



USED BEVERAGE CONTAINERS SPECIFICATIONS (ALUMINIUM)

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1. Purpose

There is a need for strong cooperation between manufacturers and recyclers in order to maximise the recovery rate of used aluminium beverage containers (UABCs). These specifications provide recyclers and re-processors information about UABCs recycling. The specifications cover the following:

- Acceptable baled UABC
- Contaminants
- Packaging and transport
- Storage
- Supplier qualification
- Deviations

This specification document is a benchmark for buyers and suppliers within the Australian recycling industry. ACOR welcomes feedback on all specifications at any time to ensure they reflect the current industry best practice. Individual buyers and sellers can use it as a workbook or a reference for trading and negotiation. It is not compulsory for buyers and sellers to comply with the standards. However, buyers and sellers are strongly encouraged to work together and reach an agreement regarding terms and conditions.

2. Acceptable UABC Bales

The UABC bale is ONLY accepted in two forms:

2.1. Baled or briquette form stacked on pallets

The size of the bales is not a critical component. No dimension should exceed 0.400 m. Bales should be of a uniform size with no protruding edges and should not overhang from the pallet.

2.2. Large, single bales (aka “Harris” bales)

The maximum acceptable bale dimensions are 1500 x 750 x 1200 mm but smaller bales are preferred.

3. Contaminants

3.1. Explosion hazards

Aluminium scrap **MUST** be free of contaminants that may cause explosion, especially when charged into molten aluminium.

Contaminants that are prohibited during reprocessing, include, but are not limited to the following:

- Heavy grease and oils
- Residual chemical, such as nitrate and sulphate and other oxidising materials
- Corroded and oxidised materials
- Water and other volatile substances either in solid or liquid form
- Salt fluxes
- Glass or plastic bottles, pressurised aerosol cans, butane lighters, or any other sealed containers.

3.2. Health risks

Substances that are harmful to employees' health are prohibited in the remelting process. These include:

- Substances that have had prior exposure to, or contaminated by radiation. This can be detected by radiation meters.
- Tramp contamination by polychlorinated biphenyls (PCBs)
- Alloyed, plated or free selenium, cadmium, lead, mercury, arsenic, beryllium or antimony.

3.3. Other contaminants

Baled UABC should be free of any other non- UABC materials which do not cause any safety hazards.

These include:

- Steel
- Lead
- Other metals
- Paper and cardboard
- Plastics
- Glass
- Wood
- Dirt
- Food wastes
- Construction wastes
- Rubbish and other refuse

All UABCs shall be magnetically separated to ensure no iron or steel presence, prior to bailing.

If UABCs are melted with other metals such as iron, lead, zinc or any other elements to the extent that affects the quality of the aluminium or further processing, the final product will be cast out as sows that will be disposed. In which case, the UABC supplier may acquire financial losses/ liability including costs of production and opportunity costs.

4. Packaging and Transport

4.1. Packaging

4.1.1. Pallets

- Small UABC bales shall be shipped on hardwood universal or double- faced pallets which comply with Standard Australia— AS 2068.
- Penalty may incur if suppliers do not comply with the standards in terms of pallets dimensions or materials used.

4.1.2. Pallet stacking

- The maximum height for stacking pallets should be 2000mm, otherwise, they will not be able to be charged directly into the furnace.
- To minimise the load movement, bales should be stacked on pallets so that they interlock with each other.
- Bales must not overhang from the pallet.
- The top layer of bales should be even.
- Financial penalties may arise for any incorrectly stacked pallets shipped by a supplier that fail to comply with any of the requirements above.

4.1.3. Strapping

The requirements of strapping are listed below:

- Acceptable materials: steel, aluminium and plastic as long as it is high strength and low stretch.
- Acceptable high strength and low stretch are materials such as; steel, aluminium and plastic
- Unacceptable materials: shrink and bandage wrapping
- Steel strapping should be a minimum of 12mm wide.
- Aluminium strapping should be a minimum of 32mm wide.
- There should be a minimum of four vertical straps, two each on each side and girth straps to secure the top row of bales.
- “Harris” bales should be secured with a maximum of four wire straps.

4.2. Transport

- “Harris” bales should be stacked no more than three high on trucks.
- The bottom bale of each stack must rest on timber dunnage that is high enough to allow forklift tynes be safely inserted between bales and truck tray.
- Dunnage must be high enough to allow safe clearance of the coaming.

5. Storage

UABC bales must be stored and transported under cover at all times.

6. Supplier Qualification

Australian recyclers only accept aluminium scrap that fulfils the requirements listed above and which is capable of being safely charged to furnaces with minimal additional handling. It is recommended that the supplier’s facilities are opened for recyclers for inspection to ensure a full understanding of the requirements for auditing scrap receipt, processing and storage systems.

7. Substandard Quality

The above specifications apply to all UABCs. Suppliers and recyclers are strongly encouraged to work together and reach agreements in terms of contaminants, packaging, transport and storage. Recyclers accepting the materials should be prepared to work with their suppliers to rectify any excessive contamination levels, and other terms and conditions.

Not conforming to these specifications may cause shipment to be downgraded or rejected. The UABC bale(s) may be deemed unacceptable and the supplier may be liable to financial losses.