

#### **Description**

The **THINKY ARV-501** is a mid-sized mixer able to homogeneously mix all engineering compounds including silicones, adhesives, conductive pastes, pharmaceuticals and many other materials. It operates using THINKY's industrial non-contact "planetary" mixing technology, and is able to mix, disperse and degas **up to 700g** of material within minutes, eliminating any micro-bubbles.



Thinky ARV-501 without optional PU-501 stand

The **ARV-501** has an optional stand, the **ARV-PU501**, which includes a built in vacuum pump. Mixing can be achieved under vacuum by using the **ARV-PU501** or another external vacuum pump in order to achieve a completely bubble-free result. Mixing and degassing can be done without vacuum by using



the two standard modes, "mixing" and "defoaming". Non-vacuum mixing is useful for solvented or highly volatile materials, or for when a less critical mix is needed. THINKY's cup holder vacuum design minimises the overall vacuum volume, and so keeps the process time required to achieve vacuum and to restore atmospheric pressure to a minimum.

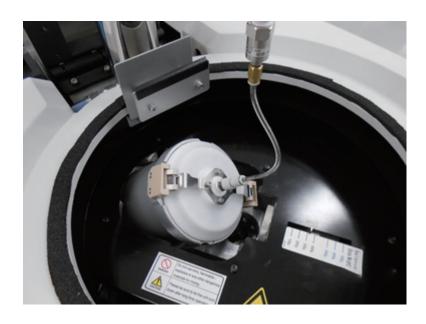
The **ARV-501** comes with **550ml** HDPE thick wall jars, including inner lid & cap, as standard. There is a standard version with a hole in the cap to facilitate vacuum mixing. Materials can be mixed in other sealed or lid-less containers such as jars, beakers, syringes or cartridges; we provide adaptors so they fit in the ARV-501.

The **THINKY ARV-501**'s multi-step mixing feature allows 20 different programs to be set containing mixing and degassing conditions (time and speed per mode) in a single batch cycle. These programs are set up and stored using the inbuilt touch screen control panel. RS232 connectivity allows recording of each process for traceability, start/stop, program editing, etc.

This **Technical Bulletin**, <u>Vacuum Mixing & Degassing</u>, discusses the differences between non-vacuum and vacuum Thinky mixers and processes, and when they are needed.

#### Features & Benefits





Thinky ARV-501 cup holder design showing vacuum hook up

Simultaneous process of mixing, dispersion and degassing in one batch

- Mix in your product container
- Vacuum and non-vacuum defoaming mode
- Non-invasive, no propeller or stirrer
- Small footprint
- RS232 connectivity for traceability
- From low viscosity to semi-solid materials
- Dry particle mixing
- Syringe degassing



No cleaning between batches

- Consistent quality with all digital controls
- Multi-step mixing
- Hands-free processing
- Fast vacuum process

#### **Applications**

Our customers use the mixer to formulate and mix a multitude of different products including:

- adhesives
- sealants
- moulding compounds
- lubricants
- slurries
- coatings
- inks
- paints
- abrasives
- bio-chemicals
- cements
- medical compounds
- cosmetics/personal care materials
- detergents
- conductive pastes
- dental materials



foods

any other materials which are hard to mix, degas, or wet

#### **Specifications**

Specification		
Method	Vacuum type propellerless rotation and revolution mixing method	
Range of operation time	From 00 minutes 00 seconds to 30 minutes 00 seconds (total operation time can be set at maximum 30 minutes in units of 1 second)	
Revolution speed	Maximum 2000 rpm	
Rotation speed	Maximum 870 rpm	
Number of programmes	20 memories (10 steps can be registered in each)	
Maximum mixing volume	550ml container: 500ml / 700g	



Specification		
Vacuum system	Vacuum system within container holder	
Dimensions	H 815 x W 500 x D 601mm	
Weight	Approximately 110kg	
Power supply	Single-phase AC 200 - 240V +/- 10% 50Hz / 60Hz	
Power consumption	On standby: approximately 50 VA During operation: maximum 2000 VA	
Display unit	Touch panel (4.3 inches)	
Communication function	Data collection function (traceability) Operation start and stop Program editing and saving	
Other	Real-time display of rpm during operation Ability to assign program names	



#### **Other Information**

	Getting to know THINKY Mixers  Download a presentation which describes how THINKY Mixers work, and what benefits they can deliver to you.
--	---

#### **Ordering Information**

Part number	Description
THIARV-501CE	THINKY ARV-501 Planetary Centrifugal Vacuum Mixer includes 1 x THI550ML-01 550ml jar, 2 x THI550ML-01-HOLE 550ml jars, instruction manual and set-up tools
THIPU-501CE	THINKY ARV-501 Vacuum Pump Unit/Stand (optional)



Part number	Description	
THI550ML-01	550ml HDPE thick wall jar with inner lid & cap	
THI550ML-01-HOLE	550ml HDPE thick wall jar with inner lid & cap - hole in cap for vacuum mixing	

Let's start by talking about your application





- Name\*
- Company\*
- Phone\*
- Email\*
- Post code\*

If you're in the UK, knowing your postcode would help us get in touch even more quickly. If you're outside the UK, please indicate your country.

■ Tell us about your application



Any information that you submit using this form will be processed according to our privacy policy.

Phone

This field is for validation purposes and should be left unchanged.

Submit

Supplied by:

#### intertronics

#### INTERTRONICS

12a Station Field Industrial Estate, Banbury Road, Kidlington Oxfordshire England OX5 1JD

t 01865 842842 e info@intertronics.co.uk

Last updated: November 2022 Version: 1.3

Statements, technical information and recommendations contained herein are based on tests we believe to be reliable but they are not to be construed in any manner as warrantees expressed or implied. The user shall determine the suitability of the product for his intended use and the user assumes all risk and liability whatsoever in connection therewith.