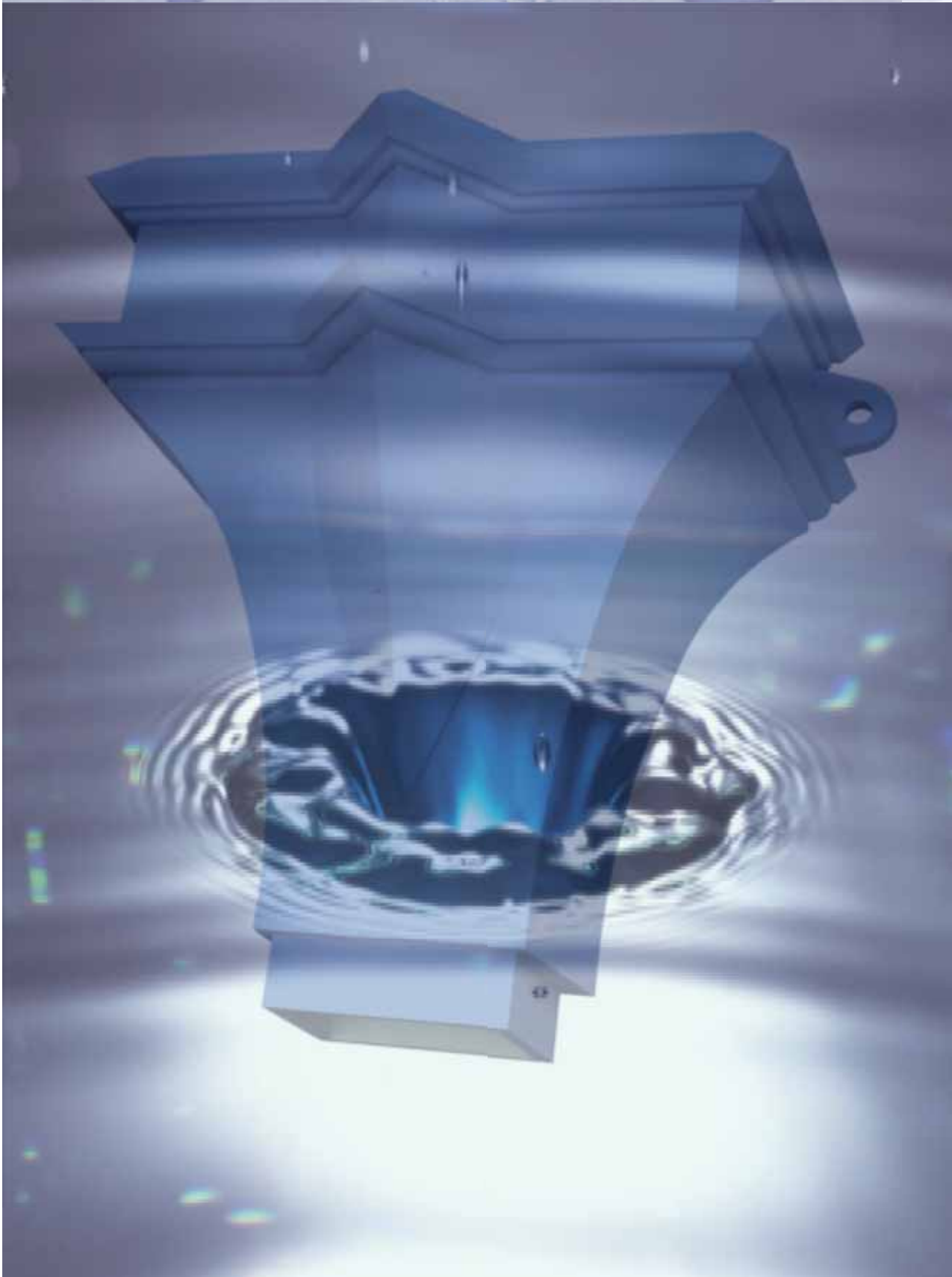


**“Colonnade”**  
**Hoppers**



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Meridian Business Park  
Braunstone  
Leicester  
LE19 1WA

Tel: 0116 2894400

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E-mail: sales@arp-ltd.com

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## “Colonnade”

### Hoppers

#### **Description:**

A range of decorative hoppers manufactured from cast aluminium (LM27) or fabricated using 2mm aluminium sheet (1050AH14).

