FS3

PRODUCT USE DATA SHEET

Generic Sheet for
Stage Maroon
0589-T2-0120

Emits a loud report with a localised intense flash. The size, any added Sparkle and if applicable the type of report, will be given on the label.

CAD	**ID N°: XI/5015/195/6**	**Serial N°: 108820**	**Title: Stage Maroon**		
CE	**Reg: 0589-T2-0120**	**Category: T2**	**Type: MAROON**		
	Class/UN N°: 1.4G/0431	**Batch N°: N/A**	**Max NEC: 0.6**	**(Grams/unit)**	

ONLY FOR USE BY PERSONS AGED 18 YEARS OR OVER

FS4

SAFETY FIRST

sc003 All T2 users may calculate their own Safety Distances based on the Product Specific T2 Data given below. If unsure please contact Wells for more advice.*

sc005 Typically T2 users should allow at least 1.5 times the Stated Directional Effect (or calculated Sound distance) as a safety margin when firing towards (or near) persons, scenery or flammable objects in the effects designed orientation.*

sc004 Always test a sample of the product to be used to confirm suitability to the job and the venue.*

sc018 Do not fire these products in an unsuitable confined space or an area with poor ventilation.*

sc000 This is a T2 Product. It is only for use by Persons With Specialist Knowledge - It is NOT for amateur use in any form.

sc010 These products explode and may produce a (very) loud report. With a possible associated flash, pressure wave and local debris.*

sc022 These products are designed to be used in a suitable 'containing' device or prop. Monitor Noise levels. Issue and use hearing protection as appropriate or reduce the effect.*

sc025 These products are locally very violent and may cause damage to nearby structures or equipment. They may throw nearby loose objects a considerable distance in all directions from the product.

sc017 Additional containment in any form, including poor placement, may increase noise levels substantially.*

sc026 Monitor noise levels during suitability tests and issue ear protection if necessary*.

SC032 These products are in a sealed, spark resistant case and require no further covering. However handle all pyrotechnics carefully and if damaged, do NOT use.

SC033 Ensure the products are secured firmly, using suitable holders, fittings or containers as necessary. Always avoid undue force when rigging products as this may damage the units.

SC029 Bridge Wire Resistance - 1.0Ω (Std. Deviation ± 0.09Ω). Max Test Current 40mA. Max No-Fire Current 300mA. Min Firing Current 1.0A. Recommended Nominal Firing Current 1.25A.

SC046 * Please Call or Email Wells Fireworks for further details if you intend to use these effects in a way other than intended by the manufacturer.

FS24

Product Specific T2 Data for use by Persons With Specialist Knowledge

FS29

	Effect Code	*CE Variant*	*A (m)*	B *dB*	B *@m*	*C (m)*	*D (m)*	*T (m)*	T1 Safety Distances *Effect*	T1 Safety Distances *Radial*
*	NSCC0000NAMICR	**Micro (Standard)**	**0.5**	**116.4**	**10**	**0**	**0**	**0.5**	**-**	**-**
	*Example Product Shown - see specific Sheet for acurate data									

FS26 *Key - A: Effect distance. B:Sound Pressure level including the measuring distance. C: Hazardous debris distance.*
FS27 *D: Information on incandescent particles returning to the level from which the device was fired. T: Radial effect distance*
FS28 *T1 Safety Distances: These are the recommended minimum safe use distances for amateur use.*

sc047 ** Wells Fireworks assumes no liability for the misuse of this product. It is up to the purchaser to ensure the safe use and suitability by Test Firings prior to the performance or public admittance.*

FS1

WELLS FIREWORKS - GENERAL SAFE USE GUIDE

FS2

(Wells products must not be supplied to or used by a member of the general public or any person under 18)

FS5

Safety Distances

FS6 *T1 users Should only use T1 products and should abide by the minimum Safety Distance specified on each product. Always consider increasing this to allow for noise, airflow or unforeseen incidents, (Units falling over, performers moving, etc.).*

