



CONSERVATION BY DESIGN LIMITED

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TECHNICAL INFORMATION: SYNPERONIC A7 (SR5/b)

Product name- Synperonic A7 (replaces Synperonic N)

General Description-

An alcohol ethoxylate 100% active solution introduced to replace the original 27% active "N" grade which is widely and successfully used for a variety of conservation processes including as a detergent, wetting agent, surfactant, emulsifying and dispersing agent.

Synperonic A7 is an alcohol ethoxylate and, like its predecessor "Synperonic N", is a mild detergent generally used for the removal of tar and ground-in grime. In conservation, it has also been used as a wetting agent and to eradicate ground-in stains on a variety of substrates including textiles; paper; chinaware and porcelain; encaustic floor and fireplace tiles; and glass. "Synperonic A7" is readily biodegradable, conforming to EEC directive 82/242.

Technical Information-

Odour	mild
Appearance	white viscous liquid at 20°C
Melting point/range	approx. 21°C
Boiling temperature	product will be stable up to 120°C
Viscosity	21 mPa.s @ 50°C
Autoignition temperature	385°C
Specific gravity	0.958 @ 50°C
pH	5.66 (in aqueous solution)
Solubility in water	soluble > 10g/100g
Flashpoint	198°C (open cup)

Soluble in water, ethanol, glycol ethers, chloroform/carbon tetrachloride, vegetable oil. Insoluble in mineral oil.

The chemical stability of SYNPERONIC is high and, in particular, it is very resistant to hydrolysis under acid or alkaline conditions. It does, however, interact with oxidising agents and reducing agents.

Instructions for use-

"A7" is a more concentrated form of wetting agent than its predecessor and must therefore first be diluted with water before reducing still further to create an active working solution.

(Best results will be obtained by slightly warming the concentrate prior to mixing. The translucency and break down of the concentrate will be improved significantly with "A7" forming a more viscous solution. Alternatively, allowing the concentrate to stand in a warm room briefly prior to dilution or heating the container of concentrate itself ever so slightly in water up to approx. 30°C may prove adequate.)

Take approximately 1.5ml "Synperonic A7" and mix with 98.5ml of water to arrive at a concentrate equivalent to the old "Synperonic N". Mix the pre-diluted "A7" with water at a ratio of 1 part solution to 20 parts water or with a spirit-based solvent as below. Warming the initial concentrate may ease dilution.

For the removal of grime from encaustic tiles, a 50/50 based solution with white spirit and water has been found to form an excellent cleansing mixture when applied with a soft cloth or sponge. (Using "Synperonic A7", mix 1 litre water to 1 litre white spirit, and then mix in 150ml of A7 to produce a working solution equivalent to the former "Synperonic N" quality.)

When mixed with solvents, protective safety wear should always be worn and sufficient ventilation maintained in accordance with the products being used.

Read the health and safety MSDS sheets provided with this product thoroughly before use and ensure that others within the working environment are made aware of the properties and precautionary notices for this product.

Brief health and safety information- CAS 68131-39-5

Avoid prolonged contact of the neat solution with the skin. Wear appropriate gloves. "A7" may cause irritation and is harmful if swallowed. Treatment for eyes or skin is prompt irrigation with copious amounts of clean water. Substances to be avoided: strong oxidising agents. "A7" is very toxic to aqueous organisms.

Pack sizes-

Supplied in 1, 5 and 25 litre plastic containers

Catalogue order code-

SR5/b

1. Identification of the substance/preparation and company/undertaking

Name- Synperonic A7
S.D.S number- S547
Supplied by- Conservation By Design Ltd
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5 Singer Way
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Kempston
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2. Composition/ information on ingredients

Contains-

<u>Chemical</u>	<u>% Conc</u>	<u>Classification</u>	<u>CAS</u>
Fatty Alcohol ethoxylate	100	Xn,N;R22-41-50	68131-39-5

Exposure EINECS

3. Hazards identification

Harmful if swallowed. Risk of serious damage to eyes. Very toxic for aquatic organisms.

4. First Aid measures

<u>Exposure Route</u>	<u>Symptom</u>	<u>Treatment</u>
Inhalation	Slight irritation of upper respiratory tract	Remove from exposure, rest and keep warm. In severe cases, or if recovery is not rapid or complete, seek medical attention.
Skin contact	Irritation	Drench the skin with plenty of water. Remove contaminated clothing and wash before reuse. If large areas of the skin are damaged or if irritation persists, seek medical attention.
Eye contact	Severe irritation.	Irrigate thoroughly with water for at least 10 minutes. Obtain medical attention.