#### **Installation:**

Hopper heads should be secured to the wall through either pre-cast holes or drilled on site & fixed back using plastic wall plugs & 5mm x 50mm st.stl screws (dependant on substrate).

#### **Finish:**

Mill Finish Aluminium or Polyester Powder Coated to a range of BS or RAL Colours.



# “Colonnade” Hoppers

## Model Specification:Cast Hoppers

ARP ‘Colonnade’ Cast Aluminium Hopper  
Type ..... , Outlet size to be ..... mm,  
Round/Square/Rectangular\*

Materials to have factory applied  
Polyester Powder Coat to all significant  
surfaces in accordance with BS EN 12206  
Matt/Satin/Gloss\* finish, or alternatively  
plain aluminium Mill Finish. All to be  
supplied by Aluminium Roofline  
Products Ltd, Unit 2, Vitruvius Way,  
Meridian Business Park,Braunstone,  
Leicester LE19 1WA. Tel 0116 2894400  
Fax 0116 2894433.

To be fastened by 5mm x 50mm  
(dependant on substrate) stainless  
steel screws, in accordance with the  
manufacturer’s specification &  
guidelines.

\* Delete as appropriate

## Model Specification:Fabricated Hoppers

ARP ‘Colonnade’ Fabricated Aluminium  
Hopper Type ..... ,Outlet size to be ..... mm  
,Round/Square/Rectangular\*

Materials to have factory applied  
Polyester Powder Coat to all significant  
surfaces in accordance with BS EN 12206  
Matt/Satin/Gloss\* finish, or alternatively  
plain aluminium Mill Finish. All to be  
supplied by Aluminium Roofline  
Products Ltd, Unit 2, Vitruvius Way,  
Meridian Business Park,Braunstone,  
Leicester LE19 1WA. Tel 0116 2894400  
Fax 0116 2894433.

To be fastened by 5mm x 50mm  
(dependant on substrate) stainless  
steel screws, in accordance with the  
manufacturer’s specification &  
guidelines.

\* Delete as appropriate



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# “Colonnade” Hoppers - Fabricated

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**Apollo**



Width (mm)	Depth (mm)	Height (mm)
305	190	190

**Juno**



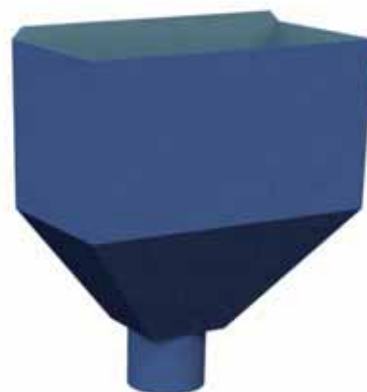
Width (mm)	Depth (mm)	Height (mm)
228	190	190

**Minerva**



Width (mm)	Depth (mm)	Height (mm)
240	240	190

**Neptune**



Width (mm)	Depth (mm)	Height (mm)
280	150	280

For available outlet sizes see page 48.

# “Colonnade” Hoppers - Fabricated

**Saturn**



Hopper size	Width (mm)	Depth (mm)	Height (mm)
Small	280	215	200
Large	310	245	230

**Faunus**



Width (mm)	Depth (mm)	Height (mm)
370	185	230

**Lares**



Width (mm)	Depth (mm)	Height (mm)
450	200	200

**Numina**



Width (mm)	Depth (mm)	Height (mm)
275	275	375

**For available outlet sizes see page 48.**

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# “Colonnade” Hoppers - Fabricated

