

Safe Pak

instruction manual



The dangerous goods packaging solution

- 4GV & 4G rated for packing groups I, II & III
- UN approved
- thirteen standard sizes
- original Tri-Wall product



For full details visit...
www.safepak.co.uk

For all UK/Ireland or specific UN related enquiries please contact:

DS Smith Tri-Wall
Wonastow Road
Monmouth NP25 5TW
United Kingdom
Tel: +44(0)1600 772222
Fax: +44(0)1600 775801
Email: csduk@triwall.dssp.com

For all European enquiries:

DS Smith Tri-Wall
Treubstraat 17
2288 EH Rijswijk
The Netherlands
Tel: +31(0)703 993110
Fax: +31(0)703 990259
Email: csdeu@triwall.dssp.com

DS Smith Tri-Wall

HIGH PERFORMANCE PACKAGING



1 GENERAL INTRODUCTION

Most products that are classed as dangerous/hazardous and have a UN identification number allocated to them are required to be packed in certified packaging.

The Tri-Wall range of UN certified packs are both 4GV and 4G rated. 4GV rated packs have been over tested to accommodate any inner packaging or article. When packing under the 4GV licence any inner packaging can be used as long as Modal regulations are followed.

Packs STF 1 to 9 hold the 4GV and 4G licences.

Packs 2A, 6A, 7A and 8A hold just the 4GV licence.

It is the shipper's responsibility to select and use the case correctly but if in doubt contact Tri-Wall. Telephone: 01600 775767.

The requirement for Dangerous Goods packaging stems from the UN Recommendations on the Transport of Dangerous Goods. These recommendations form the basis of the regulations for the four modes of transport.

AIR TRANSPORT

IATA DANGEROUS GOODS REGULATIONS

ICAO TECHNICAL INSTRUCTIONS

Both internationally in force since 1 January 1992.

SEA TRANSPORT

IMDG CODE

Internationally in force since 1991.

ROAD TRANSPORT

A D R (International Only)

Internationally in force since 1 May 1985.

CDGCPL II (UK Roads)

In force from 1 September 1996

RAIL TRANSPORT

R I D

Internationally in force since 1 May 1985



2 CLASSIFICATION OF DANGEROUS GOODS

CLASSES AND DIVISIONS

Class 1 Explosives*

Division 1.1 Articles and substances having a mass explosion hazard.

Division 1.2 Articles and substances having a projection hazard but not a mass explosion hazard.

Division 1.3 Articles and substances having a fire hazard, a minor blast hazard and/or a minor projection hazard but not a mass explosion hazard.

Division 1.4 Articles and substances presenting no significant hazard.

Division 1.5 Very insensitive substances having a mass explosion hazard.

Division 1.6 Extremely insensitive articles which do not have a mass explosion hazard.

* The packs detailed in this document are not appropriate for the above classification.

Class 2 Gas

Division 2.1 Flammable gas.

Division 2.2 Non-flammable, non-toxic gas.

Division 2.3 Toxic gas.

Class 3 Flammable Liquid

Class 4

Division 4.1 Flammable solids.

Division 4.2 Substances liable to spontaneous combustion.

Division 4.3 Substances that, on contact with water, emit flammable gases.

Class 5

Division 5.1 Oxidizer.

Division 5.2 Organic peroxides.

Class 6

Division 6.1 Toxic substances.

Division 6.2 Infectious substances.

Class 7 Radioactive Materials*

* The packs detailed in this document are not appropriate for the above classification.

Class 8 Corrosives

Class 9 Miscellaneous Dangerous Goods

Examples of the different labels can be found in appendix 4 and 5.

3 PACKAGING GROUPS

Dangerous Goods must be assigned to the relevant Packing Group according to the degree of hazard they represent...

PACKING GROUP I (X) – GREAT DANGER

PACKING GROUP II (Y) – MEDIUM DANGER

PACKING GROUP III (Z) – MINOR DANGER

DANGEROUS GOODS PACKAGES

The Safe-T-Pak range of pack sizes have been developed to ship hazardous substances of packaging groups I, II and III – excluding goods in class 1 (explosives) and class 7 (radioactives).

The certificate that applies to each pack is only valid when the following conditions are met...

- 1. The maximum gross weight of the pack must not be exceeded.**
- 2. Inner packagings – the requirement for 4G inners states that they must be of a suitable design. 4GV requirement is as stated in the Modal regulations.**
- 3. Materials that react adversely must not be packed in the same case.**
- 4. The case must be sealed as shown in Appendices 1 and 2.**
- 5. Correct use of external labels and marking is essential without obscuring the UN mark.**

NOTE

It is the responsibility of the shippers to ensure that the cases are used correctly.

4 PACK SPECIFICATIONS see specification sheets pp17-29

Listed below are the case references + their physical attributes and UN marks.

Case ref	4GV max weight	4G max weight*	Size mm	UN mark
STF1	3kg	5kg	175×155×215	UN 4GV/X3/S/**/GB/5657 UN 4G-X6-Y7-Z7/S/**/GB/5727
STF2	4kg	8kg	213×213×223	UN 4GV/X4/S/**/GB/5658 UN 4G/X8-Y11-Z11/S/**/GB/5728
STF2A	4kg	–	235×230×250	UN 4GV/X4/S/**/GB/1915
STF3	7kg	11kg	275×195×300	UN 4GV/X7/S/**/GB/5659 UN 4G/X11-Y14-Z14/S/**/GB/2216
STF4	11kg	16kg	325×245×300	UN 4GV/X11/S/**/GB/5660 UN 4G/X16-Y23-Z23/S/**/GB/2276
STF5	13kg	18kg	360×260×295	UN 4GV/X13/S/**/GB/5661 UN 4G/X18-Y25-Z25/S/**/GB/2268
STF6	19kg	27kg	430×310×300	UN 4GV/X19/S/**/GB/5662 UN 4G/X27-Y36-Z36/S/**/GB/2296
STF6A	12kg	–	420×240×440	UN 4GV/X12/S/**/GB/1607
STF7	29kg	34kg	390×390×425	UN 4GV/X29/S/**/GB/5663 UN 4G/X34-Y47-Z47/S/**/GB/2288
STF7A	19kg	–	420×420×440	UN 4GV/X19/S/**/GB/1374
STF8	42kg	50kg	575×370×420	UN 4GV/X42/S/**/GB/5664 UN 4G/X50-Y70-Z70/S/**/GB/2310
STF8A	45kg	–	600×600×440	UN 4GV/X45/S/**/GB/1386
STF9	80kg	91kg	775×575×540	UN 4GV/X80/S/**/GB/5665 UN 4G/X91-Y119-Z119/S/**/GB/2345

*Packing Group I max weights

The UN marks can be interpreted thus...

- UN** indicates packaging is tested to UN requirements.
- 4G** indicates that the container is a fibreboard box.
- 4GV** indicates that the container is a fibreboard box tested for any inner/article "Special Combination Packaging"
- X, Y & Z** indicates that the container is suitable for products in packaging groups I, II and III.
- 5** indicates that the container is suitable for packing to a max. gross weight of 5kg.
- S** indicates that the container is suitable for Solids or Inner Packagings.
- **** is replaced with the year of manufacture.
- GB** indicates the country where tested, the subsequent numbers relate to the certificate.

5 GUIDANCE FOR PACKING UNDER 4GV REGULATIONS

1. The Special Combination Packagings, for which DS Smith Tri-Wall holds the Certificate of Packaging Performance, have been tested according to the UN Recommendations for the Transport of Dangerous Goods to allow for the use of any type of inner packaging.
2. The test requirements of these special packs, which are given in paragraph 6.1.5.1.7 of the UN Recommendations, 14th edition, state that the pack is deliberately over designed for its purpose. The pack is specifically intended for "one off" shipments, or shipments of small quantities of goods of a hazardous nature on a non-routine basis. This Pack is not suitable for goods in Class 1 (explosives) or Class 7 (radioactives).
3. The UN mark has been issued to DS Smith Tri-Wall on the basis of full testing of particular pack specifications by the VCA, the UK Certifying Authority. For the UN mark to be valid the assembled packs must comply with the specification. To achieve this the following instructions must be adhered to stringently.
4. Each purchaser of the special packs shall be required to sign and return to DS Smith Tri-Wall a form (Appendix 6) stating that the instructions for use of the special packaging have been received and understood. It is the user's responsibility to ensure that the pack is assembled and used in the correct manner.
5. Any State or Operator may refuse to accept the "STF" range at their discretion. It is the shipper's responsibility to ascertain suitability of this packaging with regard to Operator and State variations.

