Conforms to : National Code of Practice for the Preparation of Material Safety Data Sheets 2nd Edition -NOHSC:2011(2004) and GHS (Australia).

SAFETY DATA SHEET

MYSTICAL FIRE

Section 1. Identification

Product identifier : MYSTICAL FIRE

Other means of identification : Not available.

Product type : Solid.

Relevant identified uses of substance or mixture and uses advised against

Identified uses : Novelty camp fire flame colorant.

Supplier's details :

STUMP JUMP PROJECTS PTY LTD
5 Ramseys Rd,
Candelo, NSW, 2550
Australia
Tel: **0448 386 747**

Emergency telephone number (with hours of operation) : **Poisons Information Centre (Australia)**
13 11 26

Section 2. Hazard(s) identification

Classification of the substance or mixture : ACUTE TOXICITY (oral) - Category 4
SKIN CORROSION/IRRITATION - Category 2
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1

GHS label elements

Hazard pictograms :

Signal word : **DANGER**

Hazard statements : **H302 - Harmful if swallowed.**
H318 - Causes serious eye damage.
H315 - Causes skin irritation.

Precautionary statements

General

: P103 - Read label before use.
P102 - Keep out of reach of children.
P101 - If medical advice is needed, have product container or label at hand.

Prevention

: P280 - Wear protective gloves. Wear eye or face protection.
P270 - Do not eat, drink or smoke when using this product.
P264 - Wash hands thoroughly after handling.

Section 2. Hazard(s) identification

Response : P301 + P312 + P330 - IF SWALLOWED: Call a POISON CENTRE or physician if you feel unwell. Rinse mouth.
P302 + P352 + P362-2 + P363 - IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing. Wash contaminated clothing before reuse.
P332 + P313 - If skin irritation occurs: Get medical attention.
P305 + P351 + P338 + P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTRE or physician.

Storage : Not applicable.

Disposal : P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

Supplemental label elements : Not applicable.

:

Other hazards which do not result in classification None known.

Section 3. Composition and ingredient information

Substance/mixture : Mixture

Other means of identification : Not available.

CAS number/other identifiers

CAS number : Not applicable.

EC number : Mixture.

Product code : 99360

Ingredient name	% (w/w)	CAS number
Copper sulphate	≥60 - ≤75	7758-98-7
Copper dichloride	≥10 - ≤30	7447-39-4
Ethene, chloro-, homopolymer	≥10 - ≤30	9002-86-2

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first measures :

Eye contact

Get medical attention immediately. Call a poison centre or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20 minutes. Chemical burns must be treated promptly by a physician.

Inhalation

Get medical attention immediately. Call a poison centre or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway.

Section 4. First aid measures

Skin contact :

Get medical attention immediately. Call a poison centre or physician. Flush contaminated skin with plenty of water. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 20 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion

Get medical attention immediately. Call a poison centre or physician. Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : Causes serious eye damage.

Inhalation : No known significant effects or critical hazards.

Skin contact : Causes skin irritation.

Ingestion : Harmful if swallowed.

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:
pain
watering
redness

Inhalation : No known significant effects or critical hazards.

Skin contact : Adverse symptoms may include the following:
pain or irritation redness
blistering may occur

Ingestion : Adverse symptoms may include the following:
stomach pains

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments : No specific treatment.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Firefighting measures

Extinguishing media :

Suitable extinguishing media : Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media : None known.

Specific hazards arising from the chemical : Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
sulfur oxides
halogenated compounds
metal oxide/oxides

Special protective actions for fire-fighters : No special measures are required.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

Methods and material for containment and cleaning up

Spill : Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling :

Protective measures

Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not ingest. Avoid release to the environment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. See also Section 8 for additional information on hygiene measures. Remove contaminated clothing and protective equipment before entering eating areas.

Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls and personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Ethene, chloro-, homopolymer	**ACGIH TLV (United States, 3/2015).** TWA: 1 mg/m³ 8 hours. Form: Respirable fraction

Appropriate engineering controls :

Environmental exposure controls :

Individual protection measures

Hygiene measures :

Eye/face protection :

Skin protection

Hand protection :

If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Section 8. Exposure controls and personal protection

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a

respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

Appearance

Physical state	:	Solid.
Colour	:	Not available.
Odour	:	Not available.
Odour threshold	:	Not available.
pH	:	Not available.
Melting point	:	Not available.
Boiling point	:	Not available.
Flash point	:	Not available.
Evaporation rate	:	Not available.
Flammability (solid, gas)	:	Not available.
Lower and upper explosive (flammable) limits	:	Not available.
Vapour pressure	:	Not available.
Vapour density	:	Not available.
Relative density	:	Not available.
Solubility	:	Not available.
Partition coefficient: noctanol/water	:	Not available.
Auto-ignition temperature	:	Not available.
Decomposition temperature	:	Not available.
Viscosity	:	Not available.

Section 10. Stability and reactivity

Reactivity : No specific test data related to reactivity available for this product or its ingredients.

Chemical stability : The product is stable.

Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : No specific data.

Incompatible materials : Reactive or incompatible with the following materials: oxidising materials.

Section 10. Stability and reactivity

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

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Copper sulphate	LD50 Oral	Rat	300 mg/kg	-
Copper dichloride	LD50 Oral	Rat	140 mg/kg	-

Irritation/Corrosion

There is no data available.

Sensitisation

There is no data available.

Mutagenicity

There is no data available.

Carcinogenicity

There is no data available.

Reproductive toxicity

There is no data available.

Teratogenicity

Inhalation : No known significant effects or critical hazards.

Skin contact : Adverse symptoms may include the following:
pain or irritation redness
blistering may occur

Section 11. Toxicological information

There is no data available.

Specific target organ toxicity (single exposure)

There is no data available.

Specific target organ toxicity (repeated exposure)

There is no data available.

Aspiration hazard

There is no data available.

Information on likely routes of exposure : Dermal contact. Eye contact. Inhalation. Ingestion.

Potential acute health effects

Eye contact : Causes serious eye damage.

Inhalation : No known significant effects or critical hazards.

Skin contact : Causes skin irritation.

Ingestion : Harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:
pain
watering
redness

Ingestion :
Adverse symptoms may include the following:
stomach pains

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Short term exposure

Potential immediate effects : No known significant effects or critical hazards.

Potential delayed effects : No known significant effects or critical hazards.

Long term exposure

Potential immediate effects : No known significant effects or critical hazards.

Potential delayed effects : No known significant effects or critical hazards.

Potential chronic health effects

General : No known significant effects or critical hazards.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Oral	555.6 mg/kg
Dermal	5500 mg/kg

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Copper sulphate	Acute EC50 0.4 µg/L Marine water	Algae - Isochrysis galbana	72 hours
	Acute EC50 16.2 µg/L Fresh water	Aquatic plants - Lemna aequinoctialis	96 hours
	Acute EC50 1.4 µg/L Fresh water	Crustaceans - Bosmina longirostris Neonate	48 hours
	Acute LC50 0.01 ng/ml Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 0.057 µg/L Fresh water	Fish - Cirrhinus mrigala	96 hours
	Chronic NOEC 0.0003 mg/L Marine water	Algae - Entomoneis punctulata Exponential growth phase	72 hours
	Chronic NOEC 0.05 mg/L Fresh water	Aquatic plants - Lemna minor	4 days
	Chronic NOEC 5.06 µg/L Marine water	Crustaceans - Moina mongolica Neonate	21 days
	Chronic NOEC 10 µg/L Fresh water	Daphnia - Daphnia magna - Instar	21 days
	Chronic NOEC 0.46 µg/L Fresh water	Fish - Acipenser transmontanus - Larvae	53 days
Copper dichloride	Acute EC50 8.4 µg/L Fresh water	Aquatic plants - Ceratophyllum demersum	96 hours
	Acute IC50 2 µg/L Marine water	Algae - Isochrysis sp.	72 hours
	Acute IC50 2 µg/L Marine water	Algae - Isochrysis sp.	96 hours
	Acute LC50 0.8478 µg/L Fresh water	Crustaceans - Ceriodaphnia dubia	48 hours
	Acute LC50 5 µg/L Fresh water	Daphnia - Daphnia hyalina - Adult	48 hours
	Acute LC50 0.01 µg/L Fresh water	Fish - Esomus danricus	96 hours
	Chronic NOEC 1 µg/L Marine water	Algae - Isochrysis sp.	96 hours
	Chronic NOEC 5 µg/L Fresh water	Aquatic plants - Potamogeton pusillus	3 days
	Chronic NOEC 1 mg/L Fresh water	Crustaceans - Potamonautes warreni Adult	21 days

