



## Material Safety Data Sheet (MSDS) Silver Enhancing Kit

### Section 1 Product and Company Information

<b>1.1 Product Catalogue Number(s)</b>	SEKL15, SEKB250
<b>1.2 Company Information</b>	BBI Solutions. Golden Gate Ty Glas Avenue Llanishen Cardiff CF14 5DX Telephone: +44 (0)29 2074 7232 Facsimile: +44 (0)29 2074 7242
<b>1.3 Emergency Contact</b>	Telephone +44 (0)29 2074 7232 Email: info@bbisolutions.com

### Section 2 Composition / Information on Ingredients

#### Chemical / Preparation Name

Initiator and Enhancer. Proprietary components and mixture. Contains silver nitrate and sodium sulfite.

### Section 3 Hazard Identification

#### Overview

Avoid contact with skin, eyes and inhalation. Can be absorbed through skin.

#### Potential Health Effects

<b>Eyes:</b>	May cause eye irritation
<b>Skin:</b>	May cause skin irritation. May be harmful if absorbed through the skin – prolonged exposure may cause sensitivity.
<b>Ingestion:</b>	Harmful if swallowed, causing colic, diarrhea, CNS depression and fatality.
<b>Inhalation:</b>	Material may be irritating to mucous membrane and upper respiratory tract.
<b>Mutagenicity:</b>	Some evidence of mutagenic effects

## Section 4 First Aid Measures

<b>Eyes:</b>	Flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating eyelids with fingers. Call a physician.
<b>Skin:</b>	Flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a physician if symptoms persist.
<b>Ingestion:</b>	If swallowed, wash out mouth with water provided the person is conscious. Call a physician.
<b>Inhalation:</b>	Remove to fresh air, rest and keep warm. If breathing becomes difficult, Call a physician.

## Section 5 Fire Fighting Measures

### General Information

Wear self-contained breathing apparatus and protective clothing. Prevent contact with skin and eyes. Emits toxic fumes under fire conditions/heated.

### Extinguishing Media

Water spray. Carbon dioxide, dry chemical powder or appropriate foam.

## Section 6 Accidental Release Measures

### Spills / Leaks

Wear respirator, chemical resistant gloves, chemical safety goggles, and rubber boots. Absorb on sand or vermiculite and place in closed containers for disposal. Ventilate area and wash spill site after pickup is complete. Observe all federal, state and local environmental laws regarding disposal.

## Section 7 Handling and Storage

### Handling

Avoid contact with skin and eyes. Observe general PPE safety standards when handling this material.

### Storage

Store between 2 – 8°C. Do not freeze.

## Section 8 Exposure Controls / Personal Protection

### Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA – Final PELs	OSHA – Vacated PELs
Silver Enhancing Kits	N/A	N/A	N/A	N/A

### Personal Protective Equipment

<b>Eyes:</b>	Wear chemical safety goggles.
<b>Skin:</b>	Wear chemical resistant gloves.
<b>Clothing:</b>	Wear disposable/washable laboratory garments.
<b>Respirators:</b>	Wear appropriate NIOSH/MSHA approved respirator

## Section 9 Physical and Chemical Properties

<b>Physical State:</b>	<b>Liquid</b>
<b>Appearance:</b>	<b>Colorless</b>
<b>Odour:</b>	<b>None</b>
<b>Vapour Pressure:</b>	<b>N/A</b>
<b>Vapour Density:</b>	<b>N/A</b>
<b>Evaporation Rate:</b>	<b>As water</b>
<b>Viscosity:</b>	<b>As water</b>
<b>Boiling Point:</b>	<b>Not known</b>
<b>Freezing / Melting Point:</b>	<b>Not known</b>
<b>Auto-ignition Temperature:</b>	<b>N/A</b>
<b>Flash Point:</b>	<b>N/A</b>
<b>Decomposition Temperature:</b>	<b>N/A</b>
<b>NFPA Rating:</b>	<b>N/A</b>
<b>Explosion Limits:</b>	<b>Upper: N/A</b>
	<b>Lower: N/A</b>
<b>Solubility:</b>	<b>Aqueous solution</b>
<b>Specific Gravity / Density:</b>	<b>N/A</b>
<b>Molecular Formula:</b>	<b>N/A</b>
<b>Molecular Weight:</b>	<b>N/A</b>

## Section 10 Stability and Reactivity

<b>Chemical Stability:</b>	<b>Stable</b>
<b>Conditions to Avoid:</b>	<b>Freezing and light</b>
<b>Incompatibilities with other Materials:</b>	<b>Light, Acids – will react violently with acids, evolving toxic fumes of sulphur dioxide and sulphurous acid</b>
<b>Hazardous Decomposition Products:</b>	<b>Not known</b>
<b>Hazardous Polymerisation:</b>	<b>Will not occur</b>

## Section 11 Toxicological Information

<b>RTECS Number:</b>	<b>Not known</b>
<b>CAS Number:</b>	<b>Not known</b>
<b>LD50 / LC50:</b>	<b>Not known</b>
<b>Carcinogenicity:</b>	<b>Not known</b>
<b>IARC:</b>	<b>Not known</b>
<b>Epidemiology:</b>	<b>Not known</b>
<b>Teratogenicity</b>	<b>Not known</b>
<b>Reproductive Effects:</b>	<b>Not known</b>
<b>Neurotoxicity:</b>	<b>Not known</b>
<b>Mutagenicity:</b>	<b>Some evidence</b>
<b>Other Studies:</b>	<b>Not known</b>

## Section 12 Ecological Information

<b>Ecological Hazards:</b>	<b>No data available</b>
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### Section 13 Disposal Considerations

<b>Waste Disposal – Material:</b>	Contact a licensed waste disposal service to dispose of this material.
<b>Waste Disposal – Empty Packaging:</b>	Contact a licensed waste disposal service to dispose of this packaging.

### Section 14 Transport Information

<b>Shipping Name:</b>	Silver Enhancing Kit (SEKL15, SEKB250)
<b>RID / ADR / DOT 49 CFR:</b>	Unknown
<b>ICAO / IATA:</b>	Unknown
<b>IMDG Code:</b>	Unknown
<b>UN Number:</b>	Unknown
<b>MFAG:</b>	Unknown
<b>EMS:</b>	Unknown
<b>Notes:</b>	N/A

### Section 15 Regulatory Information

European / International Regulations	
<b>Hazard Symbols:</b>	Unknown
<b>Risk Phrases:</b>	Unknown
<b>Safety Phrases:</b>	S36 and S37 (suitable protective clothing/ gloves)
US Federal Regulations	
<b>TSCA:</b>	Unknown
<b>SARA:</b>	Unknown
<b>OSHA:</b>	Unknown

## Section 16 Other Information

<b>MSDS Creation/Revision Date:</b>	18 May 2012
<b>Next Revision Due:</b>	18 May 2014
<b>Notes:</b>	Customers should use this information only as a supplement to other information gathered by them, and should make independent judgment of suitability of this information to ensure proper use and protect the health and safety of employees. The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall BBI Solutions be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if BBI Solutions has been advised of the possibility of such damages.

**For in vitro research only. Not for diagnostic use.**

**To reorder or for further technical support:**

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