

Revision: 2.0
(Replaces revision 1.1 of 16 April 2021)

Revision date: 17 February 2025
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Section 1. Identification

1.1 Product Identifier 1653

Product Name SUDAN III SOLUTION (alcoholic)

CAS Number Mixture

REACH Registration No A registration number is not available as the substance or its uses are exempt, the annual tonnage does not require a registration or the registration is envisaged for a later date.

1.2 Relevant identified uses of the substance or mixture & uses advised against

Uses of Material Chemical for industrial and laboratory use. Not suitable for domestic use.

1.3 Supplier Vickers Laboratories Ltd



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Section 2. Hazards Identification

2.1 Classification of the substance or mixture

Classification according to regulation (EC) 1272/2008 as amended by GB-CLP Regulation, UK SI 2019/720 & UK SI 2020/1567

Flammable liquid, category 2 H225: Highly flammable liquid and vapour.
Serious eye damage/irritation, category 2 H319: Causes serious eye irritation.
Spec target organ tox - single, category 3 H336: May cause drowsiness or dizziness.

2.2 Label elements

Labelling according to regulation (EC) 1272/2008 as amended by GB-CLP Regulation, UK SI 2019/720 & UK SI 2020/1567

Signal word Danger

Hazard Pictograms



Hazard Statements	Highly flammable liquid and vapour. Causes serious eye irritation. May cause drowsiness or dizziness.
Precautionary Statements	Keep away from heat / sparks/open flames/hot surfaces - No smoking. Ground/bond container and receiving equipment. Wear protective gloves / protective clothing / eye protection. Store in a well ventilated place. Keep cool. Avoid breathing dust / fume / gas / mist / vapours / spray. Use only outdoors or in a well-ventilated area.

Section 3. Composition

3.2 Mixtures

Component	CAS No.	EC No.	REACH No.	Conc w/w	CLP Classification (1272/2008/CE)
Acetone	67-64-1	200-662-2	01-2119471330-49-XXXX	~47%	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3 (D)
Ethanol	64-17-5	200-578-6	01-2119457610-43-XXXX	~32%	Flam. Liq. 2, Eye Irrit. 2
Methanol	67-56-1	200-659-6	01-2119433307-44-XXXX	~1.7%	Flam. Liq. 2, Acute Tox. 3 (O), Acute Tox. 3 (D), Acute Tox. 3 (I), STOT SE 1

Section 4. First Aid

4.1 Description of first aid measures

Eyes	Irrigate thoroughly with plenty of water for at least 10 minutes, holding the eye open. OBTAIN MEDICAL ATTENTION.
Skin	Thoroughly wash off skin with soap and water. Remove contaminated clothing immediately and wash before re-use. In severe cases or if exposure has been great, OBTAIN MEDICAL ATTENTION.
Inhalation	Remove from exposure. Keep warm and at rest. If there is difficulty in breathing give oxygen if available. If breathing stops or shows signs of failing, apply artificial resuscitation. If unconscious place in the recovery position. OBTAIN MEDICAL ATTENTION URGENTLY.
Ingestion	If conscious give plenty of water to drink. Do not induce vomiting. If there is difficulty in breathing give oxygen if available. If breathing stops or shows signs of failing, apply artificial resuscitation. If unconscious place in the recovery position. OBTAIN MEDICAL ATTENTION URGENTLY.
Personal protection for first aiders	Wear protective gloves / eye protection.

4.2 Most important symptoms and effects, both acute & delayed.

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed.

No further relevant information available.

Section 5. Fire Fighting

5.1 Extinguishing media

Extinguishing Media	Alcohol resistant foam, dry powder, carbon dioxide or vaporising liquid. Use water spray to keep fire exposed containers cool.
Unsuitable Media	Do not use water jet.

