

Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1	Product identifier	TLSFX WAR GAMING BALL GRENADES (Stick, Pull fuse), Class 1.4G
	<i>GHS Product Identifier</i>	TLSFX WAR GAMING BALL GRENADES (Stick, Pull fuse), Class 1.4G
	<i>Manufacturer's product code</i>	TLSFX-ST-xx (where xx specifies filling type: PE = Dried pea, PA = Paintball, PO = Fullers earth powder)
	<i>Chemical name</i>	Not applicable
	<i>CAS No.</i>	Mixture
	<i>EINECS No.</i>	Mixture
	<i>REACH Registration No.</i>	Not applicable
1.2	Relevant identified uses of the substance or mixture and uses advised against	
	<i>Identified use(s)</i>	Simulation, training and war gaming; as directed by manufacturer only
	<i>Uses advised against</i>	See product label and/or seek further advice
1.3	Details of the supplier of the safety data sheet	
	<i>Company Identification</i>	TLSFx Limited
	<i>Address</i>	Building 152, Faldingworth Base, Spridlington Road, Market Rasen, Lincolnshire, LN8 3SQ, UK
	<i>Telephone</i>	+44 (0)1673 863294
	<i>Email (competent person)</i>	sds@tlsfx.co.uk
1.4	Emergency telephone number	+44 (0)1673 863294

FOR USAGE INSTRUCTIONS REFER TO SECTION 7 ON PAGE 4

Section 2: HAZARDS IDENTIFICATION

2.1	Classification of the substance or mixture	
2.1.1	<i>Regulation (EC) No. 1272/2008 (CLP)</i>	Flammable solids (2), oxidising solids (3), skin irritation (3), eye damage (3)
2.2	Label elements	
2.2.1	<i>Label elements according to regulation (EC) No. 1272/2008 (CLP)</i>	
	<i>Hazard pictogram(s)</i>	
	<i>Signal word(s)</i>	WARNING
	<i>Hazard statement(s)</i>	H204 Fire or projection hazard H228 Flammable solid H272 May intensify fire; oxidiser H302 Harmful if swallowed H315 Causes skin irritation H319 Causes serious eye irritation H332 Harmful if inhaled H335 May cause respiratory irritation H412 Harmful to aquatic life with long lasting effects
	<i>Precautionary statement(s)</i>	P102 Keep out of reach of children P103 Read label before use P202 Do not handle until all safety precautions have been read and understood P210 Keep away from heat, sparks, open flame, hot surfaces – No smoking P250 Do not subject to grinding/shock/impact/friction P271 Use only outdoors or in a well-ventilated area P280 Wear protective gloves/protective clothing/eye protection/face protection P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting P301 + P310 IF SWALLOWED: immediately call a POISON Centre or doctor/physician P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing P305 IF IN EYES: Get immediate medical attention P370 + P380 + P372 + P373 + P374 In case of fire: Evacuate area. Explosion risk in case of fire. Do not fight fire when fire reaches explosives. Fight fire with normal precautions from a reasonable distance P401 Store in a dry place. Keep away from fire, sparks and heated surfaces – no smoking. Storage conditions should meet local/regional/national/international regulations P501 Dispose of contents/container to: Send to a licensed recycler, reclaimer or incinerator

2.2.2 Label elements according to Directive 67/548/EEC & 1999/45/EC

Hazard symbol		
Risk Phrases	R10 R20/22	Flammable Harmful by inhalation and if swallowed
Safety Phrases	S2 S15 S16 S23 S24/25 S26 S36/37/39 S41 S46 S51 S59 S62	Keep out of the reach of children Keep away from heat Keep away from sources of ignition – No Smoking Do not breathe fumes Avoid contact with skin and eyes In case of contact with eyes, rinse immediately with plenty of water and seek medical advice Wear suitable protective clothing, gloves and eye/face protection In case of fire and/or explosion do not breathe fumes If swallowed, seek medical advice immediately and show this container or label Use only in well-ventilated areas Refer to manufacturer/supplier for information on recovery/recycling If swallowed, do not induce vomiting: seek medical advice immediately and show this safety data

2.3 Additional information May ignite combustible materials and atmospheres, stain surfaces and reduce visibility in the immediate area.

