MATERIAL SAFETY DATA SHEET
Silver Nitrate

Date of Issue: 21 Sept 06

STATEMENT OF HAZARDOUS NATURE

Hazardous according to criteria of Worksafe Australia

COMPANY DETAILS

Company:	**ProSciTech**
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IDENTIFICATION SECTION

Product Name	Silver Nitrate
Other Names	
Product Code	C139, C1391, C1395
U.N. Number	UN1493
Dangerous Goods Class and Subsidiary Risk	5.1
Hazchem Code	2X
Poison Schedule	None allocated
Use	Biological staining agent

Physical Description and Properties

Appearance	White, odourless transparent crystals
Boiling Point/Melting Point	MP 212^{o}C
Vapour Pressure	No data
Specific Gravity	4.35
Flash Point	No data
Flammability Limits	No data
Solubility in water	Soluble

Other Properties

Ingredients

Chemical Name	CAS Number	Proportion
Silver Nitrate	7761-88-8	100%

HEALTH HAZARD INFORMATION

Health Effects:

Acute CAUSES BURNS

Swallowed: Will cause severe irritation and chemical burns to the gastrointestinal tract. Symptoms can include nausea, vomiting and abdominal pains.

Eye: Will cause severe irritation and chemical burns in contact with the eyes, which can result in permanent eye damage to blindess.

Skin: Will cause severe irritation and chemical burns in contact with the skin, which will result in itching, stinging and possible tissue destruction.

Inhaled: Inhalation of dust will cause severe irritation and possible chemical burns to the respiratory tract. Symptoms can include coughing, breathing difficulties and pulmonary oedema.

Chronic: Industrial argyria may occur after absorption over a long period, resulting in local blue-grey discolouration of the skin. Argyria is discolouration of the conjunctiva - a mucus membrane connecting the inner eyelid and eyeball.

First Aid:

Swallowed: DO NOT induce vomiting. Wash out mouth with water and give plenty to drink. If syptoms develop seek medical attention.

Eye: Immediately flush eye(s) with copious amounts of water for at least 15 minutes, separating eyelids to ensure adequate flushing. Take care not to rinse contaminated water into non-affected eye. Seek medical attention.

Skin: Thoroughly wash skin with soap and copious amounts of water. Remove contaminated clothing and wash before re-use. Obtain medical attention if blistering occurs or redness persists.

Inhaled: Remove to fresh air. If breathing is difficult give oxygen. If victim has stopped breathing begin artificial respiration, or if heart has stopped, cardiopulmonary resuscitation. Seek medical attention.

First Aid Facilities: Safety shower and eyebath.

Advice to Doctor

Treat symptomatically or consult a poisons information centre.

PRECAUTIONS FOR USE

Exposure Standards: TLV/TWA 0.01mg/m^3

Engineering Controls: Natural ventilation should be sufficient, however where dust is generated the use of a local exhaust ventilation system (drawing dust away from workers breathing zone) is recommended to meet TLV requirements.

Personal Protection: If airborne concentration exceeds TLV, an approved high-efficiency particulate respirator is recommended. If concentration exceeds capacity of respirator, a self-contained breathing apparatus is advised. Wear safety goggles, cotton overalls (buttoned at neck and wrist), nitrile or neoprene rubber gloves. Always wash hands before eating, drinking, smoking or going to the toilet.

Flammability: This product is a strong oxidising agent and can ignite in the presence of flammable materials. May liberate toxic gases. Increases flammability of combustibles.

SAFE HANDLING INFORMATION

Storage and Transport: Store in sealed container not exposed to light or heat. Store away from flammable materials and ammonia in a cool, well ventilated area. This material is classified as a Dangerous Good according to the Australian Code for the Transport of Dangerous Goods. **UN1493 Hazard class: 5.1 Packing group: II Proper shipping name: Silver Nitrate** Class 5.1 oxidizing agents shall NOT be loaded or packed in the same vehicle or freight as:

- Explosives (Class 1)
- Flammable Gases (Class 2.1)
- Toxic Gases (Class 2.3)
- Flammable Liquids (Class 3)

- Flammable Solids (Class 4.1)
- Spontaneously Combustible Subtances (Class 4.2)
- Dangerous When Wet Substances (Class 4.3)
- Organic Peroxides (Class 5.2)
- Toxic Substances (Class 6) (where the toxic substances are fire risk substances)
- Radioactive Substances (Class 7)
- Corrosive Substances (Class 8)
- Miscellaneous Dangerous Goods (Class 9)(where the miscellaneous dangerous goods are fire risk substances), and fire substances other than dangerous goods.

EPG Number: 5B1
IERG Number: 31
Packaging Method: 5.9.5.1

Spills and Disposal: Remove all sources of heat. Increase ventilation. Evacuate all unnecessary personnel. Wear sufficient respiratory protection and full protective clothing to minimize skin and eye exposure. Sweep up material avoiding dust generation or dampen spilled material with water to avoid airborne dust, then transfer material to a suitable container. Use absorbent paper dampened with water to pick up remaining material. Wash surfaces well with soap and water. Seal all wastes in vapour tight labelled plastic containers for eventual disposal. If large quantities of this material enter the waterways contact your local waste management authority. Dispose of according to the federal, state and local environmental regulations.

Fire/Explosion Hazard: Avoid contact with ammonia, as explosive silver componds may be formed. Mixtures with combustible material are readily ignited and may burn fiercely, generating toxic fumes of nitrogen oxides. Firefighters should wear proper protective equipment and self-contained breathing apparatus with full facepiece operated in positive pressure mode. In case of fire the product may be violently or explosivley reactive. Move containers from fire area if it can be done without risk. Extinguishing Media: Use water to spray disperse vapours. This product should be prevented from entering drains and water courses by any means possible. Use appropriate fire extinguisher for surrounding environment. Hazchem code: 2X
Produces toxic gases of nitrogen oxides.

OTHER INFORMATION

Incompatibilities (Materials to avoid) Combustable materials, strong reducing agents.

Animal Toxicity Data: LD50 (Oral-rat) 1173mg/kg