

# Frequently Asked Questions

**HAMPTON**  
RESEARCH

*Solutions for Crystal Growth*

## Additive Screen and Additive Screen HT

## HR2-138 & HR2-428

### When and why did reagent 89(H5) change from 40% v/v $\gamma$ -Butyrolactone to 40% v/v Formamide?

$\gamma$ -Butyrolactone became a United States of America Drug Enforcement Agency (DEA) controlled substance, making it difficult or impossible to obtain for many labs, since a DEA permit is required to order and use this chemical. Hampton Research substituted Formamide for reagent 89(H5) during June 2008.

Additive Screen kits (HR2-428) with the lot number 242801, 242802, 242803, 242804, 242805, 242806, 242807, and 242808 contain 40% v/v  $\gamma$ -Butyrolactone as reagent 89(H5). Additive Screen kits (HR2-428) with lot number 242809 to 2428\*\* where \*\*  $\geq$ 09 contain 40% v/v Formamide as reagent 89(H5).

Additive Screen HT kits (HR2-138) with the lot number 213801, 213802, and 213803 contain 40% v/v  $\gamma$ -Butyrolactone as reagent 89(H5). Additive Screen HT kits (HR2-138) with the lot number 213804 to 2138\*\* were \*\*  $\geq$ 4 contain 40% v/v Formamide as reagent 89(H5).

### When and why did reagent 85(H1) change from 40% v/v 1,4-Butanediol replaced with 10% v/v 1,2-Butanediol.

1,4-Butanediol became a United States of America Drug Enforcement Agency (DEA) controlled substance, making it difficult or impossible to obtain for many labs, since a DEA permit is required to order and use this chemical. Hampton Research substituted 1,2-Butanediol for reagent 85(H1) during April 2010.

Additive Screen kits (HR2-428) with the lot number 242801, 242802, 242803, 242804, 242805, 242806, 242807, 242808, 242809 and 242810 contain 40% v/v 1,4-Butanediol as reagent 85(H1). Additive Screen kits (HR2-428) with lot number 242811 to 2428\*\* where \*\*  $\geq$ 11 contain 10% v/v 1,2-Butanediol as reagent 85(H1).

Additive Screen HT kits (HR2-138) with the lot number 213801, 213802, 213803, 213804, and 213805 contain 40% v/v 1,4-Butanediol as reagent 85(H1). Additive Screen HT kits (HR2-138) with the lot number 213806 to 2138\*\* were \*\*  $\geq$ 6 contain 10% v/v 1,2-Butanediol for reagent 85(H1).

### Is the 2,5-hexanediol a racemic mixture (mixture of L and R isomers), or the pure enantiomer (L or R form)?

The 2,5-hexanediol used in the Additive Screen and Additive Screen HT is a racemic mixture (mixture of L and R isomers).

### When and why did reagent 68(F8) change from 0.15 mM CYMAL-7 to 0.5% w/v 1,2,3-Heptanetriol?

Additive Screen (HR2-428) lot number 2428\*\* where \*\*  $\geq$ 18 contain 0.5% w/v 1,2,3-Heptanetriol. For a period of time, during the formulation of lots 2428\*\* where \*\* = 7 through 17, 1,2,3-Heptanetriol was unavailable and was replaced with 0.15 mM Cymal-7, as dilute detergents can behave as an amphiphile.

Additive Screen (HR2-138) lot number 2138\*\* where \*\*  $\geq$ 16 contain 0.5% w/v 1,2,3-Heptanetriol. For a period of time, during the formulation of lots 2428\*\* where \*\* = 3 through 15, 1,2,3-Heptanetriol was unavailable and was replaced with 0.15 mM Cymal-7, as dilute detergents can behave as an amphiphile.

### When and why did reagent 52(E4) change from 40% Pentaerythritol ethoxylate (3/4 EO/OH) to Polyethylene glycol 300?

Pentaerythritol ethoxylate (3/4 EO/OH) was discontinued by the manufacturer Perstorp Specialty Chemicals in Sweden. The polymer Pentaerythritol ethoxylate (3/4 EO/OH) was replaced with the polymer Polyethylene glycol 300.

Additive Screen kits (HR2-428) with the lot number 2428\*\* where \*\*  $\leq$ 19 contain 40% Pentaerythritol ethoxylate (3/4 EO/OH) as reagent 52(E4). Additive Screen kits (HR2-428) with the lot number 2428\*\* where \*\*  $\geq$ 20 contain Polyethylene glycol 300.

Additive Screen HT kits (HR2-138) with the lot number 2138\*\* where \*\*  $\leq$ 19 contain 40% Pentaerythritol ethoxylate (3/4 EO/OH) as reagent 52(E4). Additive Screen kits (HR2-138) with the lot number 2138\*\* where \*\*  $\geq$ 20 contain Polyethylene glycol 300.

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