

Brand name & Manufacturer	Active ingredient	Formulation	Comments
Iodosorb (Smith & Nephew)	Cadexomer iodine	Ointment or powder	Highly absorbent, cadexomer iodine is a sustained release agent which releases the iodine in response to moisture
Iodoflex (Smith & Nephew)	Cadexomer iodine	Paste slab on a carrier sheet	Highly absorbent, cadexomer iodine is a sustained release agent which releases the iodine in response to moisture
Inadine (Johnson and Johnson)	Povidone iodine	Rayon dressing incorporating 10% PI Gauze	<p>Contains 10% povidone iodine (PVP –I). Effective against Gram +ve, Gram –ve bacteria, anaerobes, yeast, fungi and spores. Should not be used:</p> <ul style="list-style-type: none"> • Where there is known iodine hypersensitivity • before and after the use of radio iodine (until there is permanent healing) • If the patient has kidney problems • In pregnant or breast feeding women • In cases of Duhring's dermatitis <p>And should be used under medical supervision:</p> <ul style="list-style-type: none"> • In patients with thyroid disease • In newborn babies and infants upto the age of 6 months • To treat deep ulcerative wounds, burns or large injuries <p>Note – manufacturer's recommendations for maximum amount of product to be used.</p>

Acticoat (Smith & Nephew)

Nanocrystalline silver
Silver
release

Nanocrystalline silver, available as a silver coated, low adherent polyethylene net. (Acticoat 3 and Acticoat 7), an alginate (Acticoat Absorbant) and a foam (Acticoat Moisture Control).

High level of silver activity, contains nano crystalline silver has fast bacterial kill time, company claim effectiveness against 150 species of bacteria.
Varying levels of absorbency depending on variant used. Some products eg Acticoat require secondary dressing others such as moisture control may only require retention.

Contraindications

- Do not use if product colour is not uniform
- Acticoat Moisture Control is not compatible with oil-based products, such as petrolatum
- Acticoat Moisture Control is not compatible with oxidising agents (e.g. EUSOL) as these can break down the absorbent polyurethane component of the dressing
- Avoid contact with electrodes or conductive gels during electronic measurements e.g. EEG and ECG
- If reddening or sensitisation occurs, discontinue use

Actisorb Silver 220 (Johnson and Johnson)	Silver and Charcoal		<p>The dressing is made from activated carbon impregnated with metallic silver. The carbon gives additional odour control.</p> <p>Minimal absorbency, requires a secondary dressing.</p> <p>Effective against gram +ve, gram –ve bacteria, anaerobes and yeasts.</p> <p>Dry necrotic tissue must be removed before use of the product.</p> <p>Do not cut the product</p> <p>Contra indications</p> <p>Should not be used on patients who are sensitive to nylon, and should be used with care as a primary dressing on wounds that have a tendency to dry out</p>
Arglaes (Uno Medical)		Impregnated film	
Aquacel (ConvaTec)	Ag+	Hydrofiber/ now classified in the Drug Tariff under Protease Modulating Matrix	<p>A soft, sterile, non-woven sheet or ribbon dressing composed of 100% Hydrofiber® technology (sodium carboxymethylcellulose) and ionic silver. The silver in the dressing kills a broad spectrum of wound bacteria.</p>
Atraumann Ag (Hartmann)		Low adherent polyester mesh	<p>Impregnated with an ointment containing caprylic, capric, stearic triglycerides; caprylic, capric, isostearic, adipic triglycerides integrated with metallic silver for sustained antimicrobial action (does not contain vaseline or paraffins)</p>

Contreet (Coloplast)

Foam or hydrocolloid

Flamazine (Smith & Nephew)

SSD

Cream

Contreet Foam & Hydrocolloid belong to a generation of dressings based on the combination of hydroactivated silver technology and standard moist wound healing.

Contreet dressings release silver on contact with exudate; the more exudate present, the more silver is released. This intelligent release mechanism ensures that **Contreet** releases silver sustainably throughout the life of the dressing, effectively restoring the bacterial balance of the wound and promoting wound healing.

Flamazine Cream 1.0%w/w

2. Qualitative and Quantitative Composition

Silver Sulphadiazine 1.0%w/w

3. Pharmaceutical Form

Semi-solid oil in water emulsion.