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 EC Classification No. 1272/2008/EC

	Hazard ingredient(s)	CAS No.	EC No.	REACH Reg. No.	Hazard pictogram(s)	Hazard statement(s)
Explosive composition	Aluminium powder	3811-04-9	223-289-7	NA		H228
	Potassium perchlorate	8050-09-7	232-475-7	NA		H317 + H302
	Charcoal	7440-44-0	231-143-3	NA	None	None
	Sulphur	7704-34-9	231-722-6	NA		H228
	Potassium nitrate	7757-791	231-818-8	NA		H272
	Red phosphorus	7723-14-0	231-768-7	NA		H228 + H412 + H302
	Potassium chlorate	3811-04-9	223-289-7	NA		H272 + H302
Paintball	Resorcinol	108-46-3	203-585-2	NA		H302 + H315 + H319 + H412
	Glycerine	56-81-5	200-289-5	NA		H315 + H319 + H335
	Titanium dioxide	13463-67-7	236-675-5	NA	None	None
	Polyethylene glycol	25322-68-3	500-038-2	NA		H302
	Sorbitol	50-70-4	200-061-5	NA	None	None
FD&C approved colourants	Various	Various	NA	NA	NA	
	Fullers earth	14808-60-7	238-878-4	NA		H319 + H332

Section 4: FIRST AID MEASURES

4.1 Description of first aid measures

- Inhalation* Excess inhalation may cause respiratory irritation. If suffering with breathing difficulties, headaches or nausea move to an area of fresh air. Obtain medical attention immediately
- Skin Contact* Burns can occur once product is lit if not used in the correct manner. If a user is burned treat affected area(s) with plenty of cold water, keep clean. Seek medical assistance if required
- Eye contact* If contents of this product become separated from the casing of this product and the powder has made contact with the eye(s), remove contact lenses. Irrigate with water or eye wash solution for at least 15 minutes. Obtain immediate medical attention
- Ingestion* If contents of this product are swallowed, seek medical advice immediately and show this container or label. Do not induce vomiting. Make patient drink plenty of water. Get immediate medical attention

4.2 Most important symptoms and effects, both acute and delayed

Contact with the fuse once struck will cause burns. Once lit this product explodes after 5 seconds and can cause burns / bruising / lacerations if held in the hand. Excess inhalation may cause respiratory irritation

4.3 Indication of the immediate medical attention and special treatment needed

None other than the above

Section 5: FIRE-FIGHTING MEASURES

Extremely Flammable/Explosive

- Flash point* Not applicable
- Explosive limit ranges* Not applicable

5.1 Extinguishing media

- Suitable extinguishing media* Extinguish preferably with dry chemical, foam or water spray
- Unsuitable extinguishing media* Non known

5.2 Special hazards arising from

Explosion risk in case of fire. DO NOT fight fire when fire reaches explosives. Do not attempt to directly fight established

5.3 Advice for fire fighters

In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion

Section 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Warn everybody – explosion hazard. Evacuate the area of non-essential personnel. Ensure full personal protection (including respiratory protection) during removal of spillages

Environment Precautions

Ventilation recommended

6.3 Methods and material for containment and cleaning up

Warn everybody – explosion hazard. If safe to do so: Put on protective equipment before entering danger area. Transfer to a container for disposal. Collect using non-sparking tools. Safely discharge static electricity before commencing clean up

6.4 Additional information

Consult section 13 for disposal considerations

Section 7: HANDLING AND STORAGE

- 7.1 Precautions for safe handling**
Avoid inhalation of high concentrations of vapours. Keep away from oxidising agents. Keep away from fire, sparks and heated surfaces – NO SMOKING
- 7.2 Conditions for safe storage, including any incompatibilities**
Protect from direct sunlight. Store in a well-ventilated place. Do not use or store near heat or open flame. Do not store and / or transport with oxidisers. Store only in sealed UN approved boxes
- 7.3 Specific end use - INSTRUCTIONS**
1] Hold the product firmly by the handle and twist cap off to reveal string inside handle
2] To ignite the product, pull the string out of handle sharply in one movement to initiate pull fuse.
3] Immediately drop the product and retreat 5meters. DO NOT HOLD
4] After 5 seconds the product will explode with a flash of light and loud bang

DO NOT PLACE IN POCKETS.
This product may stain or burn surfaces and reduce visibility in the immediate vicinity
Not to be used outside of designated areas
If in any doubt, user must consult the manufacturer/supplier
- 7.4 Safety distance (m)** 5
- 7.5 Sound output at 5m (dB A)** 121

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

- 8.1 Control parameters**
None set
- 8.2 Exposure controls**
Recommended controls No fire, sparks or welding close to the items. If cleaning up spillage, use tools which cannot strike sparks. Avoid static electricity discharge onto the items
- 8.2.2 Personal protective equipment**

