



Material Safety Data Sheet (MSDS) Silver Enhancing Kit

Section 1 Product and Company Information

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

Section 2 Composition / Information on Ingredients

Chemical / Preparation Name

Initiator and Enhancer. Propriety 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

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

Section 4 First Aid Measures

Eyes:	Flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating eyelids with fingers. Call a physician.
Skin:	Flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a physician if symptoms persist.
Ingestion:	If swallowed, wash out mouth with water provided the person is conscious. Call a physician.
Inhalation:	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

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

Section 9 Physical and Chemical Properties

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

Section 10 Stability and Reactivity

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

Section 11 Toxicological Information

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

Section 12 Ecological Information

Ecological Hazards:	No data available
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Section 13 Disposal Considerations

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

Section 14 Transport Information

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

Section 15 Regulatory Information

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

Section 16 Other Information

MSDS Creation/Revision Date:	18 May 2012
Next Revision Due:	18 May 2014
Notes:	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.

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