Ingestion Upset stomach, nausea. Wash out mouth with water. Do not induce vomiting. If patient is conscious, give water to drink. If patient feels unwell, seek medical attention.

Immediate treatment/antidote- Symptomatic treatment and supportive therapy.

Delayed effects-

5. Fire fighting measures

Suitable extinguishers- Carbon dioxide or dry powder. Keep fire exposed containers cool with water spray.

Hazardous combustion products- Oxides of carbon.

Special equipment for fire fighting- Self contained breathing apparatus.

6. Accidental release measures

Safety precautions- Wear appropriate PPE- See section 8

Environmental precautions- Prevent entry into drains and water courses.

Clean up procedure- Bund or absorb material with sand, earth or other suitable absorbent material. If possible, transfer to a salvage tank. Otherwise, absorb residues and place in suitable labelled containers and hold for waste disposal.

7. Handling and storage

Handling

Ventilation- General ventilation.

Recommended procedures and equipment- Avoid contact with skin and eyes.

Storage

Temperature range- 30-35°C

Keep away from- See section 10.

Suitable storage media- Mild steel, stainless steel.

8. Exposure controls/personal protection

Protective Measures

Respiratory- Type approved for RPE for mists if required.

Hand- Impervious gloves.
Eye- Goggles.
Skin- Overalls and boots.

Hygiene Measures

Always wash thoroughly after handling chemicals.

9. Physical and Chemical Properties

Appearance-	White viscous liquid
Odour-	Mild
pH-	5.66 (in aqueous solution)
Melting point/range-	21°C
Flash point-	198°C (open cup)
Autoignition temperature-	385°C
Vapour pressure-	<0.075 mm Hg
Relative density-	0.958 @ 50°C
Solubility in water-	Soluble > 10 g/100g
Viscosity-	21 mPa.s @ 50°C

10. Stability and Reactivity

Stability- Stable in normal conditions.

Materials to avoid- Strong oxidising agents. Reducing agents.

Hazardous decomposition products- Oxides of carbon.

11. Toxicological information

Effects

Harmful if swallowed (classified in accordance with CESIO recommendations).
Irritating to skin. Will cause serious damage to eyes. Unlikely to be hazardous by inhalation unless present as an aerosol. High concentrations may be slightly irritant to the upper respiratory tract. An ingestion study in animals has shown that high doses produce no significant effects.

LD₅₀

2.5 – 5ml/kg oral-rat > 5ml/kg skin-rabbit

12. Ecological information

Environmental effects

The product is substantially removed in biological treatment processes.

Mobility

Soluble in water.

Degradability

Substantially biodegradable in water. Complies with the minimum 80% biodegradability requirement of EEC directive 82/242.

Aquatic toxicity

LC₅₀, 96h, brown shrimp- 4.8mg/l

LC₅₀, 96h, rainbow trout- 1.8mg/l

LC₀, 96h, rainbow trout- 1.0mg/l

EC₅₀, 48h, daphnia magna- 0.75-1.2mg/l

EC₀, 48h, daphnia magna- 0.56mg/l

Water endangering classification- WGK 2

13. Disposable considerations

Substance

Via an authorized waste disposal contractor to an approved waste disposal site, observing all local and national regulations.

Container

As substance. Used containers must not be cut up or punctured until completely purged of product residues.

14. Transport information

UN number-	3082
Packing group-	III
H.I. number-	90
ADR Class/Item no.-	9
Emergency action code-	2X
Marine pollutant-	P
Proper shipping name-	Environmentally hazardous substance, liquid, N.O.S, fatty alcohol ethoxylate

15. Regulatory information

Supply label details-	Ref. CHIP 2000, CESIO & manufacturers data
Label name-	Synperonic A7

Symbols-	Harmful and dangerous for the environment
Risk phrases-	22-41-50 Harmful if swallowed. Risk of serious damage to eyes. Very toxic to aquatic organisms.
Safety phrases-	26-39-57 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear eye/face protection. Use appropriate containment to avoid environmental contamination.
E.C. no-	

The information contained in this data sheet does not constitute an assessment of workplace risks.

16. Other information

Further details may be available on request from your local Univar Ltd distribution site.

Legal disclaimer

The above information is based on the present state of our knowledge of the product at the time of publication. It is given in good faith, no warranty is implied with respect to the quality or the specification of the product. The user must satisfy himself that the product is entirely suitable for his purpose.

Revision no. 2.
Replaces SDS

Dated July 2003
Dated November 2001