4. Clinical Particulars

4.1 Therapeutic Indications

Flamazine cream is indicated for the prophylaxis and treatment of infection in burn wounds.

Flamazine cream may also be used as an aid to the short-term treatment of infection in leg ulcers

and pressure sores, and as an aid to the prophylaxis of infection in skin graft donor sites and

extensive abrasions. **Flamazine** cream is also indicated for the conservative management of finger-

tip injuries where pulp, nail loss and/or partial

.3 Contraindications

As sulphonamides are known to cause kernicterus, **Flamazine** Cream should not be used at, or near

term pregnancy, on premature infants or on newborn infants during the first months of life.

Flamazine cream is also contraindicated in patients known to be hypersensitive to silver sulphadiazine or to other components of the preparation such as cetyl alcohol or propylene glycol

4.4 Special Warnings & Precautions for Use

Flamazine cream should be used with caution in the presence of significant hepatic or renal impairment. Caution of use is required in patients known to be sensitive to systemic sulphonamides

and in individuals known to have glucose-6-phosphate dehydrogenase deficiency.

Use of **Flamazine** cream may delay separation of burn eschar and may alter the appearance of the

burn wounds.

4.5 Interactions with other Medicaments and other Forms of Interaction

As silver may inactivate enzymatic debriding agents, their concomitant use may be inappropriate.

In large-area burns where serum sulphadiazine levels may approach therapeutic levels, it should be

noted that the effects of systemically administered drugs may be altered. This can especially apply

to oral hypoglycaemic agents and to phenytoin. In the case of these drugs, it is recommended that

blood levels should be monitored as their effects can be potentiated.

4.6 Pregnancy & Lactation

Safety for use in pregnancy and lactation has not been established. Although animal studies have

not shown any hazard, adequate studies in pregnant women have not been performed. Use in

pregnancy only if benefit is likely to be greater than the possible risk to the foetus. Since all sulphonamides increase the possibility of kernicterus, caution is required in nursing mothers.

Loss of the distal phalanx has occurred.

4.8 Undesirable Effects

Local reactions such as burning, itching and skin rash may occur in about 2% of patients.

Leucopenia has been reported in 3-5% of burns patients treated with **Flamazine** cream. This

may be

a drug-related effect, and often manifests itself 2-3 days after treatment has commenced. It is usually

self-limiting and therapy with **Flamazine** cream does not usually need to be discontinued, although

the blood count must be carefully monitored to ensure that it returns to normal within a few days.

Systemic absorption of silver sulphadiazine may very rarely result in any of the adverse reactions attributable to systemic sulphonamide therapy or clinical argyria.

4.9 Overdose

Not likely to occur with normal usage

5.0 Pharmacological Properties

5.1 Pharmacodynamic Properties

Silver Sulphadiazine has bacteriostatic and bactericidal properties. This combination provides a

wide spectrum of antimicrobial activity.

5.2 Pharmacokinetic Properties

There is evidence that in large area wounds and/or after prolonged application, systemic absorption

of silver can occur causing clinical argyria. The sulphadiazine readily diffuses across wounds and

enters the general circulation. The degree of uptake will significantly depend upon the nature of the wound and the dosing regime. Sulphadiazine is excreted in the urine.

5.3 Preclinical Safety Data

None Stated

6.0 Pharmaceutical Particulars

6.1 List of Excipients

In addition to the active ingredient, silver sulphadiazine, **Flamazine** contains:

Polysorbate 60 BP

Polysorbate 80 BP

Glycerol Monostearate BP

Cetyl Alcohol

Liquid Paraffin BP

Propylene Glycol BP

Purified Water EP

6.2 Incompatibilities

None Known

6.3 Shelf Life

36 Months from date of manufacture.

6.4 Special Precautions for Storage

Flamazine should be stored below 25°C. Protect from light. The contents of one container are

**Physiotulle AG
(Coloplast)**

Impregnated
tulle dressing
soft polymer
wound contact
dressing
impregnated
with silver
sulphadiazine

for

the treatment of one person. 250g and 500g pots should be discarded 24 hours after opening.
Tubes

of **Flamazine** should be discarded 7 days after opening.

