



SEFA Information on

“Material Labelling for Industrial Packaging: Steel Drums”

General Considerations

When discussing Labelling obligations for steel drums it should always be kept in mind that Drums are Industrial Packaging which means that they are produced, filled, emptied and handled/ sorted by professionals. This is even more true for those cases, where Steel Drums are used for the Transport of Dangerous Goods (which is the main share of the production). Apart from that, Steel as Material is and has been easily recognised and sorted even without any labelling for decades if not centuries. In this context it should be mentioned, that the many packagings that are used for Transport of Dangerous Goods have to bear a UN Marking, which already gives Information on the Material (the examples described below are the types "1A1", "1A2" and "6HA1" in which the "A" always stands for "steel", whereas e. g. "B" would be Aluminium).

We understand that it is in principle the obligation of the filler to attach material labelling on the filled product and that the packaging supplier must forward information on the respective materials to the filler. The labelling in this case would be on a product label together with other information on the filled product as it is usual for many consumer articles e.g., bottled beer.

Also, we understand that in Italy according to CONAI Guidelines it is in principle sufficient for industrial packaging (B2B packaging or "neutral packaging") that information on the packaging material is made available in shipping documents and/ or via digital channels (e.g., QR Code and Website).

Nevertheless, Steel Drum Manufacturers often print Material Labelling ("FE 40") in combination with the UN Marking on the drum body, because this is technically feasible in most cases. Sometimes also the closing rings (see below) have a marking (also "FE 40") which is attached by the closing ring producers together with other product information. For the Drum Lid in case of Open Head Drums a material labelling is often difficult to attach by the drum producer and not regarded as necessary because it is obvious that the lid is made from the same material as the body (also the emptier has to reclose the drums according to the Rules for the transport of dangerous goods – which means that the lid and the body stay assembled for most of the time of their life-cycle). In case of the Combination Drums the inner receptable is always marked ("HDPE 2").

Steel Drum Types

Below we have listed more detailed information on the different Steel Drum types:

- **Open Head Steel Drum** (OH, UN Dangerous Goods Code “1A2”):
 - Volume between 6 and 216 Litres,
 - Material Thickness 0.5 to 1.2 mm
 - Total Weight 1.3 to 25 kg
 - Components:
 - Body: steel
 - Lid: steel
 - Closing ring: steel, opening either manually or with simple tool, necessary for access to filled product
 - Sealing gasket: made from EPDM or PU, not or not easily removable – stays on lid (does not affect recycling)
 - Split pin: steel or plastic (weight only a few grams), often the fillers replace with their own split pins
 - If the drum is used for the transport of dangerous goods (which is mostly the case), lid and closing ring have to be re-assembled after emptying.
 - Sometimes Open Head Drums have bungs with closures (see below: Tight Head Drums)
 - Sometimes smaller drum types also have handles or drop handles (also made from steel) which always stay attached to the body until the drum is recycled.



Open Head Drum



Open Head Drum with bungs and drop handles

- **Tight Head Steel Drum (TH, UN Dangerous Goods Code “1A1”):**
 - Volume between 6 and 225 Litres
 - Material Thickness between 0.5 and 1.2 mm
 - Total Weight 1.1 to 22 kg
 - Components:
 - Body: Steel
 - Closure: Steel (18-69 g) or Plastic (6-27 g, PP, PA)
 - Seal Caps: Steel or Plastic (5-14 g)
 - Opening of the Closure with simple tool – necessary to have access to the filled product



Tight Head Drum



Closures and Seal Caps made from Steel and Plastic

- **Composite Drums** (UN Dangerous Goods Code 6HA1):
 - Volume between 6 and 216 Litres
 - Material Thickness (steel) between 0.5 and 1.2 mm
 - Total Weight 1.4 to 25 kg
 - Components:
 - Outer Body: Steel
 - Inner receptacle: HDPE (0.2 to 3.5 kg)
 - Composite Drums in principle can be either tight head or open head drums. For an open head drum, after emptying, the inner (plastic) container can easily be removed and separated. For a tight head drum this is also possible but a special tool is used to cut open the drum. The other components (lid, closing ring for OH, closure etc. for TH) are described above.



Composite Drum



Inner Receptacle of composite Drum