INNER PACKAGINGS

Inner packagings must be in accordance with all the relevant paragraphs of Chapter 6 of the UN Recommendations, particular attention being paid to Paragraph 4.1.1. The I.C.A.O. Technical Instructions, concerning internal pressure (4.1.1.1.6), need to be observed for air transport.

IMPORTANT

All the relevant instructions in the UN Recommendations and Modal Regulations still apply and must be followed when dangerous goods are shipped in this special pack.

6 ASSEMBLY INSTRUCTIONS FOR COMPLETE 4GV RANGE

The packs are to be assembled as follows...

1. Erect the case as detailed in appendix 1.
2. Place the specified liner in the case and fit snugly into each corner. See pack specifications for liner details.
3. Fill the case to the minimum depth with the specified absorbent cushioning material as detailed and ensure that it is level. Each inner package must also be separated by the same minimum distance as detailed in appendix 1.
For STF7A and 8A please refer to note 8 below.
4. Place the inner packagings on the absorbent cushioning material.
Note: For total gross inner and complete packaging weight please refer to the table detailed in appendix 1.
5. Fill all the voids between the inner packagings with the absorbent cushioning material to a depth where it is just below the tops of the inner packagings. Ensure that the inner packagings have not moved while packing. Fill the remaining space in the pack with the cushioning material to the crease level.
6. Seal the top of the liner, using tape or a heat sealer, expelling as much excess air as possible in the process and fold into the top of the case.
7. Close the top of the case by the same method as the bottom flaps.
8. For packs **STF7A and 8A** fill the case to the required minimum depth and fit one layer pad on top. Place the inner packagings on the layer pad and fill the void spaces to a depth where it at least just covers the tops of the inner packagings. Place the second layer pad on the top and fill the remaining space as detailed in notes 5, 6 and 7.

IMPORTANT

Failure to follow the above packaging instructions will render the pack certification invalid.

All inner packages containing liquid must be oriented in the same direction.

All labelling, which must be in accordance with the relevant modal instructions is the responsibility of the Packer/Shipper. However, it must NOT obscure the certification number already printed on the case.

7 Appendix 1

4GV PACKAGING PROCEDURE

1. Close bottom flaps and tape as shown.
2. Place liner in pack and follow the detailed packing instructions.
3. Close top flaps and tape.
4. Mark and label in accordance with MODAL Regulations.

CLOSURE METHODS & INNER SPACING DISTANCE

Packs STF2A and 6A

Taped as per fig. 1 with heavy duty buff packaging tape.

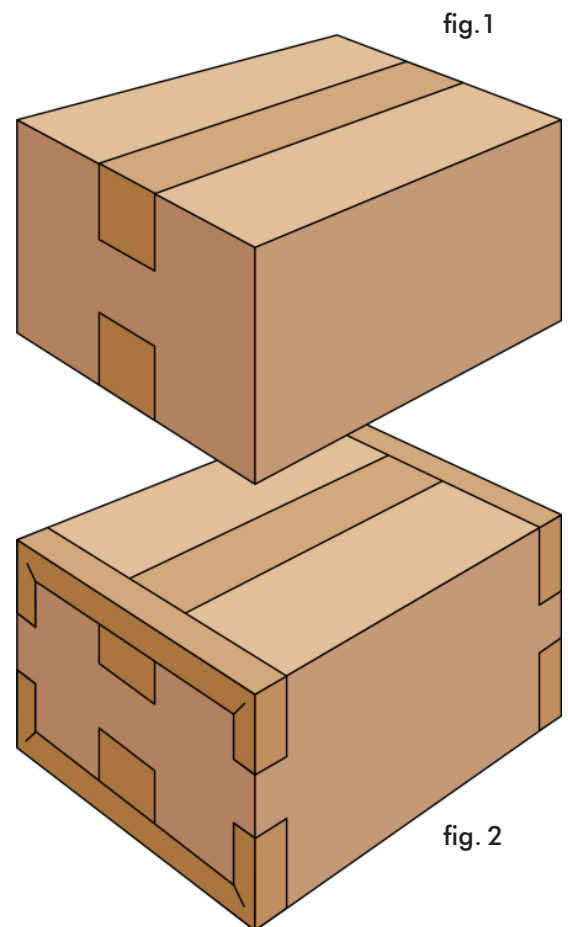
The minimum inner packaging spacing for STF 2A and 6A is 20mm and 50mm respectively.

Packs STF1 to STF9 inclusive inc. STF7A & 8A

Taped as per fig. 2 with reinforced tape.

The minimum inner packaging spacing for STF1 to 9 is 25mm.

The minimum inner packaging spacing for STF7A and 8A is 50mm.



4GV PACKAGING WEIGHT ASSEMBLY

STF range	1	2	2A	3	4	5	6	6A	7	7A	8	8A	9
Max gross weight of internal packaging (kg)	0.7	1.4	2.0	1.4	2.8	4.2	6.3	5.0	12.9	9.0	19.4	22.0	38.8
Max total gross weight of filled packaging (kg)	3.0	4.0	4.0	7.0	11.0	13.0	19.0	12.0	29.0	19.0	42.0	45.0	80.0

8 GUIDANCE FOR PACKING UNDER 4G REGULATIONS

INNER PACKAGINGS

Inner packagings suitable for use with this range of cases are listed in Appendix 3. **Please note that this only applies when shipping under the regulations of the 4G licence.** The following is an excerpt from the UN Recommendations on the Transport of Dangerous Goods (Orange Book).

6.1.5.1.6 Where an outer packaging of a combination packaging has been successfully tested with different types of inner packagings, a variety of such different inner packagings may also be assembled in this outer packaging. In addition, provided an equivalent level of performance is maintained, the following variations in inner packagings are allowed without further testing of the package:

- (a) Inner packagings of equivalent or smaller size may be used provided:
 - (i) The inner packagings are of similar design to the tested inner packagings (eg shape: round, rectangular, etc.);
 - (ii) The material of construction of the inner packagings (glass, plastics, metal, etc.) offers resistance to impact and stacking forces equal to or greater than that of the originally tested inner packaging;
 - (iii) The inner packagings have the same or smaller openings and the closure is of similar design (eg screw cap, friction lid, etc.);
 - (iv) sufficient additional cushioning material is used to take up void spaces and to prevent significant movement of the inner packagings; and
 - (v) inner packagings are oriented within the outer packaging in the same manner as in the tested package.
- (b) A lesser number of the tested inner packagings, or of the alternative types of inner packagings identified in (a) above may be used provided sufficient cushioning is added to fill the void space(s) and to prevent significant movement of the inner packagings.

Although the Orange Book quotes the above we would recommend additional tests if the inner packagings are not exactly according to Appendix 3.

Please note it is the responsibility of the shipper to ensure that the inner packaging used is covered by the range tested otherwise additional testing will be required.

9 ASSEMBLY INSTRUCTIONS FOR COMPLETE 4G RANGE

The packs are to be assembled as follows...

1. Erect the case and close bottom flaps as detailed in appendix 2.
2. Fill the case to a minimum depth with the specified absorbent cushioning material. **Note: All inner packagings must be equidistant from each other and the outer pack faces.**
3. Place the inners in the case. Specified inners detailed in appendix 3.
4. Fill all void spaces with vermiculite and ensure that all inner packagings are equidistant from each other and the outer pack faces.
5. Close the top of the case by the same method as the bottom flaps.

IMPORTANT

Failure to follow the above packaging instructions will render the pack certification invalid.

All inner packages containing liquid must be oriented in the same direction.

All labelling, which must be in accordance with the relevant modal instructions is the responsibility of the Packer/Shipper. However, it must NOT obscure the certification number already printed on the case.

10 Appendix 2

4G PACKAGING PROCEDURE

1. Close bottom flaps and tape as shown.
2. Follow the detailed packing instructions.

Note: All inner packagings must be equidistant from each other and the outer pack faces.

