



## MAUSER Recollect Service.

MAUSER, with its subsidiary National Container Group, is one of the leading reconditioners of industrial packaging.

Through the Recollect Ticket, MAUSER organises the worldwide collection service of emptied IBCs of different manufacturers.

Ecological thinking, sustainable action.



Further information about the MAUSER Recollect Service is available on [www.ncg-europe.com](http://www.ncg-europe.com).

Provided by



## Trend-setting IBC solutions. Quality “made by MAUSER”.



## The MAUSER® SM IBC design for hazardous or sensitive filling goods. Customised quality – worldwide.

The MAUSER® SM IBC fulfills the requirements of international packaging regulations for the transportation of dangerous goods. With its high product quality, made-to-measure design features and international availability, the Mauser® SM IBC is a worldwide leading brand for composite IBCs.

Because of its modular structure, the MAUSER® SM IBC can be offered in a variety of options to suit individual customer needs.

The cage design is optimised to meet the demands that vibration places on the IBC during all modes of transport. Under the dynamic load of transportation, MAUSER® SM IBCs can be stacked two high and higher in static warehouse storage.

The IBC bottle is blow moulded from UV stabilised, high molecular weight, high density polyethylene which is food safe and has high chemical resistance. The bottle has excellent mechanical strength and can be used for a broad spectrum of filling goods. Options such as ex-protection,

light protection and permeation barriers can be provided.

Different pallet designs can also be selected: the choice available is all wood (heat-treated), all plastics (steel-strengthened) or a steel/plastics combination to meet the particular requirements of hygiene, shock or corrosion resistance and to suit automatic filling lines.

Options also include various discharge valves, outlet connections and a range of screw caps.



MAUSER® SM 6 UN



MAUSER® SM 13 UN



MAUSER® SM 15 UN

		SM 6	SM 6 UN	SM 13	SM 13 UN	SM 15	SM 15 UN
<b>Dimensions</b>	length (mm)	1200	1200	1200	1200	1200	1200
	width (mm)	1000	1000	1000	1000	1000	1000
	height (mm)	1175	1175	1146	1146	1175	1175
	nominal volume <sup>A</sup> (l)	1000	1000	1000	1000	1000	1000
	brimful volume (l)	1050	1050	1050	1050	1050	1050
<b>Approval</b>	UN 31/HA1/Y		●		●		●
<b>Type of pallet</b>	Wood, runner	●	●				
	Composite Steel-Plastic, frame			●	●		
	Composite Steel-Plastic, runner			○	○		
	Full plastic, runner*					●	●
<b>Bottle</b>	HDPE, UV-stabilised	●	●	●	●	●	●
	Ex-protection		○		○		○
	Light protection	○	○	○	○	○	○
	Permeation barrier	○	○	○	○	○	○
<b>Screw cap/filling opening</b>	DN 150 <sup>1,2</sup>	●	●	●	●	●	●
	DN 225 <sup>1,2</sup>	○	○	○	○	○	○
<b>Additional top bung<sup>3</sup></b>	BCS 56 x 4	○	○	○	○	○	○
<b>Discharge valve</b>	Butterfly DN 50 <sup>4</sup>	●	●	●	●	●	●
	Cylindrical DN 50 <sup>4</sup>	○	○	○	○	○	○
	Butterfly DN 80 <sup>5</sup>	○	○	○	○	○	○
	Without valve	○	○	○	○	○	○
	Connection DN 150	○		○		○	
<b>Discharge tube</b>	DN 50	○	○	○	○	○	○
	DN 80	○		○		○	
<b>Label plate</b>	Front 235 mm x 502 mm	●		●		●	
	Front and rear 400 mm x 502 mm	○	●	○	●	○	●
	Front and rear 400 mm x 670 mm	○	○	○	○	○	○
	Side 400 mm x 610 mm	○	○	○	○	○	○

- Standard
- Optional

<sup>A</sup> 1250l (330 gal) available in US.  
<sup>1</sup> Optional with integrated venting or centre bung.  
<sup>2</sup> Standard EPDM gasket, optional with FKM gasket.  
<sup>3</sup> Optional equipped with dip tube system.  
<sup>4</sup> Connection CCS 60 x 6, NPS 2", 2"- or 1.5"-Camlock.  
<sup>5</sup> Connection CCS 100 x 8, NPS 3".

\* EU version: runner; US version: window.



