



AUSTRALIAN COUNCIL OF RECYCLERS INC

the voice of the recycling industry

# Recycling Guide for Fillers Marketing in Steel Cans



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# Introduction to Steel

The Steel packaging industry recognises that the responsibility for successful waste minimisation requires the focus of the entire value chain. Since the commencement of operations at BlueScope Steel in 1956, BlueScope Steel has focused on the minimisation of manufacturing scrap in both steel making and canmaker operations. In 1990 the Steel Industry turned its focus to the consumer market and established the foundations for the current recycling program.

Steel packaging is 100% recyclable and due to the magnetic properties of steel can be separated efficiently in Material Recovery Facilities (MRF's). Capitalising on the inherent recyclability of steel packaging, the steel packaging industry has been able to deliver a cost effective, efficient and robust recycling chain for both consumer and industrial markets.

This booklet is designed to:

- specify the current recycling process for steel
- provide fillers/brand owners with a guide to the appropriate use of the recycling logo
- clarify the requirements of steel packaging for successful recovery via the kerbside collection programs, Australia wide.

The booklet should be treated as a working document that will need updating from time to time. The publishers welcome the input of companies which can provide additional information to ensure that package designers and fillers are aware of the latest steel canrecycling technology and available products.



## About Steel Packaging

BlueScope Steel manufactures tinplate for conversion by canmakers into empty cans.

- Tinplate is a low carbon mild steel coated on both top and bottom surfaces with an electrolytic deposition of tin. The deposited tin exists as alloyed and free tin has a passivated surface as well as a coating of oil.

Steel is sold in large coils to canmakers who convert steel coils into cans for use in the:

- Human food
- Pet food
- Personal care products
- Household and industrial chemicals
- Paints and solvents
- Oils (automotive and edible)
- Broad range of general items



# The Recycling Process

# Steel 100% smart 100% recyclable

## Where do my steel cans go?...

Each year, the Australian population buys nearly 3 billion steel cans from supermarkets and hardware stores. Steel packaging is one of the most sustainable packaging materials and due to its magnetic qualities one of the easiest materials to extract from household recycling.

Through kerbside collections and council drop-off facilities many of these steel cans are recovered and recycled back into steel cans or other types of steel products. The diagram below details the endless lifecycle of the steel can.



Cansmart is a Steel Can Recycling Council initiative. The Steel Can Recycling Council works with local government, waste educators and industry to raise awareness of the sustainability and recyclability of steel packaging. For more information please contact us on 1800 073 713 or [www.cansmart.org](http://www.cansmart.org)



## What is Recyclable

Steel packaging has the environmental benefits of being 100% recyclable and easily separated from the waste stream due to the magnetic properties of steel. All steel packaging can be recycled with 94% of Australians having access to steel can recycling through kerbside collection. Some steel packaging used in hazardous and chemical applications may require cleaning to meet local EPA requirements, but once completed the steel packaging can be fully recycled.



## Recycling Infrastructure

The most commonly used systems in place for the collection and recycling of steel include:

- consumer kerbside collection
- direct collection from industrial users
- targeted collection programs for rural areas
- arising collection from canmaker and brand owner production facilities
- drop off centres
- landfill separation for some industrial applications
- hazardous household collections

## Separation of Steel

The magnetic properties of steel allow for efficient and easy separation from the recycling or waste stream.

*Consumer recycle* that is processed through a Material Recovery Facility (MRF) is processed and automatically separated via magnets. The steel is then conveyed to a baler where it is crushed and ready for transportation back to a steel producer.

*Industrial packaging* is collected through a number of different chains. Due to the significant volumes at any one site, a pre-sort is completed on site using either a dedicated bin or co-mingled system for final sort at a consolidation centre and then baling and transportation to a steel producer. Drop-off centres and landfill with sort facilities also provide for another avenue of recycling of steel.



## Innovation

Development and innovation in steel packaging has resulted in significant environmental benefits. The two major initiatives for steel packaging has been the continued focus on light weighting and the development of half gauges.

### Light-weighting

In order to further light weight the steel can BlueScope Steel Packaging Products have commenced trialling process capability on a 0.14mm product. With capital investment in the Temper Mill on schedule to be completed by June 2006, BlueScope anticipate being able to work with customers with the aim of supplying 0.14mm material by July 2006.

### Half gauges

BlueScope Steel continue to prduce half gauges to further support light-weighting. This allows canmakers to optimise the gauge for suitable end uses.

## Support for Steel Can Recycling

The Steel Can Recycling Council (SCRC) has been established by the steel industry to provide information, assistance and research to the steel packaging industry in relation to recycling. The SCRC focuses on delivering:

- Information for canmakers and brandowners to include a recyclable steel logo for packaging use
- Tools and information for councils including recipe cards, posters, householders guides, website and other collateral
- Support material for waste educators including competition and advertising templates
- Regular research to support an ongoing media relations program

Members include:

- BlueScope Steel (formerly BHP)
- Canmakers Institute of Australia (CMIA)
- Aerosol Association of Australia
- Canned Food Industry Association (formerly CFIS)

Any queries or information required in the development of packaging/labelling or environmental programs for steel can be directed to either the SCRC **1800 073 713** or email [info@cansmart.org](mailto:info@cansmart.org)

## Recyclable Steel Logo

As all steel packaging is recycled in the same manner there is no added complication of multiple recycling symbols or nomenclature. The Steel Can Recycling Council developed a recyclable steel logo that can be used by brandowners and canmakers who package in steel. They have developed the following guidelines for appropriate logo size for different steel packaging formats.