3. Close top flaps and tape.
4. Mark and label in accordance with MODAL Regulations.

CLOSURE METHODS

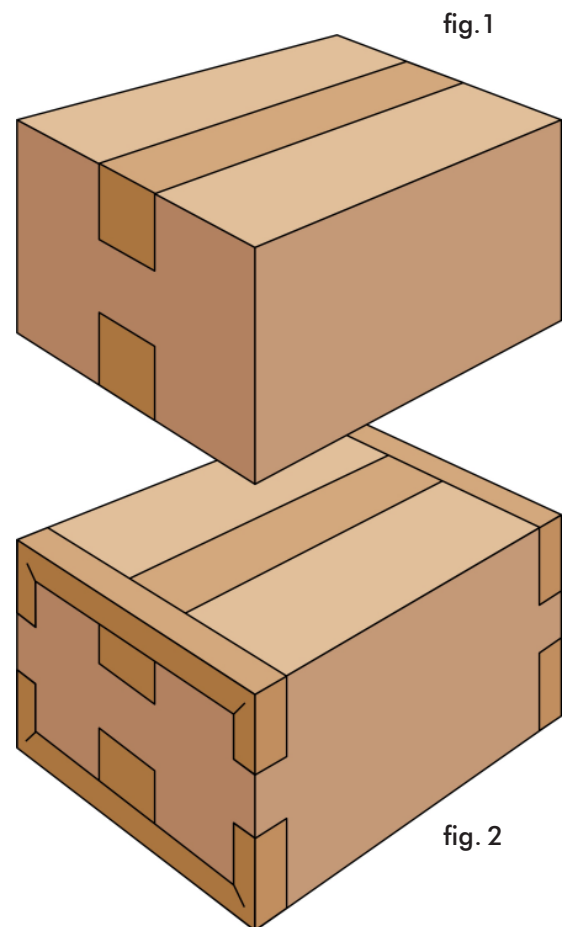
Packs STF1 to STF7 inclusive:

Taped as per fig. 1 with heavy-duty buff packaging tape.

Pack STP8:

T-taped as per fig. 2 with heavy-duty buff packaging tape.

Pack STP9: Taped as per fig. 2 with reinforced tape.



MAXIMUM APPROVED TOTAL PACKING WEIGHT in kg

Pack reference	I (X)	II (Y)	III (Z)
STF1	6	7	7
STF2	8	11	11
STF2A	N/A	N/A	N/A
STF3	11	14	14
STF4	16	23	23
STF5	18	25	25
STF6	27	36	36
STF6A	N/A	N/A	N/A
STF7	34	47	47
STF7A	N/A	N/A	N/A
STF8	50	70	70
STF8A	N/A	N/A	N/A
STF9	91	119	119

MAXIMUM DENSITY OF PRODUCT

Product type	I	II	III
Liquid	1.2	1.8	1.8
Solid	1.65	1.65	1.65

11 INNER PACKAGING

Appendix 3

The following inner containers are intended for use when shipping under 4G pack regulations only.

INNER PACKAGINGS

Pack reference	STF 1	STF 2	STF 3	STF 4	STF 5	STF 6	STF 7	STF 8	STF 9
PLYSU COMPACT 500ML JERRICAN, 25g PL38R3	2	4	12	18	-	-	-	-	-
PLYSU COMPACT 1000ML JERRICAN, 40g PL38R4	1	2	4	6	8	9	18	-	-
PLYSU COMPACT 2.5L JERRICAN, 75g PL38R4	1	1	2	4	4	6	8	12	-
PLYSU COMPACT 5.0L JERRICAN MK3, 130g PL38R4	-	-	1	1	2	3	4	6	8
BEATSON CLARK 500ml AMBER WINCHESTER, screw-top	1	2	2	4	6	-	-	-	-
BEATSON CLARK 1000ml AMBER WINCHESTER, screw-top	-	-	1	2	2	6	9	-	-
BEATSON CLARK 2500ml AMBER WINCHESTER, screw-top	-	-	-	-	-	-	4	6	12
BEATSON CLARK POWDER JAR, REF 1309, 100ml	2	4	12	-	-	-	-	-	-
BEATSON CLARK POWDER JAR, REF 1323, 500ml	1	2	2	6	-	-	-	-	-
BEATSON CLARK POWDER JAR, REF 1325, 1000ml	1	1	2	2	-	-	-	-	-
BEATSON CLARK GLASS JAR, REF 0285, 250ml	2	4	4	8	18	-	-	-	-
BEATSON CLARK GLASS JAR, REF 1287, 500ml	1	2	4	4	-	8	-	-	-
JOHNSEN & JORGENSEN SECURITAINER, 1048ml	1	-	-	-	-	-	-	-	-
MAUSER PLASTIC POWDER JAR, 250ml	2	4	6	12	12	15	-	-	-
MAUSER PLASTIC POWDER JAR, 500ml	1	2	2	6	6	12	18	-	-
MAUSER PLASTIC POWDER JAR, 1000ml	-	-	2	4	6	-	-	-	-
MAUSER PLASTIC POWDER JAR, 2500ml	-	-	1	2	2	6	-	-	-
DE LA PAK ALUMINIUM SCREW-TOP TIN, 94ml	4	8	30	-	-	-	-	-	-
DE LA PAK ALUMINIUM SCREW-TOP TIN, 110ml	4	4	30	-	-	-	-	-	-
DE LA PAK ALUMINIUM SCREW-TOP TIN, 245ml	1	8	12	16	-	-	-	-	-
DE LA PAK ALUMINIUM SCREW-TOP TIN, 495ml	1	2	2	6	12	24	-	-	-
DE LA PAK ALUMINIUM SCREW-TOP TIN, 985ml	-	-	2	6	6	12	-	-	-
RPC PLASTIC 5.0L JERRICAN, 132g	-	-	1	-	-	-	-	-	-
RPC PLASTIC 5.0L JERRICAN, 160g	-	-	1	-	-	-	-	-	-
DINES PLASTIC SCREW TOP POT, 1000ml	1	1	-	-	-	-	-	-	-
SURECAN SCREW TOP TIN, 250ml	-	2	-	-	-	-	-	-	-
SURECAN SCREW TOP TIN, 1000ml	-	1	-	-	-	-	-	-	-
CMB LEVER LID TIN, 250ml	1	-	-	-	-	-	-	-	-
CMB LEVER LID TIN, 5000ml	-	-	-	1	1	2	2	3	6
CMB METAL JERRICAN, 2500ml	-	-	2	3	4	6	-	-	-
CMB METAL JERRICAN, 5000ml	-	-	-	-	-	-	4	6	9
CMB METAL OBLONG, 1000ml	2	4	3	6	-	-	-	-	-
CMB METAL CONE-TOP, 91mm DIA, 1000ml	1	2	2	4	6	-	-	-	-
CMB METAL CONE-TOP, 77mm DIA, 500ml	2	4	6	-	-	-	-	-	-
JOHNSEN & JORGENSEN SECURITAINER, 260ml	-	4	-	-	-	-	-	-	-
JOHNSEN & JORGENSEN SECURITAINER, 538ml	1	-	-	-	-	-	-	-	-

Note: 5 litre lever lid tins only suitable for sea transport when lids taped with 50mm reinforced tape.

12 DANGEROUS GOODS LABELS

Appendix 4

Explosive subsidiary risk label for self-reactive flammable solids (class 4.1) and organic peroxides (class 5.2) which possess explosive properties (for requirements see IMDG code)

Please note: The packs detailed in this document are NOT suitable for goods in class 1 (explosives) and class 7 (radioactives).

The labels shown here are for guidance only.

Actual size of labels is 100mm x 100mm.

* The appropriate division number and compatibility group are to be placed in this location, e.g. 1.1.D.

** The appropriate compatibility group is to be placed in this location, e.g. G.

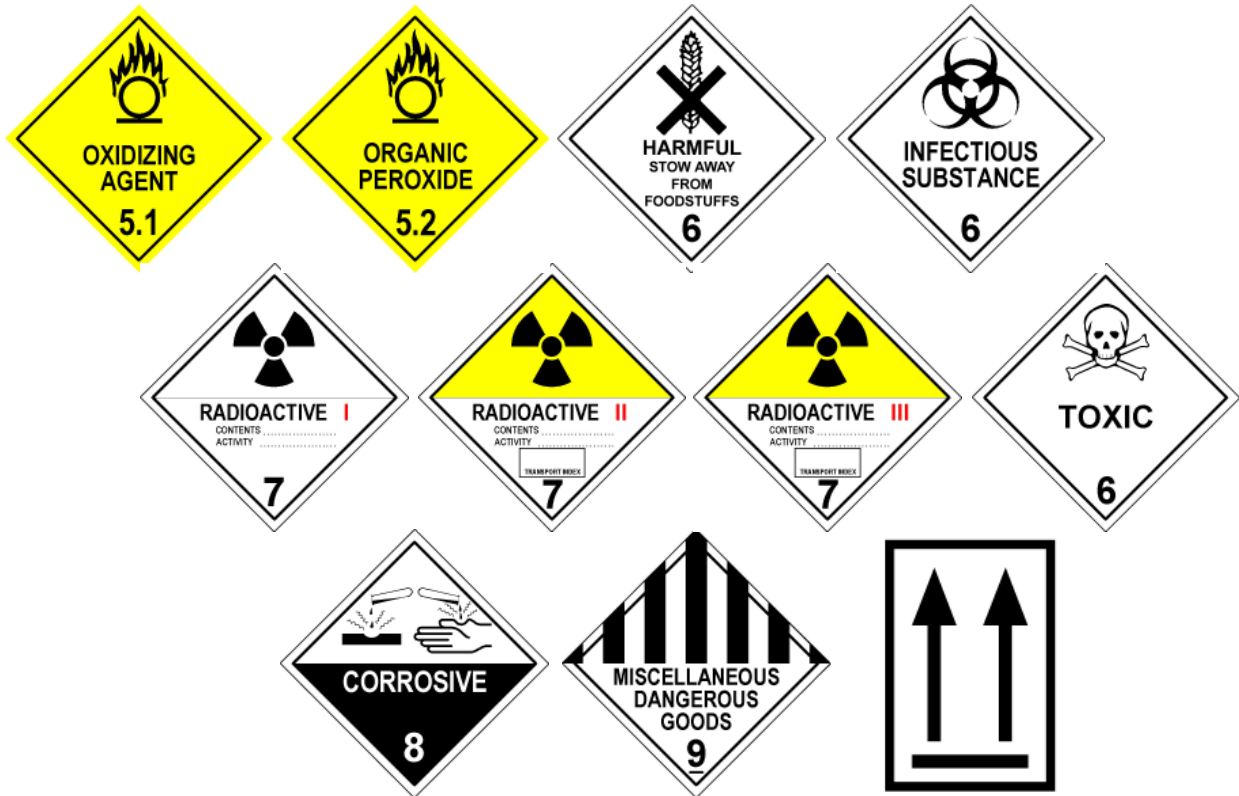
For goods of class 1 division 1.4 compatibility group S, no label is required.