<i>Hand protection</i>	Leather or similar protective gloves	
<i>Eye protection</i>	Shatter-proof glasses or goggles	
<i>Specific hygiene measures</i>	No smoking	
<i>Other</i>	Wear appropriate clothing, consult supplier	
<i>Further information</i>	Always check applicability with your supplier of protective equipment	

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

- 9.1 Information on basic physical and chemical properties**
 - Appearance**
 - Main body* Multi construction of Cardboard Cylinders resembling German WWII Stick Grenade with a pull off cap at base of handle.
 - Cap* Paper covered cardboard tube.
 - Other* Produces a flash of light and loud bang after a delay of approximately 5 seconds
 - Chemical properties**
 - Auto ignition temperature (° C)* ≈ 300 (based on fuse igniter)
 - Decomposition temperature (° C)* Not available
 - Flammability* Contents highly flammable – explosive
 - Solubility (water)* Potassium nitrate - 31.6 g/100 ml at 20°C
- 9.2 Other information**
Volatile Organic Chemical (VOC) Content – Not available

Section 10: STABILITY AND REACTIVITY

10.1	Reactivity	Product stable under recommended storage and handling conditions
10.2	Chemical stability	Product stable under recommended storage and handling conditions
10.3	Possibility of hazardous reactions	Product stable under recommended storage and handling conditions
10.4	Conditions to avoid	Avoid contact with heat and ignition sources. Avoid shock, impact, friction and rough handling.
10.5	Incompatible materials	Strong acids and bases
10.6	Hazardous Decomposition product(s)	Carbon monoxide, carbon dioxide, nitrogen oxides, sulphur oxides

Section 11: TOXICOLOGICAL INFORMATION

11.1	Information on toxicological effects	
	<i>Routes of Entry</i>	Dermal contact. Eye contact. Inhalation. Ingestion
	<i>Chronic Effects on Humans</i>	The substance is toxic to blood, kidneys, lungs, the nervous system, liver, mucous membranes
	<i>Other Toxic Effects on Humans</i>	Hazardous in case of skin contact (irritant, permeator), of ingestion, of inhalation
11.2	Other information	None

Section 12: ECOLOGICAL INFORMATION


12.1	Toxicity	No data available
12.2	Persistence and degradability	Moderately/partially biodegradable. Not persistent
12.3	Bio-accumulative potential	Moderately/partially biodegradable. Not persistent
12.4	Mobility in soil	No data
12.5	Results of PBT and vPvB	No data
12.6	Other adverse effects:	No data

Section 13: DISPOSAL CONSIDERATIONS

13.1	Waste Treatment	Disposal should be in accordance with local/regional/national or international regulations. Consult an accredited waste disposal contractor or the local authority for advice
13.2	Disposal of failed units	Should any product misfire either through the fuse not lighting or the product not functioning once lit, do not approach or pick up the device for at least 20 minutes Individual units may be rendered inert by immersion in water for a period of 24 hours. Dispose of the product in general waste thereafter
13.3	Additional information:	None



Section 14: TRANSPORT INFORMATION

14.1	UN Number	0431
14.2	Transport hazard class	1.4G
14.3	Proper shipping Name	ARTICLES PYROTECHNIC FOR TECHNICAL PURPOSES
14.4	Packing group	II
14.5	Hazard label	Explosive 1.4 
14.8	Special precautions	See statements in section 2

Section 15: REGULATORY INFORMATION

15.1	Regulatory information	
	<i>Competent Authority Document no.</i>	XI/5015/240/05
	<i>Specification number</i>	TLSFX-WGGSPF-00-00-01
	<i>CAD Serial</i>	7 2 Z 105865
	<i>Category as per The Pyrotechnic Articles (Safety) Regulations 2010</i>	P1 pyrotechnic article
	<i>Net Explosive Content (g)</i>	0.98
15.2	Chemical safety assessment	CSA has not been carried out

Section 16: OTHER INFORMATION

Information contained in this publication or as otherwise supplied to users is believed to be accurate and is given in good faith, but it is for the users to satisfy themselves of the suitability of the product for their own particular purpose. TLSFx Limited gives no warranty as to the fitness of the product for any particular purpose and any implied warranty or condition (statutory or otherwise) is excluded except to the extent that exclusion is prevented by law. TLSFx Limited accepts no liability for loss or damage (other than that arising from death or personal injury caused by defective product, if proved), resulting from reliance on this information.