100% leak-free

Never have to repour another gel due to leaks—introducing the new SureCast Gel Handcast System

If you're frustrated having to repeat your experiments due to gel leakage*, switch to the new Invitrogen™ SureCast™ Gel Handcast System. The SureCast system is designed to minimise leakage during protein gel casting.

Invitogen to the make beaut

Benefits offered by the Invitrogen SureCast Gel Handcast System include:

- Leak-free design—gels that are more usable, less wasted time
- Superior glass plate durability—up to 20 times more durable compared to other suppliers**
- Unique tilt feature minimise spillage when pouring acrylamide solutions
- Simple assembly of casting components using a single-motion, load-and-lock mechanism

The SureCast Gel Handcast System can be used to create polyacrylamide gels using Invitrogen™ SureCast™ Gel Handcast Reagents as well as other popular polyacrylamide gel casting reagents.

Thermo Fisher SCIENTIFIC

 $^{{}^*\}mathsf{Terms} \ \text{and conditions apply. For complete details, go to } \mathbf{thermofisher.com/surecast terms}$

^{**}Based on internal testing.

SureCast Gel Handcast Reagents

SureCast Stacking Buffer and Resolving Buffer

Invitrogen[™] SureCast[™] Stacking Buffer and Invitrogen[™] SureCast[™] Resolving Buffer are pouches of dry-blend powder, each sufficient to make 500 mL of stacking gel buffer (0.5 M Tris-HCl buffer, pH 6.8) or 500 mL of resolving gel buffer (1.5 M Tris buffer, pH 8.8) for handcasting polyacrylamide gels. Benefits include:

- Convenient pouches of dry-blend powder—dissolve contents of a single packet in water and the buffer is ready to use
- Time- and space-saving—no weighing, no calculations, no pH adjustment, and no need to stock individual components
- Long shelf life—stocking and storage as dry powder eliminates concerns about long-term stability of stock solutions

SureCast Acrylamide Solution, 40%

Invitrogen[™] SureCast[™] Acrylamide Solution can be used to prepare single-percentage and gradient gels using the Invitrogen[™] SureCast[™] Gel Handcast Station or other handcast systems.

Features include:

- Room-temperature storage
- Long shelf life
- High purity
- Safer alternative to powdered acrylamide
- Concentrated to enable a broader range of gel percentages to cast



See the SureCast Gel Handcast System in action at thermofisher.com/surecast

Casting multiple gels because of leaks?



Pour-your-own gels with a 100% leak-free system*

Pour your own polyacrylamide mini gels easily and confidently with the Invitrogen™ SureCast™ Gel Handcast System. The SureCast system is fully compatible with our Mini Gel Tank. Use Invitrogen™ SureCast™ handcasting reagents as well as other popular polyacrylamide gel casting reagents.

Features of the SureCast Gel Handcast System include:

- Leak-free design—gels that are more usable, for less wasted time
- Superior glass plate durability—up to 20 times more durable compared to other suppliers' plates
- Unique tilt feature—helps minimize spillage when pouring acrylamide solutions
- Simple assembly of casting components—uses a single-motion, load-and-lock mechanism

Welcome packs

SureCast Gel Handcast Bundle A	SureCast Gel Handcast Bundle B
The Invitrogen [™] SureCast [™] Gel Handcast Bundle A includes all the hardware and reagents to get started:	The Invitrogen [™] SureCast [™] Gel Handcast Bundle B includes all the hardware to get started:
2 SureCast Gel Handcast Stations	2 SureCast Gel Handcast Stations
2 SureCast Glass Plate Sets (2 front, 2 back)	2 SureCast Glass Plate Sets (2 front, 2 back)
2 SureCast Sealing Pads (attached to handcast stations)	2 SureCast Sealing Pads (attached to handcast stations)
10 SureCast Gel Spacers	10 SureCast Gel Spacers
1 10-Well Multi-Use Tool	1 10-Well Multi-Use Tool
1 12-Well Multi-Use Tool	1 12-Well Multi-Use Tool
1 15-Well Multi-Use Tool	1 15-Well Multi-Use Tool
6 Gel Combs (2 each: 10-, 12-, 15-well)	6 Gel Combs (2 each: 10-, 12-, 15-well)
1 SureCast Stacking Buffer 2-pack	
1 SureCast Resolving Buffer 2-pack	
1 SureCast APS (25 g)	
1 SureCast TEMED (30 mL)	
1 SureCast Acrylamide Solution, 40% (450 mL)	Find out more at thermofisher.com/surecast

^{*} Terms and conditions apply. For complete details, go to thermofisher.com/surecastterms

Description of parts

Introduction

The parts of the SureCast™ Handcast System are described in the following section. See page 14 for ordering information.

SureCast[™] Handcast Station

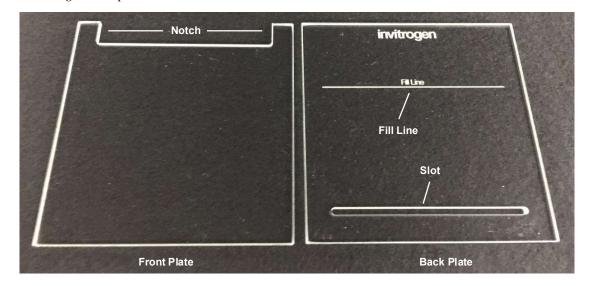
The SureCast™ Handcast Station consists of a plastic base in which glass plates and a gel spacer are held in position with a cam plate to allow casting of polyacrylamide gels.



SureCast[™] Glass Plates

Sure Cast $^{\text{\tiny{IM}}}$ Glass Plates consist of a front plate and a back plate. The front plate has a notch at the top of the plate for placement of the gel comb when casting gels.

