

MATERIAL SAFETY DATA SHEET

Description: ST6 Electronic Component cleaner	Revision Number: 00
Document Number: MSDS ST6	

1. Identification

Trade name: ST6 Electronic Component cleaner
Use Solvent, For industrial use.

Company SAFIC
32 Steele Street,
Steeledale,
JHB

Postal:

PO BOX 1754,
Alberton,
1450

Information (Product safety) Telephone: +27 11 406
E-mail address technical@safic.co.za

2. Hazards identification

Identification of the risks

R11 Highly flammable.

R38 Irritating to skin.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R65 Harmful: may cause lung damage if swallowed.

R67 Vapours may cause drowsiness and dizziness.

3. Composition

Octane; n-Octane

Contents: ≥ 50.00 - ≤ 100.00 %W/W

CAS-No. 111-65-9 Index-No. 601-009-00-8 EC-No. 203-892-1

Symbol(s) F, Xn R-phrase(s) -R11 -R38 -R50/53 -R65 -R67

Heptane; n-heptane

Contents: ≥ 50.00 - ≤ 100.00 %W/W

CAS-No. 142-82-5 Index-No. 601-008-00-2 EC-No. 205-563-8

Symbol(s) F, Xn, R-phrase(s) -R11 -R38 -R50/53 -R65

n-Hexane

Contents: < 2.50 %W/W

CAS-No. 110-54-3 Index-No. 601-037-00-0 EC-No. 203-777-6

Symbol(s) F, Xn, NF, T, N R-phrase(s) -R11 -R38 -R48/20 -R62 -R65 -R67 -R51/53 -R60

4. First aid measures

In the case of accident or if you feel unwell, seek medical advice immediately.

Inhalation

Move to fresh air in case of accidental inhalation of vapours. If breathing is irregular or stopped, administer artificial respiration.

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Consult a physician.

Skin contact

Wash off immediately with plenty of water for at least 15 minutes.

Eye contact

Rinse immediately with plenty of running water, also under the eyelids, for at least 15 minutes. Remove contact lenses. Call a doctor immediately.

Ingestion

If swallowed, seek medical advice immediately and show this container or label. Prevent vomiting if possible. If a person vomits when lying on his back, place him in the recovery position.

5. Firefighting measures

Suitable extinguishing media are:

Foam, Dry powder

Special protective equipment for firefighters

Wear self-contained breathing apparatus and protective suit.

Further information Cool containers / tanks with water spray.

6. Accidental release measures

Personal precautions

Keep people away from and upwind of spill/leak. Remove all sources of ignition. Do not breathe vapours or spray mist.

Environmental precautions

Prevent product from entering drains. Prevent further leakage or spillage if safe to do so.

Clean up

Absorb with inert absorbent material and dispose of as hazardous waste.

7. Handling and storage

Handling

Safe handling advice

Avoid inhalation of vapour or mist. Wear personal protective equipment.

Advice on protection against fire and explosion

Keep away from heat and sources of ignition.

Storage

Requirements for storage areas and containers

Keep containers tightly closed in a dry, cool and well-ventilated place.

8. Exposure controls/personal protection

Components with workplace control parameters

NATIONAL OCCUPATIONAL EXPOSURE LIMITS

Components	Type	Control parameters	Update	Basis
N-HEPTANE	TWA	2,085 mg/m ³	12 2009	EU Exposure Limit Values
	TWA	500 ppm	12 2009	EU Exposure Limit Values

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Engineering measures

Provide sufficient air exchange and/or exhaust in work rooms.

Personal protective equipment

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.

Hand protection

Gloves suitable for permanent contact: **Material:** nitrile rubber/nitrile latex

Break through time: > 8 h

Material thickness: 0.35 mm

Material: fluoro carbon rubber - FKM

Break through time: > 8 h

Material thickness: 0.4 mm

Material: polychloroprene

Break through time: < 1 h

Material thickness: 0.5 mm

Eye protection

Safety glasses

Skin and body protection

Protective suit, Safety shoes

Hygiene measures

Wash hands before breaks and immediately after handling the product.

Protective measures

Wear suitable protective equipment.