6.5 Nature of Contents and Container

15g, 20g, 30g or 50g pre-printed cylindrical polyethylene tubes fitted with polyethylene caps.

250g or 500g black polypropylene pot fitted with a black polyethylene or polypropylene lid.

All tubes and pots are tamper evident.

The hydrocolloid particles and petrolatum contained in Physiotulle – Ag swell to form a cohesive gel that helps maintain an ideal moist wound healing environment and ensures atraumatic dressing changes

- releases silver according to the amount of exudate present in the wound
- silver sulphadiazine has a broad spectrum of antibacterial activity against both gram negative and gram positive bacteria including MRSA
- suitable for low to highly exuding wounds with delayed healing due to critical

PolyMem Silver (Uno medical)

Promogran Prisma (Johnson and Johnson)

Impregnated matrix modulating product

- colonisation or risk of infection; reduces odour caused by bacteria in the wound
- requires a secondary dressing
- should be changed every third day depending on the status of the wound
- should not be used on large wounds for more than 3 months
- may cause discoloration of the wound bed; this discoloration can be removed by gentle washing
- • soft polymer wound contact dressing impregnated with silver sulphadiazine similar to Urgotul SSD
- • composed of a knitted polyester fabric impregnated with hydrocolloid particles suspended in petrolatum; silver sulphadiazine is homogeneously dispersed in the petrolatum

- **POLYMEM SILVER:** a PolyMem dressing with the addition of nanocrystalline silver which has an antibacterial effect
- **SHAPES:** sacral and oval shaped, contoured PolyMem dressings
- **SHAPES SILVER:** sacral and oval shaped, contoured PolyMem dressings containing silver
- all shapes and sizes will be available in the March Drug Tariff

- a matrix of freeze-dried collagen, oxidised regenerated cellulose (ORC) and ionically-bound silver (silver-ORC)
- used for wounds healing by secondary intent which are clean and clear of necrotic tissue; not indicated for extensive burns
 - has haemostatic properties
 - in contact with wound exudate, a gel is formed; on dry wounds, the dressing should be hydrated with saline or Ringer's Solution to initiate the gel forming process
 - the gel is naturally absorbed over time so a further dressing should be applied up to every 72 hours depending on exudate production; it is not necessary to remove any residual gel

Silver cell (Johnson and Johnson)

Hydroalginate (silver impregnated fibrous hydrocolloid dressing)

- requires a secondary dressing and can be used under compression therapy
- acts:
 - by binding and inactivating proteases which have been shown to be detrimental in excess in chronic wounds
 - by binding and protecting naturally occurring growth factors
 - as a broad spectrum antimicrobial agent due to the silver content
- visible improvement should be observed in 4 weeks
- over exposure to light may cause some discolouration but this does not impact on product performance
- available in two hexagonal dressings

Sorbsan Silver (Uno medical)

Alginate

- a silver impregnated, fibrous hydrocolloid dressing (similar to Aquacel Ag) consisting of:
 - 51% high tensile strength calcium alginate
 - 9% carboxymethylcellulose (for added absorbency)
 - 40% silver-coated fibres - fibres contain 8% w/w elemental silver which is released at an antimicrobial level for up to 7 days
- broad spectrum - effective against a wide range of micro-organisms
- use on medium to heavily exuding wounds (partial or full thickness)
- can be used either side down in the wound bed ensuring that there is no overlap of the edges of the wound
- frequency of dressing changes depends on the patient's condition and the level of exudate
- dressing becomes over 50% stronger when wet, which makes it quick and easy to remove in one piece; if the dressing looks dry, wet with saline before removal
- available in square and rectangular dressings and as a rope

all three forms are available with added silver content of 1.5%:
• Sorbsan Silver Flat

URGOCELL SILVER

(Urgo)

Urgotulle SSD (Urgo)

SSD

Lipidocolloid
with SSD

- Sorbsan Silver Ribbon
- Sorbsan Silver Packing

: a soft polymer wound contact dressing with polyurethane foam film backing impregnated with silver

A non-adhesive, non-occlusive hydrocolloid dressing, consisting of a polyester web impregnated with hydrocolloid particles (carboxymethylcellulose), Vaseline® and silver sulfadiazine.