	Not applicable	14.2	UN proper shipping name	Not classified
14.3	Transport hazard class(es)	Not applicable	14.4	Packing group	Not classified
14.5	Environmental hazards	The product should not be marked as a marine pollutant	14.6	Special procedures for user	Not applicable
14.7	Maritime transport in bulk according to IMO instruments	Not applicable			

15 SECTION 15: REGULATORY INFORMATION	
15.1 Safety, health and environmental regulations	
The SDS has been updated in accordance with EC Regulation No 1272/2008 (CLP/GHS)	
15.2 Chemical safety assessment	
Not applicable	

16		SECTION 16: OTHER INFORMATION	
	Indication of changes	This SDS has been revised in accordance with EC Regulation 1272/2008 (CLP) and in response to a change in Annex II REACH regulations, June 2020.	
	Abbreviations and acronyms	None	
	Key literature references and sources for data	Other suppliers' safety data sheets, Annex VI of the CPL Regulation (EC) No 1272/2008, EH40 (2020)	
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	Date of issue	30 August 2021	
	Classification according to Regulation (EC) Nr 1272/2008	Classification procedure	
	Relevant H-statements (number and full text)	H228, Flammable solid H412, Harmful to aquatic life with long lasting effects	
	Training advice	None	
	Further information	Comply with COSHH Regulations Contains 0.1g phosphorous amorphous (UN1338) per initiator. Exempt from regulation as per IATA 2.6.10 'De Minimis' This information is based on our present state of knowledge and is intended to describe our products from the point of view of the safety requirements. It should not be construed as guaranteeing specific problems	