Each package should be marked 1.4 S.



13 DANGEROUS GOODS LABELS

Appendix 5



MARINE POLLUTANT mark for harmful substances (environmentally hazardous substances) according to Annex III of MARPOL 1973/78, as amended.

The mark should be in a contrasting colour to the packaging, or when used as a sticker, coloured black and white. For packages the triangular shaped mark should have sides of at least 100mm except in the case of packages which, because of their size, can only bear smaller marks. For cargo transport units this dimension should be not less than 250mm (Amendment No. 25-89 to the IMDG Code).



14 BESPOKE PACKAGE DESIGN

The following form is intended to aid in the analysis of customer requirements when the need arises for a bespoke package design. Should this occur, please forward the completed form to your distributor for advice.

Company: _____

Contact Name: _____

Address: _____

Date: _____ E-mail: _____

Tel: _____ Fax: _____

Description of Dangerous Goods

Trade Name: _____

Chemical/Technical Name: _____

Solid/Liquid _____

Max. relative density: _____

Particle size (solid): _____

UN Number: _____

Class: _____

Packaging Group: _____

Inner Packagings

Type: (tin/bottle/jerrican...) _____

Material: (glass/HDPE/Alum...) _____

Inner volume/size (litre/mm) _____

Quantity in Outer Packaging: _____

Total pack weight (kg): _____

General description of packing (style, print) _____

Closure of the Outer Packaging:

(a) manual automatic

(b) hot melt strapping adhesive tape + strapping

adhesive tape stitching

Transport Modes:

road/rail air sea

Special Requirements:



15 Appendix 6

ALL USERS AND DISTRIBUTORS ARE REQUIRED TO COMPLETE AND RETURN THIS FORM BEFORE ACKNOWLEDGEMENT OF ORDERS FOR "STF" PACKAGING.

Company name

Company address

.....

.....

Post Code:

Telephone:

Fax:

I, the undersigned, have read and do fully understand the Packaging Instructions for the use of the packaging and do hereby agree to comply in full.

Our order number Refers.

Signed Date:

Position

Please return to:

**Customer Services Department
DS Smith Tri-Wall
Wonastow Road
Monmouth
NP25 5TW
Telephone: 01600 772222
Fax: 01600 775801**

16 APPROVED SOURCES

PACK LINERS

For 1 & 5 litre plastic liners:

Zeus Packaging Group

Aspect One , Gunnels Wood Road
Stevenage
Hertfordshire SG1 2DG
Telephone: 01438 777000

Note

When ordering the 1 litre liner quote the following size & thickness –
405 (length) × 243 (width) × 368 (open width) mm, 65 micron.

When ordering the 5 litre liner quote the following size & thickness –
1197 (length) × 505 (width) × 902 (open width) mm, 105 micron.

For 2.5 & 10 litre plastic liners:

RJH Plastics LTD

Unit 86, Plume St. Industrial Estate
Aston
Birmingham B6 7RT
Telephone: 01213 270297

Note

When ordering the 2.5 litre liner quote the following size & thickness –
790 (length) × 457 (width) × 685 (open width) mm, 75 micron.

When ordering the 10 litre liner quote the following size & thickness –
1390 (length) × 770 (width) × 1300 (open width) mm, 125 micron.

ABSORBENT/CUSHIONING MATERIAL:

Vermiculite is readily available from most builders merchants
or direct from the manufacturers –

Dupre Vermiculite

Telephone: 01782 383100

SUGGESTED SOURCE FOR ADHESIVE TAPE TO BE USED:

Adhesive Specialities

Hambridge Works
Hambridge Lane
Newbury
Berks RG14 5TA
Telephone: 01635 49825

Reinforced Strapping Tape

Crossweave Ref AS163

17 STF1 SPECIFICATION SHEET

CASE

Style: RSC

Spec number: 49606

Size: 175 × 155 × 215mm

Minimum order quantity: 2500

Pallet quantity: 500

The case holds both 4GV and 4G UN certifications – see table for maximum packaging weights.

	4G pack packing group max weights			4GV pack max weight
	I (X)	II (Y)	III (Z)	
STF1	6kg	7kg	7kg	3kg

INNER PLASTIC LINER

Liner spec number: 798172

Gusseted 1 litre liner

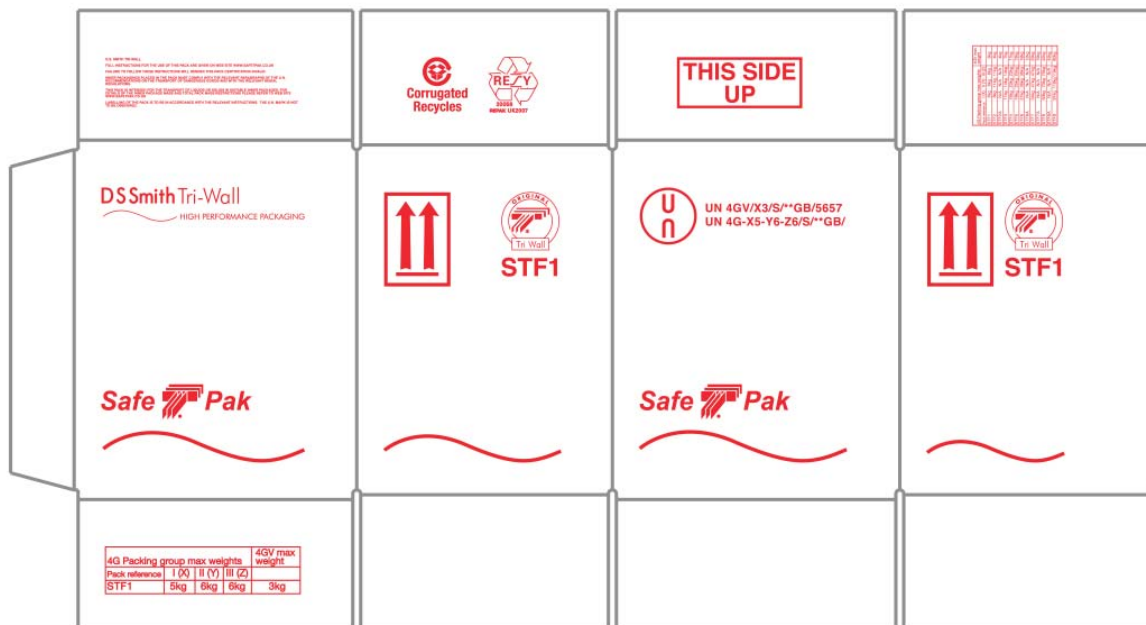
Size: 405 (length) × 243 (width) × 368 (open width) mm

Thickness: 65 micron.

NOTE

The plastic liner is only required for the 4GV version of this pack.

When ordering the 1 litre liner quote the size and thickness.



18 STF2 SPECIFICATION SHEET

CASE

Style: RSC

Spec number: 49631

Size: 213 × 213 × 223mm

Minimum order quantity: 2500

Pallet quantity: 500

The case holds both 4GV and 4G UN certifications – see table for maximum packaging weights.