## MAUSER® SM EX. For use in Ex-Zones.

### Explosion hazards

The MAUSER® SM 13 EX was developed specifically for use in Ex-Zones 1 and 2. It has been granted the relevant Cenelec certification (TR50404-2003; BGR 132) and has obtained full UN approval. The SM 13 EX thus fulfills all applicable international packaging regulations for dangerous goods with low flashpoints.

### Static electricity

The multi-layered IBC has an inner layer of food-safe polyethylene and an external layer of antistatic compound which prevents the electrostatic charging of the bottle during the IBCs entire service life.

Additional benefit: the multi-layer bottle is translucent which allows the level of contents to be clearly visible.

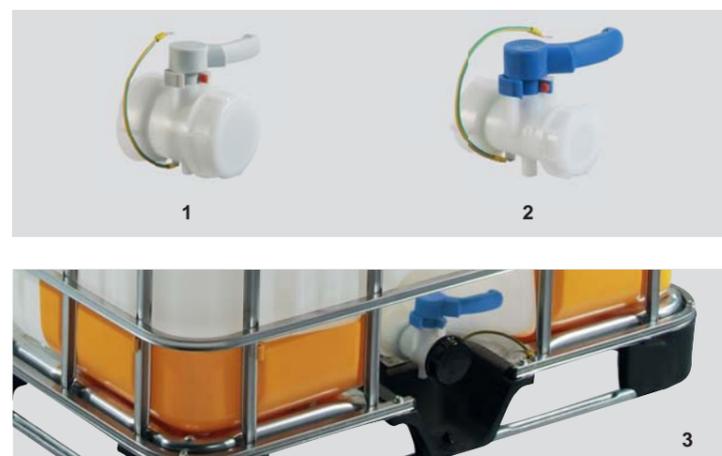
### Static electricity – filling and emptying

To meet any potential risk of electric charge from the filling goods, the MAUSER® SM 13 EX is provided with an uninterrupted connection to the ground via the discharge valve, cage and pallet.

This version is available with DN 50 (2") or DN 80 (3") Butterfly valve.

The MAUSER® SM IBC component system enables innovative, supplementary solutions. For example, the SM EX can be delivered without a discharge valve or on a grounded wooden pallet.

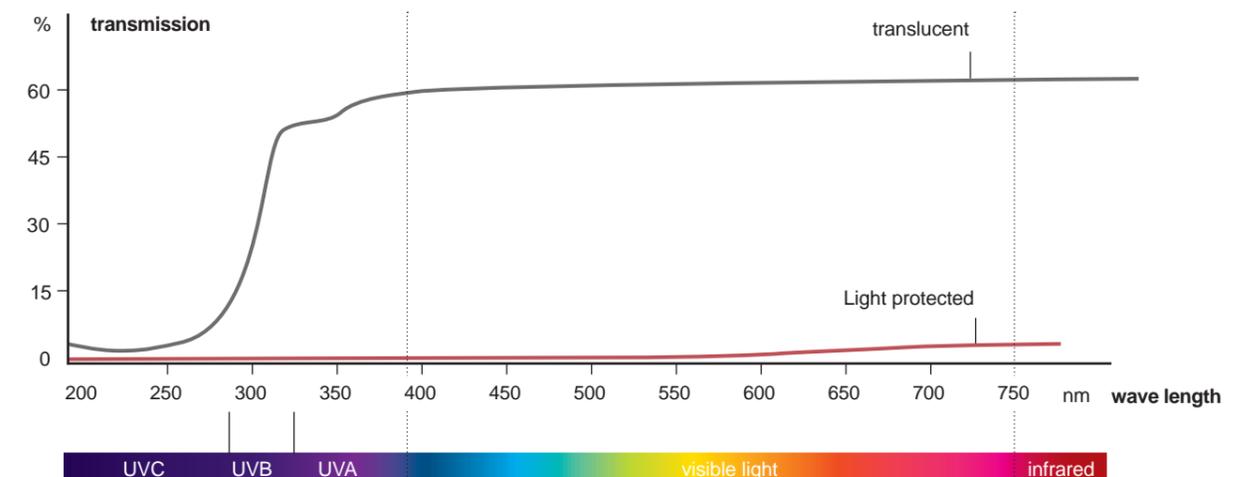
To provide protection for light-sensitive products or prevent the loss of volatile filling goods, the multi-layered IBC can incorporate light protection and/or an additional barrier.



