

SAFETY DATA SHEET

JEB SOL 51

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Compilation date: 25/07/2010

Revision date: 21/12/21

Revision No: 6

Section 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name: JEB SOL 51

CAS number: 64-18-6

EINECS number: 200-579-1

Index number: 607-001-00-0

Product code: 025

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of substance / mixture: Used for descaling kettles, water heaters and similar equipment. PC21: Laboratory chemicals.

1.3. Details of the supplier of the safety data sheet

Company name: Multex Chemicals Ltd.

Multex House

Cannon Street

HULL

East Yorkshire

HU2 0AB

Tel: 01482 320432

Fax: 01482 321777

Email: info@multexchemicals.co.uk

1.4. Emergency telephone number

Emergency tel: 01482 320432

(office hours only)

Section 2: Hazards identification

2.1. Classification of the substance or mixture

Classification under CLP: Acute Tox. 4: H302; Skin Corr. 1B: H314

Most important adverse effects: Harmful if swallowed. Causes severe skin burns and eye damage.

2.2. Label elements

Label elements:

Hazard statements: H302: Harmful if swallowed.

H314: Causes severe skin burns and eye damage.

Hazard pictograms: GHS05: Corrosion



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Signal words: Danger

Precautionary statements: P260: Do not breathe vapours.

P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

P310: Immediately call physician.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P315: Get immediate medical advice/attention.

P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water .

P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P308: IF exposed or concerned:

P313: Get medical advice/attention.

2.3. Other hazards

Other hazards: This substance does meet the criteria for classification as dangerous in accordance with Directive 1999/45/EC

PBT: This product is not identified as a PBT/vPvB substance.

Section 3: Composition/information on ingredients

3.2. Mixtures

Hazardous ingredients:

FORMIC ACID

EINECS	CAS	PBT / WEL	CLP Classification	Percent
200-579-1	64-18-6	-	Skin Corr. 1A: H314	30-50%

Section 4: First aid measures

4.1. Description of first aid measures

Skin contact: Remove all contaminated clothes and footwear immediately unless stuck to skin.

Drench the affected skin with running water for 10 minutes or longer if substance is still on skin. Transfer to hospital if there are burns or symptoms of poisoning.

Eye contact: Bathe the eye with running water for 15 minutes. Transfer to hospital for specialist examination.

Ingestion: Wash out mouth with water. Do not induce vomiting. Give 1 cup of water to drink every 10 minutes. If unconscious, check for breathing and apply artificial respiration if necessary. If unconscious and breathing is OK, place in the recovery position. Transfer to hospital as soon as possible.

Inhalation: Remove casualty from exposure ensuring one's own safety whilst doing so. If

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unconscious and breathing is OK, place in the recovery position. If conscious, ensure the casualty sits or lies down. If breathing becomes bubbly, have the casualty sit and provide oxygen if available. Transfer to hospital as soon as possible.

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

Skin contact: Blistering may occur. Progressive ulceration will occur if treatment is not immediate.

Eye contact: Corneal burns may occur. May cause permanent damage.

Ingestion: Corrosive burns may appear around the lips. Blood may be vomited. There may be bleeding from the mouth or nose.

Inhalation: There may be shortness of breath with a burning sensation in the throat. Exposure may cause coughing or wheezing.

Delayed / immediate effects: Immediate effects can be expected after short-term exposure.

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

Immediate / special treatment: Eye bathing equipment should be available on the premises.

Section 5: Fire-fighting measures

5.1. Extinguishing media

Extinguishing media: Suitable extinguishing media for the surrounding fire should be used. Use water spray to cool containers.

5.2. Special hazards arising from the substance or mixture

Exposure hazards: Corrosive. In combustion emits toxic fumes.

5.3. Advice for fire-fighters

Advice for fire-fighters: Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Do not attempt to take action without suitable protective clothing - see section 8 of SDS. If outside keep bystanders upwind and away from danger point. Mark out the contaminated area with signs and prevent access to unauthorised personnel. Turn leaking containers leak-side up to prevent the escape of liquid.

6.2. Environmental precautions

Environmental precautions: Do not discharge into drains or rivers. Contain the spillage using bunding.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Clean-up should be dealt with only by qualified personnel familiar with the specific substance. Neutralise prior to disposal. Cover with dry sodium carbonate. Wash the spillage site with large amounts of water.

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6.4. Reference to other sections

Reference to other sections: Refer to section 8 of SDS.

Section 7: Handling and storage

7.1. Precautions for safe handling

Handling requirements: Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area.
Do not handle in a confined space. Avoid the formation or spread of mists in the air.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in a cool, well ventilated area. Keep container tightly closed.
Suitable packaging: Must only be kept in original packaging.

