



EEC - SAFETY DATA SHEET

acc. 2001/58/EEC

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1. Substance/preparation, and company name

Trade name: SOLARCLIN
Company: TYFOROP Chemie GmbH, Anton-Rée-Weg 7, D - 20537 Hamburg
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Emergency information: Tel: +49 (0)40 -20 94 97-0
Information about the substance/preparation: Tel: +49 (0)40 -20 94 97-24

2. Composition/information on ingredients

Chemical nature:
Triethylene glycol monomethyl ether
CAS-No: 112-35-6 EINECS-No: 203-962-1

3. Hazard identification

No particular hazards known.

4. First aid measures

General information: Remove soiled or soaked clothing immediately.
After inhalation: When inhaled remove to fresh air and seek medical aid.
After contact with skin: Wash off immediately with soap and water.
After contact with eyes: Rinse thoroughly with plenty of water and seek medical advice.
After ingestion: Summon a doctor immediately.

5. Fire fighting measures

Suitable extinguishing media: Alcohol-resistant foam, water spray jet, carbon dioxide, dry powder. Cool containers by spraying with water.
Specific hazards from the substance itself, its combustion products or from its vapours:
In case of fire, hazardous combustion gases are formed: Carbon monoxide (CO)
Special protective equipment for firefighting: In case of fire, wear a self contained breathing apparatus.

6. Accidental release measures

Personal precautions: Wear suitable personal protective equipment.
Environmental precautions: Do not allow to enter drains or waterways.
Methods for cleaning up / taking up: Pick up with absorbent material (e. g. sand, kieselgur, acid binder, universal binder, sawdust)

7. Handling and storage

Advice on safe handling:	Ensure adequate ventilation. Take precautionary measures against static discharges.
Requirements for storage rooms and vessels:	Storage: do not use light metal containers.
Further information on storage conditions:	Do not leave vessels / containers open. Prevent entry of air / oxygen (peroxide formation).

8. Exposure controls and personal protection

General protective measures:	Avoid contact with skin and eyes.
Hygiene measures:	Observe the usual precautions when handling chemicals.
Respiratory protection:	Use respiratory protection in case of insufficient exhaust ventilation or prolonged exposure.
Hand protection:	For longterm exposure: butyl rubber gloves. Minimum breakthrough time/gloves: 480 min. Minimum thickness/gloves: 0.7 mm For short-term exposure (splash protection): nitrile rubber gloves. Minimum breakthrough time/gloves: 30 min. Minimum thickness/gloves: 0.4 mm. These types of protective gloves are offered by various manufacturers. Please note the manufacturer's detailed statements, esp. about the minimum thickness and the minimum breakthrough time. Consider also the particular working conditions under which the gloves are being used.
Eye protection:	Safety glasses with side protection shield.

9. Physical and chemical properties

Form:	liquid.
Colour:	light yellow.
Odour:	almost odourless.
Melting temperature:	-48 °C (Method: DIN 51583).
Boiling point:	240-280 °C (1013 mbar, Method: DIN 53171).
Flash point:	approx. 125 °C (Method: DIN 51758).
Ignition temperature:	approx. 210 °C (Method: DIN 51794).
Lower explosion limit:	1.5 % (V). Source: literature.
Upper explosion limit:	9.5 % (V). source: literature.
Vapour pressure (20 °C):	0.1 mbar.
Density (20 °C):	approx: 1.05 g/cm ³ (Method: DIN 51757).
Solubility in water (20 °C):	miscible.
pH value):	neutral.
Octanol/water partition coefficient (log Pow):	< 3.
Viscosity (kinematic, 20 °C):	7-7.5 mm ² /s.
Further information:	product is hygroscopic.

10. Stability and reactivity

Thermal decomposition:	305 °C. At normal pressure may be distilled without decomposition.
Hazardous reactions:	No hazardous reactions when stored and handled according to prescribed instructions.

11. Toxicological data

Acute oral toxicity:	LD50: > 4000 mg/kg (rat). Source: IUCLID
Acute dermal toxicity:	LD50: > 2000 mg/kg (rabbit). Source: IUCLID
Irritant effect on skin:	non-irritant (rabbit). Method: OECD 404
Irritant effect on eyes:	slight irritant effect – does not require labelling (rabbit eye). Method: OECD 405
Mutagenicity:	Not mutagenic in Ames Test.

12. Ecological data

Biodegradability:	100% (31d) - good degradability. OECD 302B. Source: IUCLID
Fish toxicity:	LC50: > 5000 mg/l, (96 h, zebra fish). Method OECD 203
Daphnia toxicity:	EC50: > 10 g/l (48 h, Daphnia magna). Source: IUCLID
Algae toxicity:	EC50: 40 mg/l. Source: literature
Bacteria toxicity:	EC0: > 2500 mg/l, (24 h). Fermentation tube test. Source: IUCLID
Remarks:	If handled correctly it causes no disturbance in treatment plants

13. Disposal considerations

In accordance with regulations for special waste, product must be taken to an authorised special waste incineration plant.

14. Transport information

ADR: not restricted	RID: not restricted	ADNR: not restricted
IMDG: not restricted	IATA: not restricted	

15. Regulatory information

Labelling in accordance with EC-Directives:	The product does not require a hazard warning label in accordance with EC-Directives
Other regulations:	Threshold limit value (German MAK-value): not determined.

16. Further Information

Vertical lines in the left hand margin indicate an amendment from the previous version.

This safety data sheet is intended to provide information and recommendations as to: 1. how to handle chemical substances and preparations in accordance with the essential requirements of safety precautions and physical, toxicological, and ecological data. 2. how to handle, store, use, and transport them safely.

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