FS7 *T2 users (Persons with Specialist Knowledge) This distance is for the Operator to calculate using experience and the applicable data given overleaf. This Distance should also take into account the products possible effect on the audience, performers, other staff, scenery, flammable objects, etc. and reasonable variations within batches.*

FS8

Test Firings and Noise Levels

FS9 *Always test samples to confirm suitability to the job and the venue. Test any 'new' products outdoors first from a safe distance before trying inside. For T2 users, use of appropriate witness screens may help to determine a products effect on surfaces within the venue. Always monitor noise levels, especially if using a product designed to have a report or concussive effect. These tests will allow an accurate Risk Assessment to be undertaken PRIOR to the event.*

FS10

Smoke, Light and Fumes

FS11 *Pyrotechnics produce varying amounts of all or some of the following:- Heat, Smoke, Fumes, Dust, Sparks, Flashes of Light, Noise and Concussion. Do not use in small or poorly ventilated venues as excessive inhalation may cause medical side effects and should always be avoided. If used in large well ventilated areas the smoke and fumes should not pose any problems. However should anyone complain of side effects from inhalation or suffer directly from excessive inhalation, remove them to a fresh air source and seek medical assistance.*

FS12

Spillage, Contamination and Disposal

FS13 *If a product bursts or leaks, warn others of the hazard and keep them clear. Remove all sources of ignition. Put on protective gloves and a dust mask, and gently sweep up the loose powder, composition and packing. Secure the waste in a well labelled plastic bag or container. Dispose of in accordance with local regulations.*

FS14

Physical Contact with Pyrotechnic composition

FS15 *If powder or composition from a Pyrotechnic contacts skin or eyes, wash the area freely with cold running water. In the case of inhalation remove the victim to fresh air. If composition is swallowed and the victim is still conscious then drink plenty of clean cold water (do NOT induce vomiting). In ALL cases seek medical assistance.*

FS16

Firing Pyrotechnics

FS17 *Always use and issue hearing protection as necessary. Always use a professional, isolated firing system. Ensure it can't be fired or left live whilst rigging. Avoid placing cables in locations where they may pick up stray EMF'S. The igniters used in Wells products have a resistance of 1.0 Ω and require 1.25 A to fire. When calculating the necessary fire voltage always allow a generous margin to cover possible electrical losses in the firing circuit.*

FS18

Mis-fires and Failures

FS19 *In the unlikely event of a misfire or product failure always check the complete firing system and re-fire when safe to do so. If after this it is still felt the product is at fault it should be left alone for a minimum of 1 hour. Failed product should be repacked as it was delivered and returned to Wells Fireworks - (After arranging to do so with Wells).*

FS20

Storage and Transport

FS21 *The user must comply with the Countries Explosives Regulations. As a rule Pyrotechnics should be stored in a secure, cool, (not cold), dry place with an appropriate licence. No other hazardous material should be stored with them. Access to the Store should only be available to the operator and other approved persons. The products Hazard/UN Code is given overleaf. Pyrotechnics should be stored in their original packaging. If you repack pyrotechnics for transport or storage then they may no longer comply with EU packing and transportation regulations.*

FS22

Handling and Rigging

FS23 *Always handle Pyrotechnics carefully - They are not designed to withstand dropping, rough handling or violent vibrations. Avoid sharp edges or rough surfaces which may damage the outer case. Ensure the product is secured firmly. However avoid undue pressure or force as this will damage the product and may cause a malfunction. If damaged, do NOT use. The igniters used are sensitive to stray currents. Keep effects and cables away from high power emf's, stray currents, radio waves and Mobile phones. Avoid direct sources of ignition or intense heat sources. Do not modify these products in any way or use them other than intended. Protect from wet or humid conditions.*