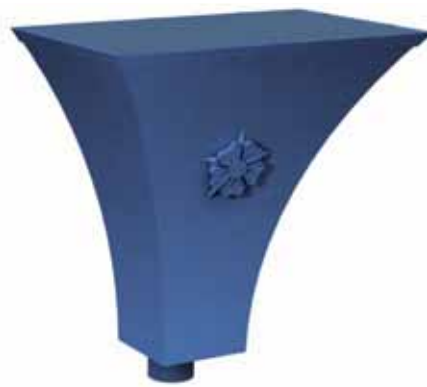
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Mercury



Width (mm)	Depth (mm)	Height (mm)
305	200	450

Venus



Width (mm)	Depth (mm)	Height (mm)
505	330	500

Diana



Width (mm)	Depth (mm)	Height (mm)
375	200	400

For available outlet sizes see page 48.

# “Colonnade” Hoppers - Cast

**Carinus**



Width (mm)	Depth (mm)	Height (mm)
255	177	177

**Avitus**



Width (mm)	Depth (mm)	Height (mm)
250	165	185

**Claudius**



Width (mm)	Depth (mm)	Height (mm)
305	160	125

**Nero**



Width (mm)	Depth (mm)	Height (mm)
320	195	230

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For available outlet sizes see page 48.

# “Colonnade” Hoppers - Cast

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**Marcus**



Hopper size	Width (mm)	Depth (mm)	Height (mm)
Small	330	152	265
Large	457	203	350

**Lucius**



Width (mm)	Depth (mm)	Height (mm)
345	215	355

**Augustus**



Width (mm)	Depth (mm)	Height (mm)
400	175	160

**Romulus**



Width (mm)	Depth (mm)	Height (mm)
355	235	325

For available outlet sizes see page 48



# “Colonnade” Hoppers - Cast

**Arcadius**



Width (mm)	Depth (mm)	Height (mm)
410	205	213

**Hadrian**



Width (mm)	Depth (mm)	Height (mm)
445	205	150

**Constantine**



Width (mm)	Depth (mm)	Height (mm)
460	205	305

**Antonius**



Width (mm)	Depth (mm)	Height (mm)
415	205	433

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For available outlet sizes see page 48

# “Colonnade” Hoppers - Cast

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**Cassius**



Width (mm)	Depth (mm)	Height (mm)
475	205	530

**Julius**



Width (mm)	Depth (mm)	Height (mm)
620	240	482

**Maximus**



Width (mm)	Depth (mm)	Height (mm)
380	185	180

**Commodus**



Width (mm)	Depth (mm)	Height (mm)
205	205	465

For available outlet sizes see page 48.

# “Colonnade” Hoppers

## Hopper Outlet Sizes:

The table below outlines standard outlet sizes for our range of Hopper Heads. In some instances hoppers can be modified to accept other outlet sizes to those shown, please enquire.