	4G pack packing group max weights			4GV pack max weight
	I (X)	II (Y)	III (Z)	
STF2	8kg	11kg	11kg	4kg

INNER PLASTIC LINER

Liner spec number: 798172

Gusseted 1 litre liner

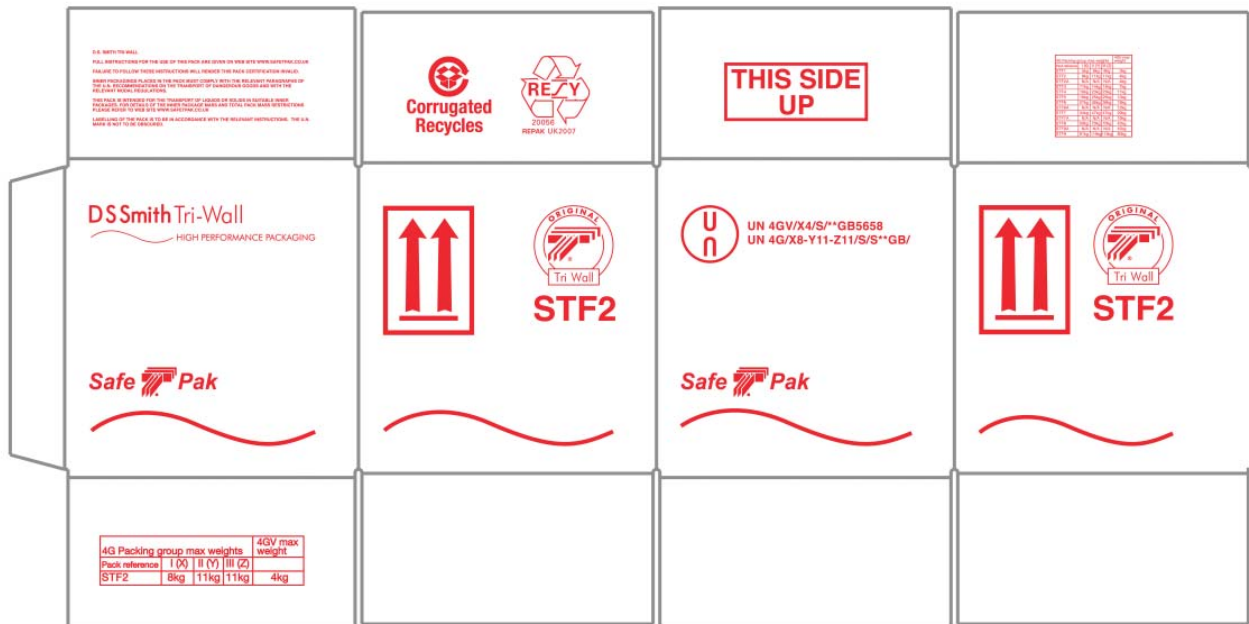
Size: 405 (length) × 243 (width) × 368 (open width) mm

Thickness: 65 micron.

NOTE

The plastic liner is only required for the 4GV version of this pack.

When ordering the 1 litre liner quote the size and thickness.



19 STF2A SPECIFICATION SHEET

CASE

Style: RSC

Spec number: 49647

Size: 235 × 230 × 250mm

Minimum order quantity: 260

Pallet quantity: 65

The case holds a 4GV UN certification – see table for maximum packaging weights.

	4G pack packing group max weights			4GV pack max weight
	I (X)	II (Y)	III (Z)	
STF2A	N/A	N/A	N/A	4kg

INNER PLASTIC LINER

Liner spec number: 798172

Gusseted 1 litre liner

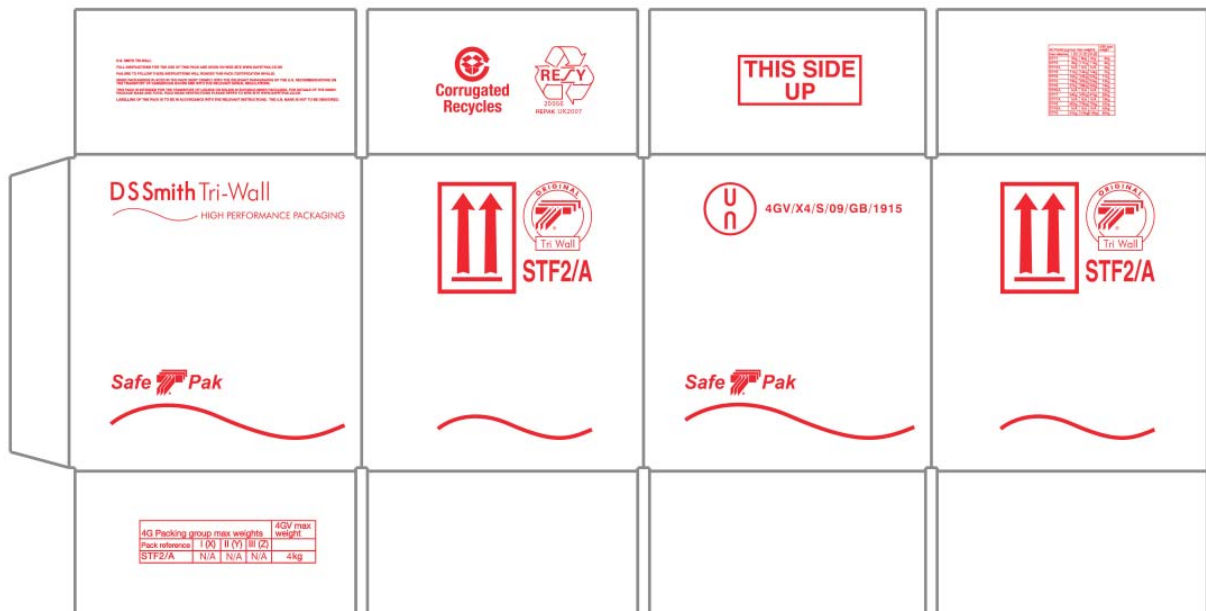
Size: 405 (length) × 243 (width) × 368 (open width) mm

Thickness: 65 micron.

NOTE

The plastic liner is only required for the 4GV version of this pack.

When ordering the 1 litre liner quote the size and thickness.



20 STF3 SPECIFICATION SHEET

CASE

Style: RSC

Spec number: 49632

Size: 275 × 195 × 300mm

Minimum order quantity: 840

Pallet quantity: 120

The case holds both 4GV and 4G UN certifications – see table for maximum packaging weights.

	4G pack packing group max weights			4GV pack max weight
	I (X)	II (Y)	III (Z)	
STF3	11kg	14kg	14kg	7kg

INNER PLASTIC LINER

Liner spec number: 798126

Gusseted 2.5 litre liner

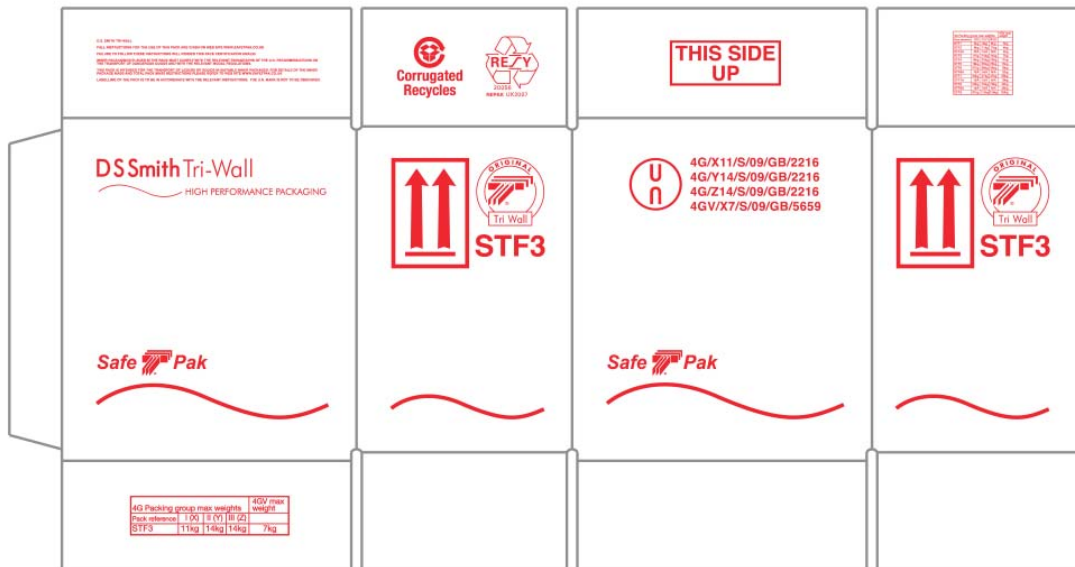
Size: 790 (length) × 457 (width) × 685 (open width) mm

Thickness: 75 micron.

NOTE

The plastic liner is only required for the 4GV version of this pack.