## MAUSER® SM LP. Better protection from light.

The MAUSER® SM LP (Light Protect) IBC is equipped with a special light-impermeable bottle. The material is a mixture of polyethylene and an additive which protects the filling goods from UV and visible light, even in geometrically complex areas like nearby the discharge valve and the top filling opening. Compared to composite IBCs with a full metal casing, this is a decisive advantage.

Unlike composite IBCs providing light protection through black coloured bottles, the white coloured bottle of the MAUSER® SM LP reflects the sunlight and therefore will limit temperature levels inside whereas those coloured black heat up much more. This is of particular significance because many light-sensitive filling goods also tend to react chemically at such elevated temperatures.





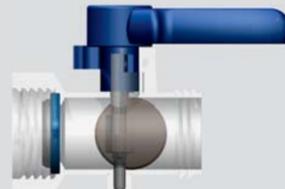
1.1



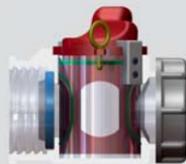
1.2



2.1



2.2



3.1



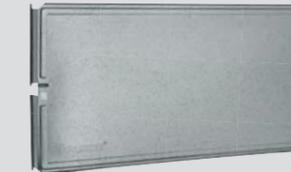
3.2



4.1



4.2



5.1



5.2



6.1



6.2



6.3

## MAUSER discharge valves. Simply the best.

### For all applications

MAUSER® SM discharge valves have a rigid, one-piece polyethylene body which increases both their strength and resistance to corrosion. In addition, they have a retained gasket which improves the efficiency of the seal. The choice of polyethylene as the gasket material avoids the need to evaluate compatibility in relation to filling goods.

IBC discharge valves are so critical to the integrity of the complete IBC that MAUSER produce all their valves in just one Group factory, giving total control over production and quality. The valves are produced in the most modern, injection moulding facility and completed in full automation. 100% inspection is used to secure functionality and liquid-tightness.

In every Group factory producing IBCs, the fitting of the valve to the bottle is also automated in a fully controlled process.

### Butterfly valve DN 50 (2") and DN 80 (3")

Simple construction and easy to use: these are the characteristics of this robust Butterfly valve. The ETFE seal used for the valve flap has outstanding chemical compatibility. For additional mechanical strength all moveable components are made of fibreglass-filled plastics.

### Cylindrical valve DN 50 (2")

Comparable to the ball valve, the Cylindrical valve works with an internal cylinder which is rotated by the handle into the open or closed position. In the open position, it permits unrestricted flow, which can be regulated by the movement of the handle.

The Butterfly and the Cylindrical discharge valves are available in metric and NPS threads or with quick connect in 2" and 1.5" sizes. A variety of adaptors are available.

- 1.1 Valve body
- 1.2 Retained gasket
- 2.1 Butterfly valve – closed
- 2.2 Butterfly valve – open
- 3.1 Cylindrical valve – closed
- 3.2 Cylindrical valve – open

## MAUSER accessoires. More than just a standard.

### Screw caps

Screw caps can be delivered in standard diameters of DN 150 (6") and DN 225 (9"). Both sizes are available in a plain version or with integrated venting. These venting systems are required for gaseous filling goods or, alternatively, when there are large temperature changes, such as with hot filling.

Screw caps with a centre bung in BCS 56 x 4 or 2" NPS sizes are available for use with pumps or dip tubes.

### Optivent®

This unique venting system, which is fully UN approved, enables the IBCs to be emptied without having to unscrew the cap. This is critical in such areas as offshore oil platforms or ultra-clean applications where contamination from the outside must be prevented. Any contamination is captured by an integrated filter system while the valve mechanism simultaneously permits a high level of air flow.

### Pressure relief valve

This relief valve was developed for filling goods capable of dangerous reactions that include the release of large amounts of gas. During normal operations, the valve is closed in both directions, but, at a defined pressure level, the pressure relief valve opens and depressurises the IBC bottle.

### Label plates

Steel label plates are available in small, medium and large sizes for the MAUSER® SM IBCs. To eliminate the possibility of damage to the IBC bottle, all edges are flanged and rounded off. There is also a XXL version made of plastic.

All label plates are securely connected to the IBC cage though plates can be exchanged or additional plates fitted easily.

- 4.1 Pressure relief valve
- 4.2 Optivent® valve
- 5.1 Label plate large
- 5.2 Label plate medium
- 6.1 Screw cap DN 225
- 6.2 Screw cap DN 150 with integrated venting
- 6.3 Screw cap DN 150 with centre bung