FS25 ***If you have any further question, Please call us on +44 (0)1903 882366 during normal weekday office hours***

www.wellsfireworks.co.uk

Home Farm, Wepham, Arundel, West Sussex, BN18 9RA

Tel: +44 (0)1903 882366 Fax: +44 (0)1903 882387 Email: info@wellsfireworks.co.uk

VAT No. GB 864 4575 90 : Registered in England No. 01791727 at Lygon House, 50 London Road, Bromley, BR1 3RA

CE Approved Version - May 2016

Wells Fireworks Ltd

Standard & Concussion Maroons

Stage Maroons & Cannon Charge

CE Type	CE Category	CE name	Reg No	EU-type examinaton certificate
MAROON	T2	Stage Maroon	0589-T2-0120	0589.PYR.3609/15

Emits a loud report with a localised intense flash. The size, any added Sparkle and if applicable the type of report, will be given on the label.

Wells Code	Description	Packed in	NEQ (g)	UN No/ Class	Igniter length (mm)
NSCC0000NAMICR	Stage Maroon - Micro (bomb tank use)	20	0.25	1.4G/0431	300
NSCC0000NASMLL	Stage Maroon - Small (bomb tank use)	20	0.5	1.4G/0431	300
NSCC0000NAMEDM	Stage Maroon - Medium (bomb tank use)	20	1	1.4G/0431	300
NSCC0000NALRGE	Stage Maroon - Large (bomb tank use)	10	3	1.4G/0431	300
NSCC0000NAGINT	Stage Maroon - Giant (bomb tank use)	10	6	1.4G/0431	300
NSCCEC00NASMLL	Stage Maroon - Small (concussion pot use)	10	1	1.4G/0431	300
NSCCEC00NAMEDM	Stage Maroon - Medium (concussion pot use)	10	3	1.4G/0431	300
NSCCEC00NALRGE	Stage Maroon - Large (concussion pot use)	10	7	1.4G/0431	300
NSCCEC00NAGINT	Stage Maroon - Giant (concussion pot use)	10	14	1.4G/0431	300
NSCCEC00ABGINT	Stage Maroon - Shell Firing Sim' (concussion pot use)	10	16	1.4G/0431	300
NBCCIB00NA035G	Cannon Charge	10	35	1.4G/0431	300

TECHNICAL PERFORMANCE SPECIFICATIONS		Effect Distance (A)			Radial Distance (T)			Sound Pressure (B)	@ (m) - (B)	Minimum Safety distance		Hazardous Debris (C)	Incandescent particles (D)	Unit NEC not exceeding
Wells Code	Variant Name	Min (m)	Avg (m)	Max (m)	Min (m)	Avg (m)	Max (m)	(dB)	(m)	Direction (m)	Radial (m)	(m)	(m)	(g)
NSCC0000NAMICR	Micro (Standard)	0.5	0.5	0.5	0.5	0.5	0.5	116.4	10	-	-	0	0	0.6
NSCC0000NASMLL	Small (Standard)	0.5	0.5	0.5	0.5	0.5	0.5	116.8	10	-	-	0	0	0.6
NSCC0000NAMEDM	Medium (Standard)	0.5	0.5	0.5	0.5	0.5	0.5	124	10	-	-	0	0	1
NSCC0000NALRGE	Large (Standard)	1	1	1	1	1	1	122.6	20	-	-	0	0	3
NSCC0000NAGINT	Giant (Standard)	1	1	1	1	1	1	124.6	20	-	-	0	0	6
NSCCEC00NASMLL	Small (Concussion)	1	1	1	0.5	0.5	0.5	110.1	15	-	-	0	0	35
NSCCEC00NAMEDM	Medium (Concussion)	1	1	1	0.5	0.5	0.5	129	15	-	-	0	0	35
NSCCEC00NALRGE	Large (Concussion)	1	1	1	0.5	0.5	0.5	130.7	20	-	-	0	0	35
NSCCEC00NAGINT	Giant (Concussion)	1	1	1	0.5	0.5	0.5	129.8	30	-	-	0	0	35
NSCCEC00ABGINT	Shell Firing Sim' (Concussion)	1	1	1	0.5	0.5	0.5	131.4	30	-	-	0	0	35