Section 12. Ecological information

	Chronic NOEC 0.4 µg/L Fresh water	Daphnia - Daphnia pulex	21 days
	Chronic NOEC 9.21 µg/L Fresh water	Fish - Oncorhynchus mykiss	56 days

Persistence and degradability

There is no data available.

Bioaccumulative potential

There is no data available.

Mobility in soil

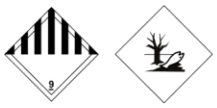
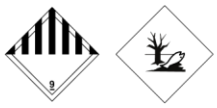
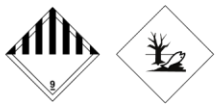
Soil/water partition : There is no data available. **coefficient (K_{OC})**

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	ADG	ADR/RID	IMDG	IATA
UN number	UN3077	UN3077	UN3077	UN3077
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O. S. (Copper sulphate, Copper dichloride)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O. S. (Copper sulphate, Copper dichloride)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O. S. (Copper sulphate, Copper dichloride). Marine pollutant (Copper sulphate, Copper dichloride)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O. S. (Copper sulphate, Copper dichloride)
Transport hazard class(es)	9 	9 	9 	9 
Packing group	III	III	III	III
Environmental hazards	Yes.	Yes.	Yes.	Yes.

Section 14. Transport information

Additional information	The product is not regulated as a dangerous good when transported by road or rail in sizes of ≤5 L as a dangerous good when transported in either an IBC, or in other container types if ≤500 kg. The environmentally hazardous substance mark is not required when or ≤5 kg.	This product is not regulated as a dangerous good when transported in sizes of ≤5 L as a dangerous good when transported in or ≤5 kg, provided the packagings meet the provisions of 4.1.1.1, general 4.1.1.2 and 4.1.1.4 to 4.1.1. 8. transported in sizes of ≤5 L **Tunnel code** (E)	This product is not regulated as a dangerous good when transported in sizes of ≤5 L as a dangerous good when transported in or ≤5 kg, provided the packagings meet the provisions of 4.1.1.1, general 4.1.1.2 and 4.1.1.4 to 4.1.1. 8. **Emergency schedules (EmS)** F-A, S-F	This product is not regulated as a dangerous good when transported in sizes of ≤5 L as a dangerous good when transported in or ≤5 kg, provided the packagings meet the provisions of 5.0.2.4. 1, 5.0.2.6.1.1 and 5.0.2.8.

History

Date of issue : 15/04/2016

Version : 1

Prepared by : KMK Regulatory Services Inc.

Key to abbreviations : ADG = Australian Dangerous Goods
ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
NOHSC = National Occupational Health and Safety Commission
SUSMP = Standard Uniform Schedule of Medicine and Poisons
UN = United Nations

Classification	Justification
ACUTE TOXICITY (oral) - Category 4	Calculation method
SKIN CORROSION/IRRITATION - Category 2	Calculation method
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1	Calculation method

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to Annex II of Marpol and the IBC Code : Not available.

Section 15. Regulatory information

Standard Uniform Schedule of Medicine and Poisons

Not regulated.

Model Work Health and Safety Regulations - Scheduled Substances

No listed substance

Australia inventory (AICS) : All components are listed or exempted.

Section 16. Any other relevant information

Procedure used to derive the classification

MYSTICAL FIRE

Section 16. Any other relevant information

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.
Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.