7.3. Specific end use(s)

Specific end use(s): No data available.

Section 8: Exposure controls/personal protection

8.1. Control parameters

Workplace exposure limits: No data available.

DNEL/PNEC Values

DNEL / PNEC No data available.

8.2. Exposure controls

Engineering measures: Ensure there is sufficient ventilation of the area.
Respiratory protection: If ventilation is poor, Gas/vapour filter, type E: sulphur dioxide and other acid gases (EN141).
Hand protection: Impermeable gloves.
Eye protection: Tightly fitting safety goggles. Ensure eye bath is to hand.
Skin protection: Impermeable protective clothing.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State: Liquid

Colour: Colourless

Odour: Characteristic odour

Evaporation rate: Slow

Oxidising: Non-oxidising (by EC criteria)

Solubility in water: Miscible in all proportions

Viscosity: Non-viscous

Boiling point/range°C: >100

Part.coeff. n-octanol/water: -1.9

Vapour pressure: <4.4 mPas@20

pH: 1 approx

Melting point/range°C: -13

Autoflammability°C: 500

Relative density: 1.1 approx

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9.2. Other information

Other information: No data available.

Section 10: Stability and reactivity

10.1. Reactivity

Reactivity: Stable under recommended transport or storage conditions.

10.2. Chemical stability

Chemical stability: Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions: Hazardous reactions will not occur under normal transport or storage conditions.
Decomposition may occur on exposure to conditions or materials listed below.

10.4. Conditions to avoid

Conditions to avoid: Heat. Excessive heat for long periods of time.

10.5. Incompatible materials

Materials to avoid: Strong oxidising agents. Amines. Bases.

10.6. Hazardous decomposition products

Haz. decomp. products: In combustion emits toxic fumes.

Section 11: Toxicological information

11.1. Information on toxicological effects

Toxicity values:

Route	Species	Test	Value	Units
ORAL	RAT	LD50	730	mg/kg

Hazardous ingredients:

FORMIC ACID...100%

IVN	MUS	LD50	145	mg/kg
ORL	MUS	LD50	700	mg/kg
ORL	RAT	LD50	1100	mg/kg

Relevant hazards for product:

Hazard	Route	Basis
Acute toxicity (ac. tox. 4)	ING	Hazardous: calculated
Skin corrosion/irritation	DRM	Hazardous: calculated

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Serious eye damage/irritation	OPT	Hazardous: calculated
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Symptoms / routes of exposure

Skin contact: Blistering may occur. Progressive ulceration will occur if treatment is not immediate.

Eye contact: Corneal burns may occur. May cause permanent damage.

Ingestion: Corrosive burns may appear around the lips. Blood may be vomited. There may be bleeding from the mouth or nose.

Inhalation: There may be shortness of breath with a burning sensation in the throat. Exposure may cause coughing or wheezing.

Delayed / immediate effects: Immediate effects can be expected after short-term exposure.

Section 12: Ecological information

12.1. Toxicity

Ecotoxicity values: No data available.

12.2. Persistence and degradability

Persistence and degradability: Biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential: No bioaccumulation potential.

12.4. Mobility in soil

Mobility: Readily absorbed into soil. Soluble in water.

12.5. Results of PBT and vPvB assessment

PBT identification: This product is not identified as a PBT/vPvB substance.

12.6. Other adverse effects

Other adverse effects: Negligible ecotoxicity.

Section 13: Disposal considerations

13.1. Waste treatment methods

Disposal operations: Dispose of used or surplus material to a foul water drain. Large amounts should first be neutralised with chalk, lime, or other suitable alkali. Dispose of waste and residues in accordance with local authority requirements.

Disposal of packaging: Clean with water. Dispose of as normal industrial waste. Packaging is recyclable.

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

Section 14: Transport information

14.1. UN number

UN number: * UN3412

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14.2. UN proper shipping name

Shipping name: FORMIC ACID

14.3. Transport hazard class(es)

Transport class: * 8

14.4. Packing group

Packing group: * II

14.5. Environmental hazards

Environmentally hazardous: No

Marine pollutant: No

14.6. Special precautions for user

Special precautions: No special precautions.

Tunnel code: E

Transport category: 2

Section 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.2. Chemical Safety Assessment

Section 16: Other information

Other information

Other information: This safety data sheet is prepared in accordance with Commission Regulation (EU) No 2015/830.

Phrases used in s.2 and s.3: H302: Harmful if swallowed.
H314: Causes severe skin burns and eye damage.

Legal disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.