NBCCIB00NA035G	Cannon	1	1	1	1	1	1	113.8	30	-	-	0	0	35

SAFETY DATA SHEET

Stage Maroon

SECTION 1 – PRODUCT DETAILS

1.1 Product identifier:

Product Name: Stage Maroon

CE Reg Number: 0589-T2-0120

1.2 Approved Uses:

Articles pyrotechnic used for theatrical purposes within stage, film and television productions, as well as within music or show productions.

1.3 Supplier:

Name: Wells Fireworks (Dartford) Ltd

Address: Home Farm
Wepham
West Sussex
BN18 9RA

England

Contact number: +44 (0)20 8646 2222

Email: info@wellsfireworks.co.uk

1.4 Emergency Contact:

Please Contact; Health and Safety Executive (HSE) Chemicals Regulation Directorate.

+44 (0)151 951 3317 (Only available during office hours)

SECTION 2 –HAZARDS & IDENTIFICATION

2.1 Classification of the substance or mixture

Physical Hazard: H204 - Fire or projection hazard.

2.2 Label elements

Labelling according to Regulation (EC) No. 1272/2008 (CLP)

Hazard pictograms:

(Letter may be an S or G)

Signal word: PYROTECHNIC

2.3 Other hazards

There are no chronic effects from handling the product in an appropriate manner.

SECTION 3 – INFORMATION ON INGREDIENTS

3.1 Substances

Name	***CAS No.***	***EC No.***
Aluminium powder	7429-90-5	231-072-3
Graphite	7782-42-5	231-955-3
Potassium Perchlorate	7778-47-7	231-912-9
Titanium powder	7440-32-6	231-142-3

List above covers all products within the Wells Fireworks Stage Maroon range.

SECTION 4 – FIRST AID

4.1 Description of first aid measures:

Generally, in any case of accident or sickness featuring Pyrotechnics, always seek medical advice IMMEDIATELY.

Following the *medical effects* below it is advised *that*:

- *Inhalation* - Remove casualty to fresh air and keep warm and at rest.
- *Skin contact* - Wash immediately with soap and water
- *Eye contact* - Immediately flush with water
- *Ingestion* - If swallowed, rinse the mouth with plenty of water and spit out (only if the person is conscious) and obtain URGENT medical attention.

NOTE; in all cases, Self-protection of the first aider should always be paramount!

4.2 Most important symptoms and effects, both acute and delayed:

Irritation to the eyes and irritation to the skin.

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

Obvious contact with hot materials or gas on operation of products.

Apply First aid, decontamination measures and treatment of symptoms.

SECTION 5 – FIREFIGHTING

5.1 Extinguishing media:

Do not attempt to extinguish any actively functioning product or a fire which contains live products with ANY form of extinguishing media. Evacuate area immediately and contact emergency services. Any resulting fires caused after the full functioning of a product may be tackled in the prescribed manner.

Suitable/Unsuitable extinguishing media: See above.

5.2 Special hazards arising:

Hazardous combustion products may be produced when functioning. Pyrotechnic devices can burn violently and the state of any fire may be dependent on composition, packaging and containment. See 5.1 above for special precautions.

5.3 Advice for firefighters:

- Exercise extreme caution.
- Ascertain extent of material involved BEFORE combatting fire.
- If unsure keep to a safe distance.
- It is recommended that all firefighters wear self-contained breathing apparatus and chemical protective clothing.

SECTION 6 – ACCIDENTAL RELEASE MEASURES SECTION

6.1 Personal precautions, protective equipment and emergency procedures:

6.1.1 For non-emergency personnel:

Suitable personal protective equipment. Remove ignition sources.

6.1.2 For emergency responders:

Remove persons to safety. Isolate hazard area and deny entry. Ventilate closed spaces before entering.

