



TRINOVABIOCHEM
European Distributor of **MOLTOX**

To whom it may concern:

Impending Shortage of Aroclor 1254

Dear Valued Customer!

Due to the limited availability of Aroclor 1254, the polychlorinated biphenyl (PCB) used as an inducer of rodent liver in the production of S9, **Moltox™ will be discontinuing all S9 products induced with his method once it's supply of this material is exhausted.**



However, due to concerns over the detrimental environment impact of PCBs, alternate inducing regimes were investigated as early as the mid-1970s.

The use of phenobarbital/5,6-benzoflavone (PB/BNF) induced S9 is proposed in the following work:

Matushima et al. 1976. A safe substitute for polychlorinated biphenyls as an inducer of metabolic activation system. In: de Serres F.J., Fouts, J.R., Bend, J.R. and Philpot, R.M; editors. In Vitro Metabolic Activation in Mutagenesis Testing. Amsterdam (Netherlands): Elsevier/North-Holland Biomedical Press. p 85 – 88.

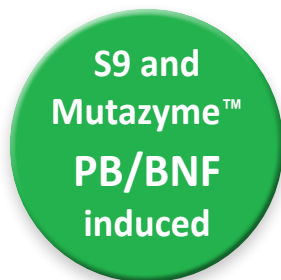
and concluded that the combination induction by phenobarbital and 5,6-benzoflavone could be used as a safe substitute for PCB as an inducer of rat liver.

Further studies showing equivalent performance between these two induction methods have been performed since this time:

Ong et al. 1980. Differential effects of cytochrome P450-inducers on promutagen activation capabilities and enzymatic activities of S-9 from rat liver. J. Environ. Path. Toxicol. 4(1), 55-65.

Callander et al. 1995. Evaluation of phenobarbital/ beta-naphthoflavone as an alternative S9-induction regime to Aroclor 1254 in the rat for use in in vitro genotoxicity assays. Mutagenesis. 10(6), 517-522.

Elliott et al. 1992. Report of UK Environmental Mutagen Society Working Party: Alternatives to Aroclor 1254-induced S9 in in vitro genotoxicity assays. Mutagenesis. 7(3), 175 – 177.



Given the environmental concerns and supporting literature, genetic toxicologists, specifically in Europe and parts of Asia, have been using PB/BNF induced S9 successfully for 20+ years.

Kind regards

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For more information send an E-Mail to info@trinova.de or robert.pylypiw@trinova.de

... and view our broad PB/BNF induced S9 portfolio etc. ▶ ▶ ▶



Frozen S9 Liver Extract

Catalog No	Description	Storage	Size
11-105.1	S9 SD Rat liver PB/BNF in KCl	-80°C	1 ml per vial
11-105.2	S9 SD Rat liver PB/BNF in KCl	-80°C	2 ml per vial
11-105.5	S9 SD Rat liver PB/BNF in KCl	-80°C	5 ml per vial
11-102.5	S9 SD Rat liver uninduced in KCl	-80°C	5 ml per vial
11-115.5	S9 SD Rat liver Ethanol in KCl	-80°C	5 ml per vial
15-104.5	S9 Golden Syrian Hamster liver uninduced in KCl	-80°C	5 ml per vial
15-205.5	S9 Golden Syrian Hamster liver PB/BNF in KCl	-80°C	5 ml per vial

Lyophilized S9 Liver Extract

Lyophilized S9 is easy to handle and especially useful when an ultralow freezer is not available. It is ready to use after reconstitution with the label volume of cold, sterile, purified water.

Catalog No	Description	Storage	Size
11-05L.1	S9 SD Rat liver PB/BNF in KCl	-20°C	1.1 ml per vial
11-05L.2	S9 SD Rat liver PB/BNF in KCl	-20°C	2.1 ml per vial

MUTAZYME™ Rat liver S9 Mix complete; including NADPH-regenerating system & Co-factors

Catalog No	Description		Storage	Size
11-406.3L	MUTAZYME™ 30% S9 Mix, SD rat liver PB/BNF	lyophilized	-20°C	3.25 ml per vial
11-404L	MUTAZYME™ 10% S9 Mix, SD rat liver PB/BNF	lyophilized	-20°C	20 ml per vial
11-405L	MUTAZYME™ 5% S9 Mix, SD rat liver PB/BNF	lyophilized	-20°C	20 ml per vial

Note:

Please contact us directly if you have questions about any products not listed here or would like us to custom manufacture an item to your specifications. Please ask for availability of S9 Mouse!



**MOLTOX PRODUCTS
DELIVERY FROM STOCK!**

About Us

TRINOVA BIOCHEM GmbH is the European distributor of MOLTOX®, the leading manufacturer of products used in the Salmonella and E. coli WP2 mutagenicity tests / Ames tests: Minimal glucose agar plates, top agars, Salmonella and E. coli tester strains, frozen and lyophilized S9, MUTAZYME™, NADPH-regenerating systems and positive control chemicals.

MOLTOX[®]
Molecular Toxicology, Inc.