9. Physical and chemical properties

Form:	Liquid
Colour:	Colourless
Odour:	Slight
Melting point/range	< -35 °C
Boiling point/boiling range	94 - 128 °C
Flash point	< 2 °C; Closed cup
Autoignition temperature	204 °C
Lower explosion limit	1.07 %(V)
Upper explosion limit	6.7 %(V)
Vapour pressure	11.997 kPa
Density	0.695 g/cm ³ ; 20 °C
Water solubility	Immiscible, Insoluble
Viscosity, kinematic	0.66 mm ² /s; 40 °C
Relative vapour density	4.42

10. Stability and reactivity

Materials to avoid Oxidizing agents, Reducing agents

Hazardous decomposition products

Carbon oxides

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11. Toxicological information

Acute oral toxicity;
n-Heptane: LD50 rat: 17,000 mg/kg; (literature value)
n-Hexane: LD50 rat: 5,000 mg/kg; (literature value)
Acute inhalation toxicity Heptane;
n-Heptane: LC50 rat: 60 mg/l; ; 4 h(literature value)
n-Hexane: LC50 rat: 48000 ppm; ; 4 h(literature value)
Octane; n-Octane: LC50 rat: 118 mg/m³; ; 4 h(literature value)
Octane; n-Octane: LC50 rat: 118 g/m³; ; 4 h
Acute dermal toxicity Heptane; n-Heptane: LD50 rat: 3,000 mg/kg;
n-Hexane: LD50 rabbit: 3,000 mg/kg;
Eye irritation Heptane; n-Heptane: rabbit: slightly irritating;
n-Hexane: rabbit: Mild eye irritation; (literature value)

12. Ecological information

Biodegradability Readily biodegradable.
Biodegradability n-Hexane: 70 %; 192 h(literature value)
Ecotoxicity effects
Toxicity to fish Heptane; n-Heptane: LC50 Leuciscus idus: 220 - 270 mg/l; (literature value)
Toxicity to daphnia and other aquatic invertebrates.
Heptane; n-Heptane: LC50 Daphnia magna: > 10 mg/l; 24 h; (literature value)
n-Hexane: LC50 Daphnia magna: 50 mg/l; 24 h; (literature value)
Octane; n-Octane: EC50 Daphnia magna: 0.38 mg/l; 48 h; (literature value)

13. Disposal considerations

Product Dispose of in accordance with local regulations.

14. Transport information

ADR UN number: 3295; Class: 3; Packaging group: II; F1; Description of the goods: HYDROCARBONS, LIQUID, N.O.S. (heptane, octane)

RID UN number: 3295; Class: 3; Packaging group: II; F1; Description of the goods: HYDROCARBONS, LIQUID, N.O.S. (heptane, octane)

ADNR UN number: 3295; Class: 3; Packaging group: II; F1; Description of the goods: HYDROCARBONS, LIQUID, N.O.S. (heptane, octane)

IMDG UN number: 3295; Class: 3; EmS: F-E, S-D; Packaging group: II; Description of the goods: HYDROCARBONS, LIQUID, N.O.S. (heptane, octane)

ICAO/IATA UN number : 3295; Class: 3; Packaging group: II; Description of the goods: Hydrocarbons, liquid, n.o.s.

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(heptane, octane)

15. Regulatory information

Labelling

Symbol(s) F: Highly flammable

Xn: Harmful

N: Dangerous for the environment

R-phrases R11: Highly flammable.

R38: Irritating to skin.

R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R65: Harmful: may cause lung damage if swallowed.

R67: Vapours may cause drowsiness and dizziness.

S-phrases S 9: Keep container in a well-ventilated place.

S16: Keep away from sources of ignition - No smoking.

S33: Take precautionary measures against static discharges.

S37: Wear suitable gloves.

S62: If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

16. Other information

R11 Highly flammable.

R38 Irritating to skin.

R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R60 May impair fertility.

R62 Possible risk of impaired fertility.

R65 Harmful: may cause lung damage if swallowed.

R67 Vapours may cause drowsiness and dizziness.

The information in this MSDS is based on current knowledge and experience at the date of publication. This MSDS summarises our best knowledge of the health and safety hazard information of the product and is intended only as a guide to the appropriate precautionary handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification of the product. The data relates only to the specific product designated, and does not relate to use of the product in combination with any other material or use of the product in any process. The data is not intended to constitute performance information concerning the product. No express warranty, or implied warranty of merchantability for fitness for a particular purpose is made with respect to the product, its composition, its safety or the information contained in this MSDS sheet

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APPENDIX A

Revision Date (dd/mm/yy)	Issued By	Revision History		Revision No.
		Description	DCN No.	
26/09/2018	Operations Director	New Issue	MSDS ST6	00

CONTROLLED DOCUMENT

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