### Logo Colour and Background

Logo should be used as black on white, or white reversed out of solid colour. When logo is required for use on a busy background (eg image), the recyclable steel logo in a circle of solid white is acceptable.

Black is the preferred colour for the logo when used on a white background. If there is no black in the artwork, the darkest colour available may be used.

In each instance, the minimum diameter is the preferred size, except in cans 85gms – 240gms and 250ml paint cans where the preferred diameter is larger than the minimum diameter (see following).

## Labelling Guide for Recyclable Steel Logo

### Food and Petfood Cans

*Food and petfood cans in the range 85gms – 240gms.*




Some examples of can dimensions:

85gms	67mm x 38mm
105gms	75mm x 37mm
120gms	52mm x 72.5mm
215gms	73mm x 61.5mm
240gms	65mm x 76.5mm

9mm (minimum) diameter up to 18mm

Preferred 11mm

#### Preferred 9mm

9mm			
		reversed out of solid	busy background (eg image)

#### Preferred 11mm

11mm			
		reversed out of solid	busy background (eg image)




## Food and Petfood Cans, Aerosols

Food and petfood cans in the range 400gms – 850gms.

Some examples of can dimensions:

- 400gms     72mm x 110mm
- 450gms     83mm x 90mm
- 810gms     99mm x 118.5mm
- 850gms     83mm x 177.5mm
- + aerosols (household and industrial)




### 11mm (minimum) diameter up to 18mm

11mm			
		reversed out of solid	busy background (eg image)

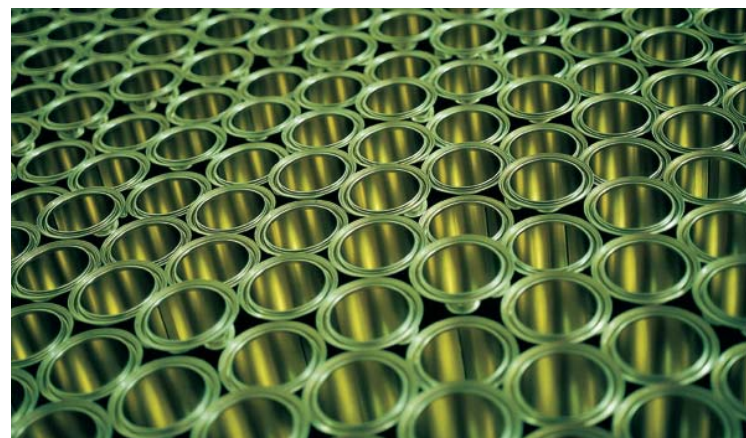
A10 can used for fruit, vegetable and juices:

3000gms or 3L 160mm x 185mm

### 13mm (minimum) diameter up to 24mm

13mm			
		reversed out of solid	busy background (eg image)

## Other Cans





Other cans in the range 340gms – 450gms.

Some examples of can dimensions:

- 340gms 95mm x 91mm (square shaped can used for ham)
- 425gms 155mm x 33mm (dish shaped can used for pies)
- 450gms 145mm x 47mm (kidney shaped can used for ham)




**11mm (minimum) diameter up to 18mm**

11mm			
		reversed out of solid	busy background (eg image)

4L rectangular can used for cooking oil:

4L 163mm x 289mm

**13mm (minimum) diameter up to 24mm**

13mm			
		reversed out of solid	busy background (eg image)




**Paint Cans**

Paint cans 250ml:



250ml 74mm x 79mm

9mm (minimum) diameter up to 18mm

**Preferred 11mm**

9mm			
		reversed out of solid	busy background (eg image)

**Preferred 11mm**

11mm			
		reversed out of solid	busy background (eg image)




## Paint Cans

Paint cans in the range 500ml - 20L

Some examples of can dimensions:

500ml	89mm x 104mm	6L	179mm x 178mm
1L	110mm x 134mm	10L	227mm x 290mm
2L	142mm x 157mm	15L	307mm x 298mm
4L	180mm x 192mm	20L	307mm x 387mm

### 13mm (minimum) diameter up to 24mm

13mm			
		reversed out of solid	busy background (eg image)

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[www.acor.org.au](http://www.acor.org.au)

**For further information:**  
**Australian Council of Recyclers Inc.**

PO Box 277  
BALGOWLAH NSW 2093  
Australia

**Tel: 61 2 9907 0883**  
Fax: 61 2 9907 0330

Email: [admin@acor.org.au](mailto:admin@acor.org.au)  
Website: [www.acor.org.au](http://www.acor.org.au)