The back plate has a slot at the bottom, and a printed fill line to indicate the level to which resolving gel solution is poured when casting gels. When assembled, the lettering on the back plate should be readable, indicating that the plate is in the correct orientation.



SureCast[™] Sealing Pad

The SureCast[™] Sealing Pad is attached to the cam plate, and ensures that the slot in the back plate is sealed against leakage when pouring the resolving gel. The pad also holds the glass plates firmly in place for casting.



SureCast[™] Gel Spacer

The SureCast[™] Gel Spacer is a 1 mm thick silicone spacer that is placed between front and back SureCast[™] Glass Plates when casting gels. The spacer is matched with the SureCast[™] gel combs to cast 1 mm thick gels.



SureCast[™] Gel Combs

The SureCast[™] Gel Combs are plastic combs with 1 mm thick teeth, used to cast 10-well, 12-well, and 15-well gels.



SureCast[™] Multi-use Tool

The SureCast™ Multi-use Tool can be used for several purposes:

- Gel loading guide for 10-well, 12-well, or 15-well gels
- Gel cassette opening tool
- Gel cutting tool
- Gel spatula



Reagents

The SureCast[™] solution are provided to pour high quality gels, and can be stored at room temperature.

- SureCast[™] Resolving Buffer
- SureCast[™] Stacking Buffer
- SureCast[™] Acrylamide Solution 40%
- SureCast[™] APS
- SureCast[™] TEMED

Product specifications

SureCast Dimensions: $10 \times 10 \times 10 \text{ cm}$

Handcast Material: Plastic
Station Cl. Pl. C: 10 10

Glass Plate Size: $10 \text{ cm} \times 10.5 \text{ cm}$

The SureCast^m Handcast Station is compatible with alcohols, but not compatible with chlorinated hydrocarbons (e.g., chloroform), aromatic hydrocarbons (e.g., toluene, benzene) or acetone.

Gel selection

General gui delines

Choose the polyacrylamide percentage and type of well for your application based upon the expected molecular weight of your protein of interest and the volume of your sample.

Resolve large molecules with low percentage gels and small molecules with high percentage gels. If the molecular weight of the molecule is unknown, or the sample contains a wide range of molecules, use a mid-range percentage gel.

Recommended loading volumes

The maximum recommended loading volumes and protein load per band are provided in the table below

Note: To ensure the highest band resolution, do not exceed the maximum load volume.

Well Types	Gel Thickness	Maximum Recommended Volume	Maximum Protein Load Per Band*
10 well	1.0 mm	25 μL	0.5 μg/band
12 well	1.0 mm	20 μL	0.5 μg/band
15 well	1.0 mm	15 µL	0.5 μg/band

^{*} Protein load values are for purified proteins that are western blotted subsequent to electrophoresis. For direct Coomassie staining (e.g. SimplyBlue™ Safestain), protein loads should be increased 10-fold.

Get started now with everything you need

Invitrogen™ SureCast™ Gel Handcast Bundle A includes:

- 2 SureCast Gel Handcast Stations
- 2 SureCast Glass Plate Sets (2 front and 2 back)
- 2 SureCast Sealing Pads (attached to handcast stations)
- 10 SureCast Gel Spacers
- 3 Multi-Use Tools (1 each: 10-, 12-, and 15-well)
- 6 Gel Combs (2 each: 10-, 12-, and 15-well)
- 1 SureCast Stacking Buffer 2-pack
- 1 SureCast Resolving Buffer 2-pack
- 1 SureCast APS (25 g)
- 1 SureCast TEMED (30 mL)
- 1 SureCast Acrylamide Solution, 40% (450 mL)



Invitrogen™ SureCast™ Gel Handcast Bundle B includes:

- 2 SureCast Gel Handcast Stations
- 2 SureCast Glass Plate Sets (2 front and 2 back)
- 2 SureCast Sealing Pads (attached to handcast stations)
- 10 SureCast Gel Spacers
- 3 Multi-Use Tools (1 each: 10-, 12-, and 15-well)
- 6 Gel Combs (2 each: 10-, 12-, and 15-well)



invitrogen

Ordering information

Product	Quantity	Cat. no.		
Welcome packs				
SureCast Gel Handcast Bundle A	Multiple	HC1000SR		
SureCast Gel Handcast Bundle B	Multiple	HC1000S		
SureCast Gel Handcast System				
SureCast Gel Handcast Station	1 casting station	HC1000		
SureCast Glass Plates	2 glass plate sets (2 front and 2 back)	HC1001		
SureCast Sealing Pads	2 sealing pads	HC1002		
SureCast 10-well Multi-Use Tool	1 multi-use tool	HC1010		
SureCast 12-well Multi-Use Tool	1 multi-use tool	HC1012		
SureCast 15-well Multi-Use Tool	1 multi-use tool	HC1015		
SureCast Gel Spacer	10 spacers	HC1003		
SureCast Gel Handcast Reagents				
SureCast Stacking Buffer (1 L), 2-pack	2 x 500 mL dry packs	HC2112		
SureCast Stacking Buffer (2.5 L), 5-pack	5 x 500 mL dry packs	HC2115		
SureCast Resolving Buffer (1 L), 2-pack	2 x 500 mL dry packs	HC2212		
SureCast Resolving Buffer (2.5 L), 5-pack	5 x 500 mL dry packs	HC2215		
SureCast APS	25 g	HC2005		
SureCast Acrylamide Solution, 40%	450 mL	HC2040		
SureCast TEMED	30 mL	HC2006		