Outlet size	Code Ø63mm	Code Ø76mm	Code Ø101mm	Code 63mm Sq	Code 76mm Sq	Code 101x76mm	Code 101mm Sq
Apollo	HAPOL2R	HAPOL3R	HAPOL4R	HAPOL2S	HAPOL3S	HAPOL43	HAPOL4S
Juno	HJUNO2R	HJUNO3R	HJUNO4R	HJUNO2S	HJUNO3S	HJUNO43	HJUNO4S
Minerva	HMINE2R	HMINE3R	HMINE4R	HMINE2S	HMINE3S	HMINE43	HMINE4S
Neptune	HNEPT2R	HNEPT3R	HNEPT4R	HNEPT2S	HNEPT3S	HNEPT43	HNEPT4S
Saturn(sml)	HSATS2R	HSATS3R	HSATS4R	HSATS2S	HSATS3S	HSATS43	HSATS4S
Saturn(lge)	HSATL2R	HSATL3R	HSATL4R	HSATL2S	HSATL3S	HSATL43	HSATL4S
Faunus	HFAUN2R	HFAUN3R	HFAUN4R	HFAUN2S	HFAUN3S	HFAUN43	HFAUN4S
Lares	HLARE2R	HLARE3R	HLARE4R	HLARE2S	HLARE3S	HLARE43	HLARE4S
Numina	HNUMI2R	HNUMI3R	HNUMI4R	HNUMI2S	HNUMI3S	HNUMI43	HNUMI4S
Mercury	HMERC2R	HMERC3R	HMERC4R	HMERC2S	HMERC3S	HMERC43	HMERC4S
Venus	HVENU2R	HVENU3R	HVENU4R	HVENU2S	HVENU3S	HVENU43	HVENU4S
Diana	HDIAN2R	HDIAN3R	HDIAN4R	HDIAN2S	HDIAN3S	HDIAN43	HDIAN4S
Carinus	HCARI2R	HCARI3R	HCARI4R		HCARI3S	HCARI43	HCARI4S
Avitus	HAVIT2R	HAVIT3R					
Claudius	HCLAU2R	HCLAU3R					
Nero	HNERO2R	HNERO3R	HNERO4R				
Marcus(sml)		HMARS3R					
Marcus(lge)		HMARL3R	HMARL4R				
Lucius		HLUCI3R				HLUCI43	
Augustus	HAUGU2R	HAUGU3R					
Romulus						HROMU43	
Arcadius	HARCA2R	HARCA3R	HARCA4R		HARCA3S	HARCA43	HARCA4S
Hadrian	HHADR2R	HHADR3R	HHADR4R		HHADR3S	HHADR43	HHADR4S
Constantine						HCONS43	
Antonius	HANTO2R	HANTO3R	HANTO4R		HANTO3S	HANTO43	HANTO4S
Cassius							HCASS4S
Julius							HJULI4S
Maximus		HMAXI3R					
Commodus		HCOMM3R			HCOMM3S		

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# “Colonnade” Hoppers

## Hopper Embellishments:

A range of Cast Aluminium motifs to enhance the appearance of Hopper Heads.

Lugs may be used as hopper embellishments or used with Cast Collared Downpipes.

	Item		Item
	<b>Fleur de Leys</b> Size: 48mm Code: CFDL		<b>Feathers</b> Size: 170mm Code: CFEA
	<b>Northampton Rose</b> Size: 70mm, 95mm Code: CNRS, CNRL		<b>Mansion Lug</b> Size: 150mm Code: CMANS
	<b>Tudor Rose</b> Size: 38mm, 51mm, 63mm Code: CTRS, CTRM, CTRL		<b>Sterling Lug</b> Size: 95mm Code: CSTER
	<b>Yorkshire Rose</b> Size: 35mm, 89mm, 114mm Code: CYRS, CYRM, CYRL		<b>Warwick Lug</b> Size: 120mm Code: CWARW
	<b>Britannia Rose</b> Size: 178mm Code: CBR		<b>Windsor Lug</b> Size: 100mm Code: CWIND
	<b>Lions Head</b> Size: 80mm Code: CLH		<b>Acorn Lug</b> Size: 130mm Code: CACOR

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# Handling & Storage

## Handling & Storage:

Gutters/downpipes & fittings, particularly with polyester powder coat finish should be handled with care & should preferably be stored under cover on racks to prevent scratching.

All lengths are supplied in protective polythene wrapping, components suitably packed in boxes.

If painted products are to be stored outside, cover with tarpaulin to guard against water ingress into the protective polythene.

Mill finish items should be stored under cover to avoid uneven oxidization prior to being fitted.

## Safety:

The relevant safety regulations are outlined in the Health & Safety at Work Act 1974 & should be followed.

Refer to CDM regulations (Code of Practice and Design for Health and Safety in Construction 1995)

Handling mill finish or painted aluminium products does not pose any known health hazard, however it is recommended to wear protective gloves whilst handling.

When cutting or welding these products it is advisable to wear eye protection. Avoid ingestion or inhalation of any dust or fumes arising from such operations & use a face mask when necessary.

Precaution needs to be taken to avoid contact with live power lines or cables.

These products generally do not aid combustion & are rated as below.

Mill Finish, non combustible to BS 476 part 4.

Powder coated, 0.1 Fire propagation index BS476 part 6, Class 1 Flame Surface Spread BS 476 part 7.

