

FINISHED AND LACQUERED CLOSURE COMPONENTS Selection Guide

Finished Tri-Sure® metal components



Zinc-plating is a finishing process to prevent the steel against rusting. The Zinc is deposited electro chemically on the product and finished with a Tri-valent chromate passivation layer which gives the components their characteristic platinum color.

- ✓ Good corrosion resistant.
- ✓ Compatible with a wide range of chemicals.
- ✓ Zinc-plated (only) plugs are also available in Top Side Lacquer execution.
- ✓ Zinc-plated (only) components are not **FDA** compliant.



Phosphating is a finishing type where in a chemical process zinc or iron phosphate salts are deposited as a substrate on the plain steel. Due to the porous structure of phosphate products an additional coating

is required to prevent early corrosion of the components. Always check with our Support Laboratory for packaging advice.

- ✓ Suitable for food applications provided a compatible coating is used.
- ✓ Iron phosphate is available for products which are incompatible with zinc.
- ✓ Phosphate plugs are also available in Top Side Lacquer execution.
- ✓ Always requires an additional coating for good corrosion resistance.



Lacquered Tri-Sure® RDL® closures are phenolic based linings with carefully selected formulation ingredients. This linings system is an optimal balance between the chemical and mechanical performance that will ultimately

benefit the final application. To make the right choice, our in-house Chemist and Laboratory experts can recommend a suitable Packaging Advice.

- ✓ RDL® lacquers are (FDA) food compliant.
- ✓ Global availability and suitable for a wide range of chemicals

Tri-Sure® BPA free linings (NI)



New regulations prohibit the use of BPA in food packaging that may contain products for children between the age of 0 and 3 years.

We have developed these two linings that do not contain BPA by design, meaning raw materials used do not contain BPA, nor is BPA intentionally added during production.

These are the lining types RDL® 100 and RDL® 101 and will have the same high performance chemical resistance and flexibility as our well known high quality RDL® linings.

- ✓ Brings clarity and standardization.
- ✓ Provide sustainable solutions.
- ✓ Worldwide availability.

Tri-Sure® Top Lacquered Closures



Tri-Sure® offers Top Side Lacquered (TSL) plugs for extreme environmental conditions or unusually aggressive products.

These closures provide the same high performance level as our standard executions, but with a special lacquer applied to the top or cup side of the closure to ensure additional levels of protection for your packed product.

- ✓ Guarantees consistent quality.
- ✓ Safeguarding your product and protecting our environment.

GENERAL COMPATIBILITY RDL® LACQUERS

Type of Lacquers	Performance Characteristics					
	Color	Mechanical Properties Resistance	General Chemical Resistance (Strong)	Solvents Resistance	Alkaline Resistance	Water Resistance
Epoxy - Phenolic RDL® 55*	Red Oxide	Good	Good	Good	Fair/Good	Fair
Epoxy - Phenolic RDL® 44*	Golden Brown	Good	Good	Good	Fair/Good	Fair
Epoxy - Phenolic RDL® 36	Off White	Good	Good	Good	Fair/Good	Fair
Epoxy - Phenolic RDL® 29*	(Clear) Gold	Good	Fair	Good	Fair	Poor
Epoxy - Phenolic RDL® 6	Red Oxide	Good	Good	Good	Fair/Good	Fair
Epoxy - Phenolic RDL 5	Grey	Good	Good	Good	Fair/Good	Fair
Phenolic RDL® 50*	Olive green	Fair	Excellent	Excellent	Poor	Fair
Phenolic RDL® 39	Red Oxide	Fair	Excellent	Excellent	Poor	Fair
Phenolic RDL® 16*	(Clear) Gold	Poor	Fair	Good	Poor	Poor
BPA - (NI) Non Intent ¹ RDL® 100 (Phenolic)	Brown	Fair	Excellent	Excellent	Poor	Fair
BPA - (NI) Non Intent ¹ RDL® 101 (Phenolic)	(Clear) Gold	Poor	Fair	Good	Poor	Poor
*These lacquers are made from materials which comply with the requirements of the FDA regulations, subpart F, paragraph 175.300 resinous and polymeric coatings. Contact your local Tri-Sure Sales center for a declaration of compliance with FDA and heavy metal contents legislation/directives. ¹ The raw materials used do not contain BPA nor is BPA intentionally added during the production process.						

The information contained in this bulletin is meant as a general guideline for packaging and cannot be used and/or considered as a compatibility sheet with guaranteed performance of lacquers. The compatibility of each type of lacquer must be checked by the user, not only in laboratory tests but also with inserted closures under field conditions.