When ordering the 2.5 litre liner quote the size and thickness.



21 STF4 SPECIFICATION SHEET

CASE

Style: RSC

Spec number: 49633

Size: 325 × 245 × 300mm

Minimum order quantity: 720

Pallet quantity: 120

The case holds both 4GV and 4G UN certifications – see table for maximum packaging weights.

4G pack	4G pack packing group max weights			4GV pack max weight
	I (X)	II (Y)	III (Z)	
STF4	16kg	23kg	23kg	11kg

INNER PLASTIC LINER

Liner spec number: 798126

Gusseted 2.5 litre liner

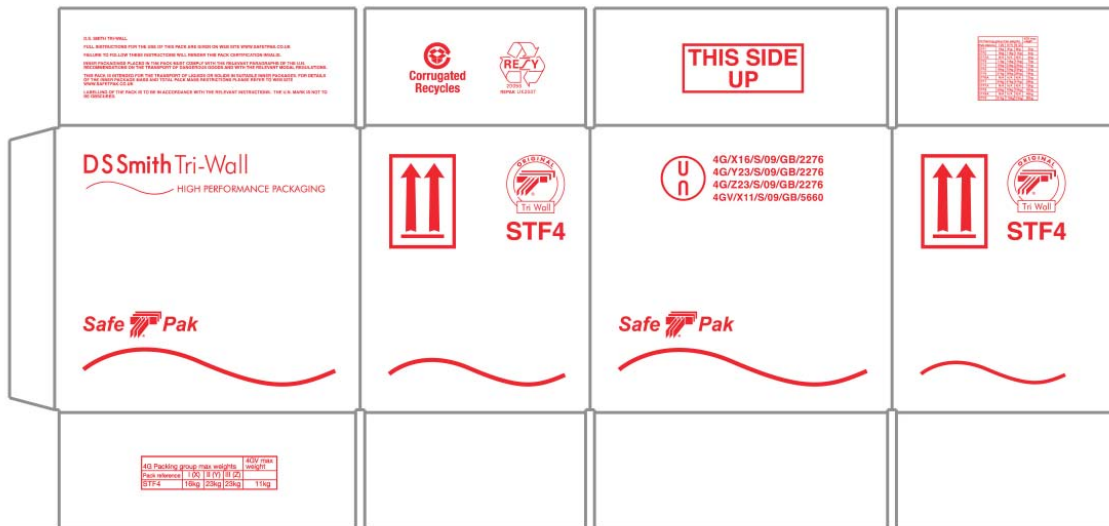
Size: 790 (length) × 457 (width) × 685 (open width) mm

Thickness: 75 micron.

NOTE

The plastic liner is only required for the 4GV version of this pack.

When ordering the 2.5 litre liner quote the size and thickness.



22 STF5 SPECIFICATION SHEET

CASE

Style: RSC

Spec number: 49643

Size: 360 × 260 × 295mm

Minimum order quantity: 600

Pallet quantity: 120

The case holds both 4GV and 4G UN certifications – see table for maximum packaging weights.

	4G pack packing group max weights			4GV pack max weight
	I (X)	II (Y)	III (Z)	
STF5	18kg	25kg	25kg	13kg

INNER PLASTIC LINER

Liner spec number: 798126

Gusseted 2.5 litre liner

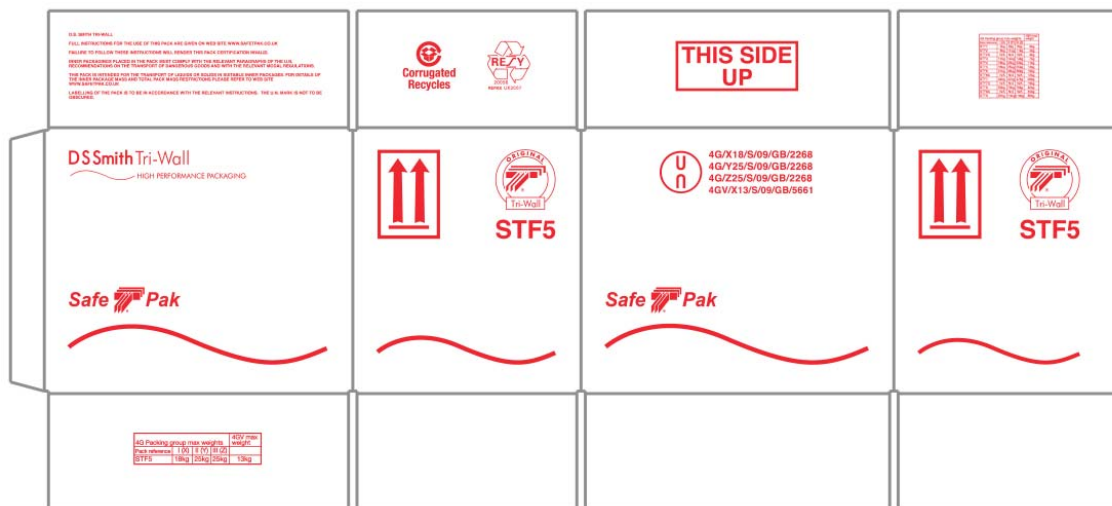
Size: 790 (length) × 457 (width) × 685 (open width) mm

Thickness: 75 micron.

NOTE

The plastic liner is only required for the 4GV version of this pack.

When ordering the 2.5 litre liner quote the size and thickness.



23 STF6 SPECIFICATION SHEET

CASE

Style: RSC

Spec number: 49635

Size: 430 × 310 × 300mm

Minimum order quantity: 480

Pallet quantity: 120

The case holds both 4GV and 4G UN certifications – see table for maximum packaging weights.

4G pack	4G pack packing group max weights			4GV pack max weight
	I (X)	II (Y)	III (Z)	
STF6	27kg	36kg	36kg	19kg

INNER PLASTIC LINER

Liner spec number: 798126

Gusseted 2.5 litre liner

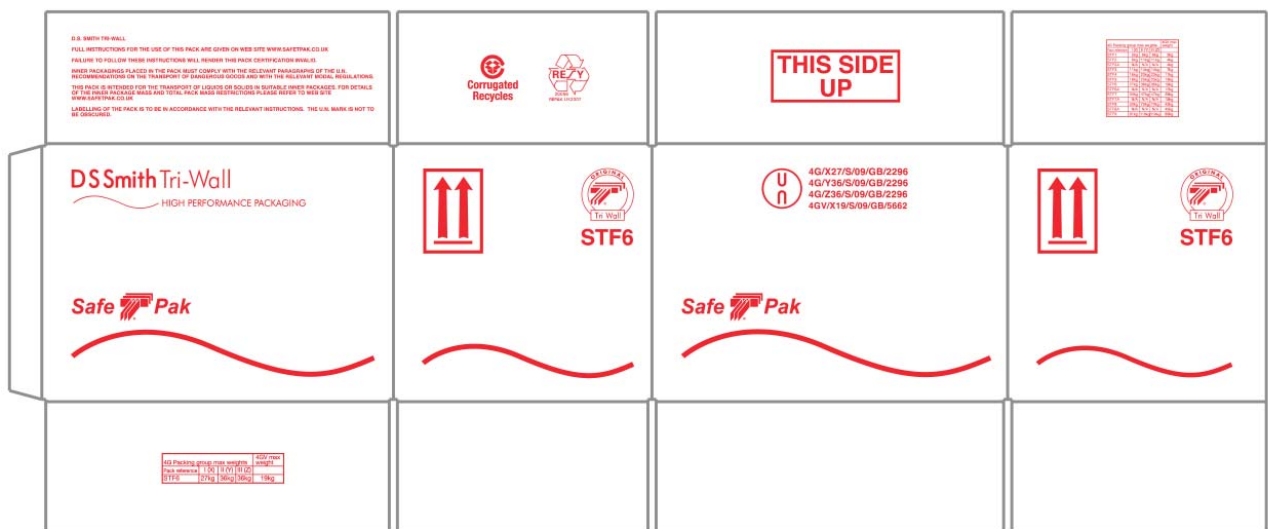
Size: 790 (length) × 457 (width) × 685 (open width) mm

Thickness: 75 micron.

NOTE

The plastic liner is only required for the 4GV version of this pack.

When ordering the 2.5 litre liner quote the size and thickness.



24 STF6A SPECIFICATION SHEET

CASE

Style: RSC

Spec number: 49644

Size: 420 × 240 × 440mm

Minimum order quantity: 260

Pallet quantity: 65

The case holds a 4GV UN certification – see table for maximum packaging weights.