## Maintenance:

### Post Installation

Gutters & downpipes should be thoroughly checked & water tested for leaks, sealant smudges & any damage that may impair the performance or appearance of the system with the necessary remedial action being taken before the system is handed over.

### Inspection

The gutter should be regularly inspected in terms of fixings, joints, surface damage & build up of leaves or silt. The proximity of trees or climbing vegetation in the immediate vicinity should be noted. Lightning links, if installed should be checked for conductivity.

## Cleaning:

Remove any debris in the gutter to ensure the gutter performs to its original design capacity.

Brushing down a mill finish gutter will be adequate, as an aluminium oxide layer forms over time. This acts as a natural barrier against further corrosion & thus protects the metal.

Polyester powder coated gutters & downpipes should be washed down regularly using non abrasive materials & a warm detergent solution, in marine or other aggressive environments this should be carried out at three monthly intervals. Any breaks in the surface finish should be rubbed down, primed & touched up with a suitable liquid paint.

Guarantees (if required) issued by polyester powder manufacturers or applicators are reliant upon their terms & conditions being met which include maintenance, copies available upon request.

## Health & Safety

### Material Safety Data Sheet - Aluminium Extrusions & Sheet Products

#### Product

Extruded Aluminium sections and/or Aluminium sheet formed to requirements.

#### Composition

The products consist of aluminium which may (or not) be subsequently coated with polyester powder paints or alternative finishes.

#### Health Statement

When subject to the normal purposes for which they are designed, these products do not present health risks or hazards.

By their nature these products may have sharp edges and corners and the use of gloves when handling is recommended. When installing overhead it is advisable to wear head protection.

When cutting or welding these products it is advisable to wear eye protection. Avoid ingestion or inhalation of any dust or fumes arising from such operations and use a suitable face mask when necessary.

Metal is a good conductor of electricity and precautions should be taken to ensure contact with live power lines/cables is avoided.

#### Precautions for Handling & Storage

No special precautions are necessary for normal handling and storage.

#### Procedures in the event of an emergency

There are no special risks associated and the products do not constitute a fire hazard. The products are not generally ignitable.

#### Waste Disposal

Waste products are not hazardous and their disposal should be in accordance with local authority regulations.

## ADSHHEAD RATCLIFFE

### Technical Datasheet Arbosil 1096

Arbosil 1096 is a One-part Low Modulus Neutral Cure Silicone Sealant, which cures on exposure to moisture vapour to form an elastic silicone rubber.

#### Main Application

Recommended for use in many forms of construction including glass wall assemblies, perimeter seals on curtain walling, perimeter sealing of polyester powder coated frames and glazing of windows in swimming pool buildings. *It is not recommended for overpainting and use against natural stone.*

#### Specification Compliances

BS EN ISO 11600 F/G 25LM  
BS 5889 Type A: 1989  
BS 6920 Part 1: 1990 (*Translucent only*)  
German DIN 18545 Class 2 Type E (*Translucent only*)  
German DIN 18540 Class 2 (*All colours except Translucent*)  
US Federal TT-S-00 1543A Class A

#### Application Instructions

##### Joint preparation

The joint surfaces must be clean, dry and free from all contamination. The surfaces should be degreased using the appropriate Arbo Cleaner. Primers may be required on some substrates. It is recommended that Adsheed Ratcliffe Technical Services Department should be consulted and advice obtained with regard to the choice of primer for specific purposes.

##### Joint Backing

Where applicable, appropriate joint filler e.g. closed cell polyethylene foam, should be used to provide the correct joint depth.

##### Application

Arbosil 1096 is supplied in cartridges and can be applied into the joint using an Arbo Caulking Gun.

All joint preparation, priming, and sealant application should be carried out in accordance with BS 8000 Part 16, the British Standard for the sealing of joints in buildings using sealants.