5.2 Special hazards arising from the substance or mixture

Hazards	Vapour-air mixtures are explosive.
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5.3 Advice for firefighters

Advice for firefighters	Evacuate area immediately. Keep up wind. Avoid exposure to toxic vapours and fumes. Fire-fighters should wear protective clothing and breathing apparatus.
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Section 6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Protection	Ensure no sources of ignition. Avoid breathing vapour. Use approved personal protective equipment. Evacuate area immediately. Do not allow general use of area until it is safe to do so. Beware : vapour is heavier than air and will tend to accumulate at low spots.
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6.2 Environmental precautions

Environmental Keep material out of sewers, storm drains, surface waters and soil. Notify the Environmental Agency and local Environmental Health Officer if major spillage occurs.

6.3 Methods and material for containment and cleaning up

Major Spillage Contain and absorb on inert material. Transfer absorbent to salvage container for removal. Wash area down with copious amounts of water.

Minor Spillage Contain and absorb on inert material. Transfer absorbent to container for removal. Allow solvent to evaporate in remote area, then dispose of absorbent as solid chemical waste. Wash area down with copious amounts of water.

6.4 Reference to other sections

See section 8.2 for information on protective equipment and section 13 for information on disposal.

Section 7. Storage & Handling

7.1 Precautions for safe handling

All transfer systems should be earthed to prevent accumulation of static electricity. Avoid contact with skin and eyes. Do not breath vapours. Do not allow to contaminate clothing.

Ensure Local Exhaust Ventilation maintains vapour concentrations below the recommended limits.

7.2 Conditions for safe storage, including any incompatibilities

Well ventilated, cool, dry storage . Protect from direct sun and store away from sources of ignition. Keep containers closed when not in use. Keep well separated from oxidising agents.

7.3 Specific end use(s)

See section 1.2.

Section 8. Workplace Exposure & Personal Protection

8.1 Control parameters

Component	CAS No	Concentration	Workplace Exposure Limits			
			Long Term (8hr TWA)		Short Term 15min period	
Acetone	67-64-1	~47%	500.0 ppm	1210.0 mg/m-3	1500.0 ppm	3620.0 mg/m-3
Ethanol	64-17-5	~32%	1000.0 ppm	1920.0 mg/m-3	-	-
Methanol	67-56-1	~1.7%	200.0 ppm	266.0 mg/m-3	250.0 ppm	333.0 mg/m-3

Exposure data source(s) IOELV: Indicative Occupational Exposure Limit Value.

8.2 Exposure controls

Respiratory Protection Use L.E.V. or natural ventilation to maintain vapour concentrations below exposure limits. If not, use a well maintained chemical cartridge organic vapour respirator, or use self contained breathing apparatus.

Hand Protection Use solvent resistant gloves.

Eye Protection Use tightly fitting chemical splash proof glasses or goggles.

Skin Protection Avoid contact with skin. If skin contact or contamination of clothing is likely, protective clothing must be worn.

Special Hazards No special precautions required.

Section 9. Physical & Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance Clear red to dark red solution.

Odour Pungent.

pH Not applicable

Boiling Point 56.4°C

Melting Point -94.7°C

Flash Point 23°C (Closed cup)

Upper Flammable Limit 12.8%

Lower Flammable Limit	2.6%
Auto Ignition	465°C
Explosive Properties	Severe in confined spaces.
Oxidising Properties	No.
Vapour Pressure	185mmHg @ 20°C
Relative Density	0.8300
Water Solubility	Completely soluble in water.

9.2 Other information

No data available.

Section 10. Stability & Reactivity

10.1	Reactivity	No data available.
10.2	Chemical Stability	Stable under normal conditions
10.3	Possibility of hazardous reactions	No data available.
10.4	Conditions to Avoid	Hot surfaces, naked flames or other sources of ignition.
10.5	Incompatible materials	Strong oxidising agents.
10.6	Hazardous Decomposition Products	None unusual. Burning will produce smoke, carbon monoxide and/or carbon dioxide.