6.2 Environmental precautions:

Prevent large spillages from entering surface water or drains.

6.3 Methods and material for containment and cleaning up:

Dispose of as special waste in compliance with local and national regulations.

6.4 Reference also sections 5, 8 & 13.

SECTION 7 – HANDLING AND STORAGE SECTION

7.1 Precautions for safe handling:

- Handle with caution.
- Prevent fires. No smoking and no naked flames.
- Avoid aerosol and dust generation. Do not tamper with the item.
- Do not eat, drink or smoke in work areas.
- Wash hands after handling products.

7.2 Conditions for safe storage, including any incompatibilities:

- Store in cool, dry place.
- Always store in original packaging with appropriate marking and labelling.
- Stores should be adequately secured and identified.

7.3 Specific end use(s):

The identified use for this product is detailed in section 1.2.

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters:

Workplace exposure limits.

8.2 Exposure controls:

8.2.1 Provide adequate ventilation.

8.2.2 PPE: Appropriate Safety goggles.

8.2.3: No specific Environmental exposure controls.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

Appearance: Solid tube containing pressed composition.

As this is essentially a sealed unit chemical properties are not applicable.

9.2 Other information:

No additional information relevant to safe use.

SECTION 10 – STABILITY AND REACTIVITY SECTION

10.1 Reactivity:

No specific data related to reactivity is available.

10.2 Chemical stability:

Stable under recommended conditions of storage and use.

10.3 Possibility of hazardous reactions:

No hazardous reaction when handled and stored in accordance with the provisions.

10.4 Conditions to avoid:

- High temperatures,
- Excessive shock or rough handling
- Static discharge,
- Vibrations or other physical stresses
- High localise EMF
- And any situations that might result in a hazardous situation.

10.5 Incompatible materials:

As an effectively sealed unit, incompatible materials are not applicable.

10.6 Hazardous decomposition products:

Decomposition will not occur during normal circumstances of storage, transport and handling.

Upon functioning various gases may be emitted, including oxides, during the planned decomposition of the product.

11 – TOXILOGICAL INFORMATION SECTION

11.1 Information on toxilogical effects:

No material is exposed during normal circumstances of storage, transport and handling.

As this is a sealed unit this only applies to spillages.

May cause eye and skin irritation. Inhalation or ingestion may cause discomfort.

12 – ECOLOGICAL INFORMATION

12.1 Toxicity: Not classified as dangerous for the environment/aquatic toxicant.

12.2 Persistence and degradability: N/A

12.3 Bio-accumulative potential: N/A

12.4 Mobility in soil: N/A

12.5 Results of PBT and vPvB assessment: N/A

12.6 Other adverse effects: N/A

13 – DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods:

No specific regulations apply to packaging or spent devices.

Unused devices should be either:

- Returned to the manufacturer,
- Functioned in a safe manner or
- Soaked in a vessel of water for 48 hours. (If soaked in water, review local and national requirements prior to disposal).

14 – TRANSPORT INFORMATION

14.1 UN number:

UN0431 or UN0432

14.2 UN proper shipping name:

Articles Pyrotechnic for Technical Purposes.

14.3 Transport hazard class(es):

1.4G (UN0431) or 1.4S (UN0432).

14.4 Packing group:

Packing Group II.

14.5 Environmental hazards:

None.

14.6 Special precautions for user:

No smoking or naked flames.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code:

N/A

15 – REGULATORY INFORMATION*/

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

Explosives Regulations 2014 and all orders of council, HSG 36, Local Authorities and the Health and Safety Executive.

Pyrotechnic Articles European Directive 2013/29/EU.

15.2 Chemical Safety Assessment:

N/A

16 – OTHER INFORMATION

All Information for this Safety Data Sheet was obtained from sources which are considered reliable and technically accurate. Every effort has been made to ensure full disclosure of any product hazards, however some data is not available and is so stated.

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