	4G pack packing group max weights			4GV pack max weight
	I (X)	II (Y)	III (Z)	
STF6A	N/A	N/A	N/A	12kg

INNER PLASTIC LINER

Liner spec number: 798126

Gusseted 2.5 litre liner

Size: 790 (length) × 457 (width) × 685 (open width) mm

Thickness: 75 micron.

NOTE

The plastic liner is only required for the 4GV version of this pack.

When ordering the 2.5 litre liner quote the size and thickness.

<p><small>U.S. PATENT PENDING FULL INSTRUCTIONS FOR THE USE OF THIS PACK ARE GIVEN ON WWW.DS.COM/SAFEPAK/STF6A PLEASE TO FOLLOW THESE INSTRUCTIONS TO AVOID DAMAGE TO THE PACK CONTENTS AND TO THE USER. DO NOT REUSE THIS PACK FOR OTHER PURPOSES. THE USE OF THIS PACK FOR OTHER PURPOSES IS NOT RECOMMENDED. THIS PACK IS APPROVED FOR THE TRANSPORT OF LIQUIDS OR SOLIDS IN ACCORDANCE WITH THE REGULATIONS. LABELLING OF THE PACK IS TO BE IN ACCORDANCE WITH THE RELEVANT INSTRUCTIONS. THE U.S. MARK IS NOT TO BE REPRODUCED.</small></p>		<p>THIS SIDE UP</p>									
<p>D S Smith Tri-Wall HIGH PERFORMANCE PACKAGING</p> <p>Safe Pak</p>		<p>UN 4GV/X12/S/09/GB/1607</p> <p>Safe Pak</p>									
<p><small>4G Packing group max weights</small></p> <table border="1"> <tr> <td>4GV</td> <td>12kg</td> </tr> <tr> <td>III (Z)</td> <td>9kg</td> </tr> <tr> <td>II (Y)</td> <td>7kg</td> </tr> <tr> <td>I (X)</td> <td>5kg</td> </tr> </table> <p><small>STF6A N/A N/A N/A</small></p>	4GV	12kg	III (Z)	9kg	II (Y)	7kg	I (X)	5kg			
4GV	12kg										
III (Z)	9kg										
II (Y)	7kg										
I (X)	5kg										

25 STF7 SPECIFICATION SHEET

CASE

Style: RSC

Spec number: 49636

Size: 390 × 390 × 425mm

Minimum order quantity: 360

Pallet quantity: 60

The case holds both 4GV and 4G UN certifications – see table for maximum packaging weights.

	4G pack packing group max weights			4GV pack max weight
	I (X)	II (Y)	III (Z)	
STF7	34kg	47kg	47kg	29kg

INNER PLASTIC LINER

Liner spec number: 798168

Gusseted 5 litre liner

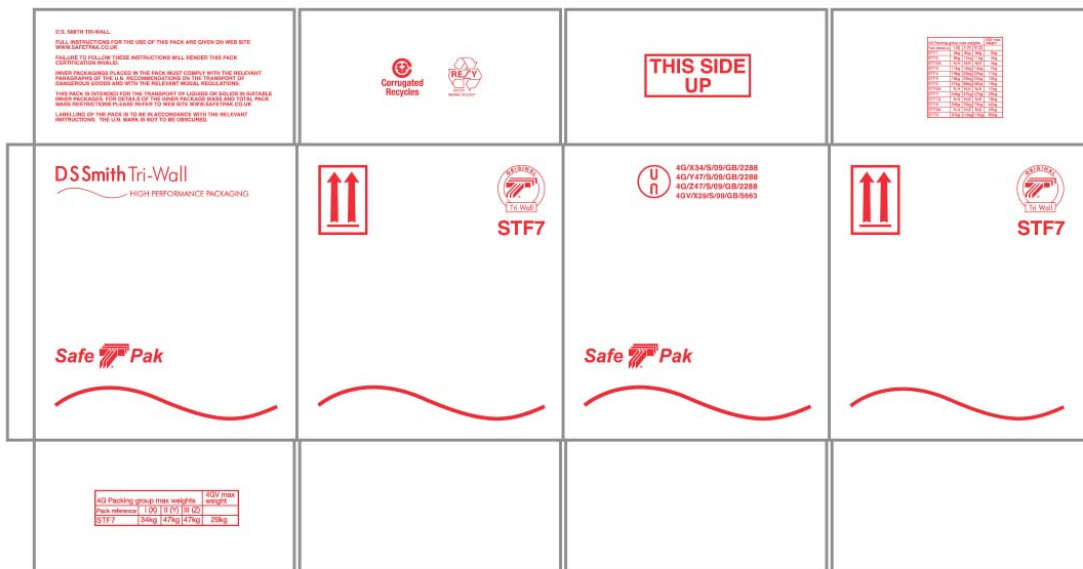
Size: 1197 (length) × 505 (width) × 902 (open width) mm

Thickness: 105 micron.

NOTE

The plastic liner is only required for the 4GV version of this pack.

When ordering the 5 litre liner quote the size and thickness.



26 STF7A SPECIFICATION SHEET

CASE

Style: RSC

Layer pad × 2 in 460 CA
(only required for 4GV version of pack)

Spec number: 49645

Size: 420 × 420 × 440mm

Minimum order quantity: 240

Pallet quantity: 60

The case holds a 4GV UN certification –
see table for maximum packaging weights.

	4G pack packing group max weights			4GV pack max weight
	I (X)	II (Y)	III (Z)	
STF7A	N/A	N/A	N/A	19kg

INNER PLASTIC LINER

Liner spec number: 798168

Gusseted 5 litre liner

Size: 1197 (length) × 505 (width) × 902 (open width) mm

Thickness: 105 micron.

NOTE

The plastic liner is only required for the 4GV version of this pack.

When ordering the 5 litre liner quote the size and thickness.

<small>D.S. SMITH TRI-WALL FULL INSTRUCTIONS FOR THE USE OF THIS PACK ARE GIVEN ON WEB SITE WWW.DSSMITH.CO.UK PLEASE TO FOLLOW THESE INSTRUCTIONS WELL BEFORE THIS DATE CONSIDERATION PLEASE INNER PACKAGING PLACED IN THIS PACK MUST COMPLY WITH THE RELEVANT REGULATIONS FOR THE TRANSPORT OF DANGEROUS GOODS AND WITH THE RELEVANT REGULATIONS FOR THE TRANSPORT OF SOLID OR LIQUID DANGEROUS GOODS THIS PACK IS INTENDED FOR THE TRANSPORT OF SOLID OR LIQUID DANGEROUS GOODS INNER PACKAGING MUST COMPLY WITH THE RELEVANT REGULATIONS FOR DANGEROUS GOODS TRANSPORTATION. PLEASE REFER TO THE RELEVANT REGULATIONS FOR DANGEROUS GOODS TRANSPORTATION. THE FULL NAME IS GIVEN ON THE LABELLING OF THE PACK AND TO BE IN ACCORDANCE WITH THE RELEVANT REGULATIONS. THE FULL NAME IS GIVEN ON THE LABELLING.</small>		THIS SIDE UP											
DSSmith Tri-Wall HIGH PERFORMANCE PACKAGING	 STF7A	 4GV/X18/S/09/GB/1374	 STF7A										
<table border="1"> <thead> <tr> <th>4G Packing group max weight</th> <th>4GV max weight</th> </tr> </thead> <tbody> <tr> <td>I (X)</td> <td>N/A</td> </tr> <tr> <td>II (Y)</td> <td>N/A</td> </tr> <tr> <td>III (Z)</td> <td>N/A</td> </tr> <tr> <td>STF7A</td> <td>19 kg</td> </tr> </tbody> </table>	4G Packing group max weight	4GV max weight	I (X)	N/A	II (Y)	N/A	III (Z)	N/A	STF7A	19 kg			
4G Packing group max weight	4GV max weight												
I (X)	N/A												
II (Y)	N/A												
III (Z)	N/A												
STF7A	19 kg												

27 STF8 SPECIFICATION SHEET

CASE

Style: RSC

Spec number: 49637

Size: 575 × 370 × 420mm

Minimum order quantity: 300

Pallet quantity: 60

The case holds both 4GV and 4G UN certifications – see table for maximum packaging weights.