Section 11. Toxicological Information

11.1 Information on toxicological effects

Eyes	Both the vapour and liquid will act as an eye irritant. Repeated exposure to the vapours can lead to reversible corneal changes and conjunctivitis
Skin	Repeated or prolonged contact may defat the skin producing irritation and dermatitis. Skin penetration is possible. May cause skin sensitisation.
LD50 Skin	Not available
Ingestion	The liquid causes damage to stomach and intestinal linings.
LD50 Oral	Not available
Inhalation	Exposure to vapour concentrations above the occupational exposure limits will cause narcosis. Prolonged exposure to vapour concentrations above the occupational exposure limits will cause headache, nausea, vomiting and irritation of the mucous membranes. High concentrations of vapour may produce central nervous system depression and unconsciousness.
LD50 Inhalation	Not available
TCLo	Not available
Carcinogenicity	Not considered to be a carcinogen.
Mutagenicity	May be a mutagen.
Reproductive Effects	It is considerably embryotoxic, but only weakly teratogenic with a low incidence of malformations.

Section 12. Ecological

12.1	Toxicity	Moderately toxic to mammals, fish and bacteria.
	LC50 Algal	Not available
	LC50 Crustacea	Not available
	LC50 Fish	Not available
12.2	Persistence and degradability	No data available.
12.3	Bioaccumulative potential	No data available.
12.4	Mobility in soil	No data available.
12.5	Results of PBT & vPvB assessment	Assessment not required.
12.6	Other adverse effects	None known at present.

Section 13. Disposal Considerations

13.1 Waste treatment methods

Disposal Methods	Dispose of in a licensed incinerator for organic solvents. Do not dispose of as domestic waste. Never dispose of into water courses or sewerage systems due to high risk of explosion.
Contaminated Packaging	Use a licensed waste disposer. Do not attempt to burn any residual liquids due to risk of explosion.

Section 14. Transport Information

14.1 UN Number	1993
14.2 Proper Shipping Name	Flammable liquid, N.O.S. (Sudan III Solution)
14.3 Transport classes	
UN classification	3
Subsidiary hazard(s)	None
Transport category	3
ADR Hazard ID	30
Tunnel Restriction Code	D/E
14.4 Packing Group	III
14.5 Environment hazards	See section 12.
14.6 Special precautions for user	No special precautions required.
14.7 Transport in bulk	Not transported in bulk.



Section 15. Regulatory Information

15.1 Safety, health and environment regulations specific for substance/mixture.

Classification, Labeling & Packaging of Substances & Mixtures Regulations (1272/2008/CE) as amended by GB-CLP Regulation, UK SI 2019/720 & UK SI 2020/1567

Classification Flammable liquid, category 2; Serious eye damage/irritation, category 2; Spec target organ tox - single, category 3

Signal word Danger

Hazard Pictograms



Hazard Statements H225, H319, H336
Highly flammable liquid and vapour. Causes serious eye irritation. May cause drowsiness or dizziness.

Hazard Statements (Packs of 125ml/g or less) H225, H319, H335, H336
Highly flammable liquid and vapour. Causes serious eye irritation. May cause respiratory irritation. May cause drowsiness or dizziness.

Precautionary Statements P210, P240, P280, P403+P235, P261, P271
Keep away from heat / sparks/open flames/hot surfaces - No smoking. Ground/bond container and receiving equipment. Wear protective gloves / protective clothing / eye protection. Store in a well ventilated place. Keep cool. Avoid breathing dust / fume / gas / mist / vapours / spray. Use only outdoors or in a well-ventilated area.

Precautionary Statements (Packs of 125ml/g or less) P280, P210
Wear protective gloves / protective clothing / eye protection. Keep away from heat / sparks/open flames/hot surfaces - No smoking.

15.2 Chemical safety assessment

Assessment not required.

Section 16. Other Information

The information contained in this document only covers the hazards presented by this material, it DOES NOT constitute a workplace risk assessment. See sections 11 for toxicological information and section 12 for ecological information.

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