#### Joint Size suitability

##### Joint width

Minimum 6mm  
Maximum 25mm (*single application*); 50mm (*Multiple application*)

##### Joint Depth

Minimum 10mm on porous substrates  
Minimum 6mm on non-porous substrates  
Maximum 15mm

##### Width:Depth ratio (*within above min/max restrictions*)

2:1 butt joints  
1:1 lap joints

#### Storage Life

12 months in original unopened package stored in a cool, dry place out of direct sunlight.

#### Health & Safety

Under the Chemical (Hazards Information and Packaging for Supply) Regulations 1994, Arbosil 1096 is labelled 'irritant'. If sealant comes into contact the eyes, flush with copious volumes of cold water and obtain medical attention. For further information consult Product Safety Data Sheet P41A/B.

## ADS HEAD RATCLIFFE

### Technical Datasheet Arbosil 1096

#### Technical Data

<b>Properties</b>	<b>Values</b>
Typical Shore A hardness.....	30
Application temperature.....	+5°C to + 50°C
Service temperature.....	-50°C to +150°C
Skimming time @ 20°C/65%RH.....	5 minutes
Cure rate @ 20°C/65%RH .....	2mm/24 hours
Chemical resistance.....	Resistant to most dilute acids and alkalis; organic solvents may cause the sealant to swell and lose adhesion, but do not directly dissolve the sealant.
UV resistance.....	Very Good
Service life.....	25 years +
Movement accommodation.....	Butt joints ( <i>movement in tension and compression</i> ): 50% ( <i>Not to exceed ± 30% in any one direction</i> ) Lap joints ( <i>movement in shear</i> ): 100% ( <i>Not to exceed ± 70% in any one direction</i> )
Colours.....	White, Black, Grey, Mahogany, Translucent, Anthracite.

#### **Accessories:**

##### **Primers**

Arbo Primer 2650	500ml tin (yield approximately 125 metres per tin)
Arbo Primer 2402	500ml tin (yield approximately 200 metres per tin)
Arbo Primer 2172	500ml tin (yield approximately 200 metres per tin)

##### **Cleaners**

Arbo Cleaner No.13	1 Litre tin
<i>(Toluene based – not suitable for use with plastics or delicate finishes)</i>	
Arbo Cleaner No.16	1 Litre tin
<i>(Alcohol based)</i>	

##### **Equipment**

Polyethylene nozzles  
Arbo Caulking Guns

##### **Quantity Estimator**

<i>Joint size</i>	<i>Metres per litre</i>
6 x 6	27.75
9 x 6	18.50
12 x 9	9.25
18 x 10	5.55
25 x 10	4.0

**Packaging:** 25 x 380ml plastic cartridges. Polyethylene nozzles are included in each box.



# Health & Safety

## ARBOSIL 1096

### BIOACCUMULATION

This product is not expected to significantly bioaccumulate.

### DEGRADABILITY

Not degradable.

### ACUTE FISH TOXICITY

Toxicity to fish is improbable.

## 13 DISPOSAL CONSIDERATIONS

### DISPOSAL METHODS

Dispose of waste and residues in accordance with local authority requirements.

## 14 TRANSPORT INFORMATION

### GENERAL

The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID).

## 15 REGULATORY INFORMATION

### LABELLING



Irritant

### CONTAINS

METHYL-0,0',0"-BUTAN-2-ONE-TRIOXIMOSILANE

### RISK PHRASES

R43 May cause sensitisation by skin contact.

### SAFETY PHRASES

S24 Avoid contact with skin.  
S37 Wear suitable gloves.  
S60 This material and its container must be disposed of as hazardous waste.

### STATUTORY INSTRUMENTS

Chemicals (Hazard Information and Packaging) Regulations. Control of Substances Hazardous to Health.

### GUIDANCE NOTES

Workplace Exposure Limits EH40. CHIP for everyone HSG(108).

## 16 OTHER INFORMATION

### REVISION COMMENTS

General review

REVISION DATE 120/9/05

REV. NO./REPL. SDS GENERATED 26/02/04

SDS NO. 10171

### RISK PHRASES IN FULL

R36/38 Irritating to eyes and skin.

R43 May cause sensitisation by skin contact.