	4G pack packing group max weights			4GV pack max weight
	I (X)	II (Y)	III (Z)	
STF8	50kg	70kg	70kg	42kg

INNER PLASTIC LINER

Liner spec number: 798168

Gusseted 5 litre liner

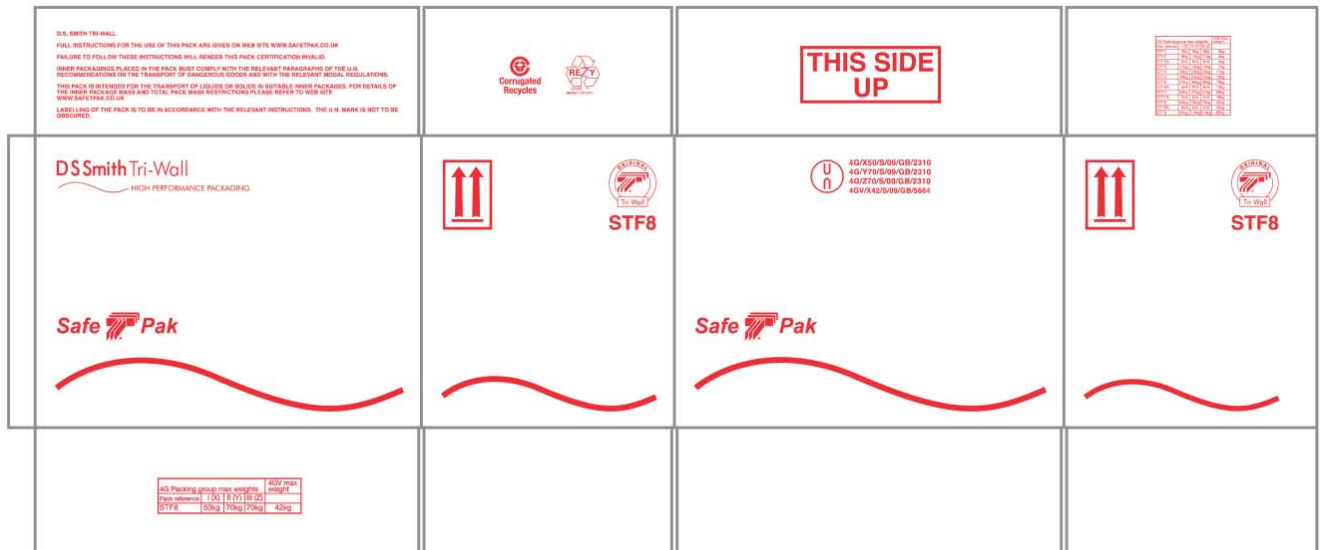
Size: 1197 (length) × 505 (width) × 902 (open width) mm

Thickness: 105 micron.

NOTE

The plastic liner is only required for the 4GV version of this pack.

When ordering the 5 litre liner quote the size and thickness.



28 STF8A SPECIFICATION SHEET

CASE

Style: RSC

Layer pad × 2 in 510 CA
(only required for 4GV version of pack)

Spec number: 49646

Size: 600 × 600 × 440mm

Minimum order quantity: 260

Pallet quantity: 65

The case holds a 4GV UN certification –
see table for maximum packaging weights.

	I (X)	II (Y)	III (Z)	4GV pack max weight
STF8A	N/A	N/A	N/A	45kg

INNER PLASTIC LINER

Liner spec number: 798124

Gusseted 10 litre liner

Size: 1390 (length) × 770 (width) × 1300 (open width) mm

Thickness: 125 micron.

NOTE

The plastic liner is only required for the 4GV version of this pack.
When ordering the 10 litre liner quote the size and thickness.

<p><small>D.S. SMITH TRI-WALL ALL INSTRUCTIONS FOR THE USE OF THIS PACK ARE GIVEN ON WEB SITE OR ON THE PACK ITSELF.</small></p> <p><small>PLEASE FOLLOW THESE INSTRUCTIONS WELL BEFORE THE PACK IS OPENED.</small></p> <p><small>IF THE PACKING GROUPED IN THIS PACK MUST COMPLY WITH THE RELEVANT REGULATIONS OF THE ILO, WITH CONFORMANCE TO THE REQUIREMENTS OF INTERNATIONAL STANDARDS AND WITH THE RELEVANT NATIONAL REGULATIONS.</small></p> <p><small>THIS PACK IS INTENDED FOR THE TRANSPORT OF A LIQUID OR SOLID IN HAZARDOUS MATERIALS. IT IS NOT TO BE USED FOR THE TRANSPORT OF OTHER GOODS. LABELLING OF THE PACK IS TO BE IN ACCORDANCE WITH THE RELEVANT REGULATIONS. THE UN MARK IS NOT TO BE OBLITERATED.</small></p>		<p>THIS SIDE UP</p>							
<p>DSSmith Tri-Wall HIGH PERFORMANCE PACKAGING</p>	<p>STF8/A</p>	<p>4GV/X45/S/09/GB/1386</p>	<p>STF8/A</p>						
<p>Safe Pak</p>		<p>Safe Pak</p>							
<table border="1"> <thead> <tr> <th>4GV Packing group max weights</th> <th>400 mm height</th> </tr> </thead> <tbody> <tr> <td>Pack reference: I (X) II (Y) III (Z)</td> <td></td> </tr> <tr> <td>STF8/A</td> <td>N/A N/A N/A 45kg</td> </tr> </tbody> </table>	4GV Packing group max weights	400 mm height	Pack reference: I (X) II (Y) III (Z)		STF8/A	N/A N/A N/A 45kg			
4GV Packing group max weights	400 mm height								
Pack reference: I (X) II (Y) III (Z)									
STF8/A	N/A N/A N/A 45kg								

29 STF9 SPECIFICATION SHEET

CASE

Style: RSC

Spec number: 49638

Size: 775 × 575 × 540mm

Minimum order quantity: 160

Pallet quantity: 40

The case holds both 4GV and 4G UN certifications – see table for maximum packaging weights.

	4G pack packing group max weights			4GV pack max weight
	I (X)	II (Y)	III (Z)	
STF9	91kg	119kg	119kg	80kg

INNER PLASTIC LINER

Liner spec number: 798124

Gusseted 10 litre liner

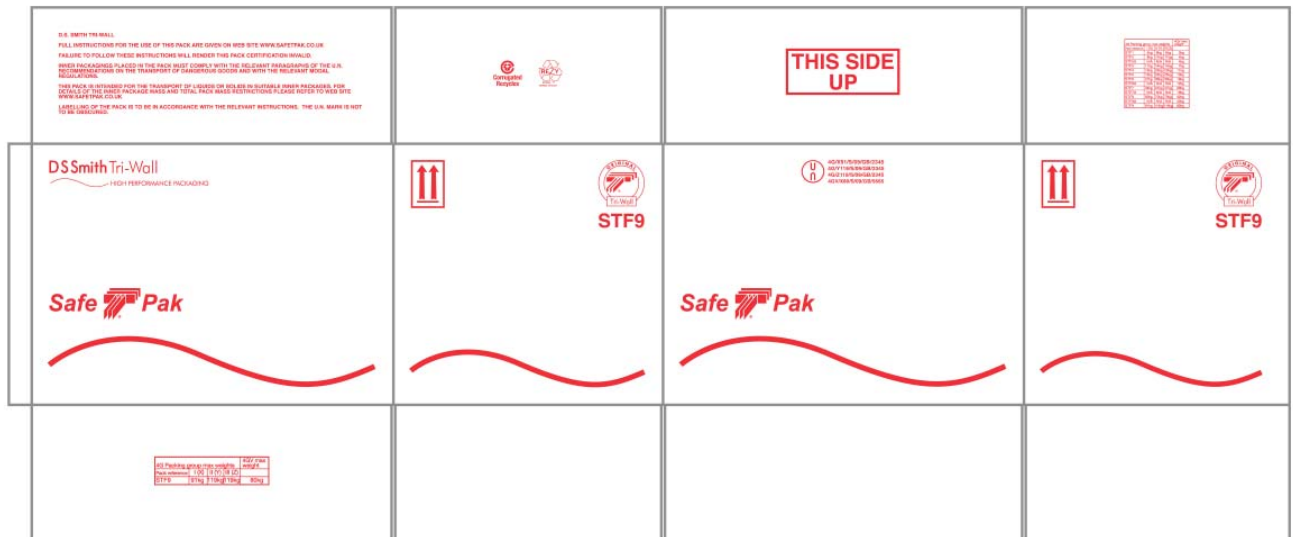
Size: 1390 (length) × 770 (width) × 1300 (open width) mm

Thickness: 125 micron.

NOTE

The plastic liner is only required for the 4GV version of this pack.

When ordering the 10 litre liner quote the size and thickness.



DSSmith Tri-Wall

HIGH PERFORMANCE PACKAGING

Wonastow Road
 Monmouth NP25 5TW
 United Kingdom
 Tel: +44(0)1600 772222
 Fax: +44(0)1600 775801
 Email: csduk@triwall.dssp.com

Treubstraat 17
 2288 EH Rijswijk
 The Netherlands
 Tel: +31(0)703 993110
 Fax: +31(0)703 990259
 Email: csdeu@triwall.dssp.com

www.tri-wall.eu.com