



**DE SANGOSSE**

**SAFETY DATA SHEET**  
NEW MANGANESE SOLUTION

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**Compilation date:** 12/05/2011

**Revision date:** 20/01/2014

**Sent to:** De Sangosse Ltd

**Revision No:** 2

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

**1.1. Product identifier**

**Product name:** NEW MANGANESE SOLUTION

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

**Use of substance / mixture:** Micronutrient Seed-Treatment

**1.3. Details of the supplier of the safety data sheet**

**Company name:** De Sangosse Ltd

Hillside Mill

Quarry Lane

Swaffham Bulbeck

Cambridge

CB25 0LU

United Kingdom

**Tel:** +44 (0) 1223 811215

**Fax:** +44 (0) 1223 810020

**Email:** [msds@desangosse.co.uk](mailto:msds@desangosse.co.uk)

**1.4. Emergency telephone number**

**Emergency tel:** Outside Office Hours: 01638 577581 or 01485 544230

**Section 2: Hazards identification**

**2.1. Classification of the substance or mixture**

**Classification under CHIP:** Xn: R22; C: R34; Xn: R48/20; -: R52/53

**Classification under CLP:** Acute Tox. 4: H302; Aquatic Chronic 3: H412; Skin Corr. 1C: H314; STOT RE 2: H373

**Most important adverse effects:** Harmful if swallowed. Causes burns. Harmful: danger of serious damage to health by prolonged exposure through inhalation. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**2.2. Label elements**

**Label elements under CLP:**

**Hazard statements:** H302: Harmful if swallowed.

H314: Causes severe skin burns and eye damage.

H373: May cause damage to organs [brain / central nervous system] through prolonged or repeated exposure [inhalation (vapour)].

H412: Harmful to aquatic life with long lasting effects.

**Signal words:** Danger

[cont...]

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**Hazard pictograms:** GHS05: Corrosion  
GHS07: Exclamation mark  
GHS08: Health hazard



**Precautionary statements:** P260: Do not breathe dust/fume/gas/mist/vapours/spray.  
P280: Wear protective gloves/protective clothing/eye protection/face protection.  
P301+310: IF SWALLOWED: Immediately call a POISON CENTER or doctor.  
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P314: Get medical if you feel unwell.  
P321: Specific treatment (see on this label).

### Label elements under CHIP:

**Hazard symbols:** Corrosive.



**Risk phrases:** R22: Harmful if swallowed.  
R34: Causes burns.  
R48/20: Harmful: danger of serious damage to health by prolonged exposure through inhalation.  
R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**Safety phrases:** S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
S36/37/39: Wear suitable protective clothing, gloves and eye / face protection.  
S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

### 2.3. Other hazards

**PBT:** This product is not identified as a PBT substance.

## Section 3: Composition/information on ingredients

### 3.2. Mixtures

**Hazardous ingredients:**

[cont...]

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MANGANESE DINITRATE

EINECS	CAS	CHIP Classification	CLP Classification	Percent
233-828-8	10377-66-9	Xn: R22; C: R34; Xi: R41; Xn: R48/20; -: R52/53	Acute Tox. 4: H302; Skin Corr. 1C: H314; Eye Dam. 1: H318; STOT RE 2: H373; Aquatic Chronic 3: H412; Ox. Sol. 2: H272; -: EUH071	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. If conscious, give half a litre of water to drink immediately. Consult a doctor. If unconscious, check for breathing and apply artificial respiration if necessary.
- Inhalation:** Remove casualty from exposure ensuring one's own safety whilst doing so. If unconscious and breathing is OK, place in the recovery position. Consult a doctor.

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

- Skin contact:** There may be irritation and redness at the site of contact. Blistering may occur. Severe burns may occur. Progressive ulceration will occur if treatment is not immediate. Irritation or pain may occur at the site of contact.
- Eye contact:** There may be irritation and redness. The eyes may water profusely. There may be severe pain. Corneal burns may occur. May cause permanent damage.
- Ingestion:** There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur. There may be vomiting. Corrosive burns may appear around the lips. Blood may be vomited.
- Inhalation:** There may be irritation of the throat with a feeling of tightness in the chest. There may be shortness of breath with a burning sensation in the throat.

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

**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:** In combustion emits toxic fumes. Corrosive.

[cont...]

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### 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:** Refer to section 8 of SDS for personal protection details. If outside do not approach from downwind. 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:** Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method. Avoid all incompatible materials in clean-up procedure - see section 10 of SDS.

### 6.4. Reference to other sections

## 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 cool, well ventilated area. Keep container tightly closed. The floor of the storage room must be impermeable to prevent the escape of liquids. Avoid incompatible materials and conditions - see section 10 of SDS.

**Suitable packaging:** Must only be kept in original packaging.

**Storage quantity limits:** Refer to COMAH

### 7.3. Specific end use(s)

## Section 8: Exposure controls/personal protection

### 8.1. Control parameters

**Workplace exposure limits:** No data available.

### 8.1. DNEL/PNEC Values

**DNEL / PNEC** No data available.

[cont...]

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### 8.2. Exposure controls

**Engineering measures:** Ensure there is sufficient ventilation of the area. The floor of the storage room must be impermeable to prevent the escape of liquids. Ensure all engineering measures mentioned in section 7 of SDS are in place.

**Respiratory protection:** Respiratory protection not required.

**Hand protection:** Gloves (acid resistant).

**Eye protection:** Ensure eye bath is to hand. Tightly fitting safety goggles.

**Skin protection:** Impermeable protective clothing.

## Section 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

**State:** Liquid

**Colour:** Red

**Odour:** Barely perceptible odour

**Evaporation rate:** Negligible

**Oxidising:** Non-oxidising (by EC criteria)

**Solubility in water:** Miscible in all proportions

**Viscosity:** Non-viscous

**Boiling point/range°C:** ~ 100

**Flammability limits %: lower:** No data

**Flash point°C:** >93

**Autoflammability°C:** No data

**Relative density:** 1.270 - 1.330

**VOC g/l:** No data

**Melting point/range°C:** No data

**upper:** No data

**Part.coeff. n-octanol/water:** No data

**Vapour pressure:** No data

**pH:** < 2.0

### 9.2. Other information

**Other information:** Not applicable.

## Section 10: Stability and reactivity

### 10.1. Reactivity

### 10.2. Chemical stability

**Chemical stability:** Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

### 10.4. Conditions to avoid

**Conditions to avoid:** Heat. Flames.

### 10.5. Incompatible materials

**Materials to avoid:** Bases. Metals. Reducing agents. Organic materials.

[cont...]

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### 10.6. Hazardous decomposition products

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

## Section 11: Toxicological information

### 11.1. Information on toxicological effects

#### Relevant effects for mixture:

Effect	Route	Basis
Acute toxicity (harmful)	ING	Hazardous: calculated
Corrosivity	OPT INH DRM	Hazardous: calculated
Repeated dose toxicity	INH	Hazardous: calculated

### Symptoms / routes of exposure

**Skin contact:** There may be irritation and redness at the site of contact. Blistering may occur. Severe burns may occur. Progressive ulceration will occur if treatment is not immediate.  
Irritation or pain may occur at the site of contact.

**Eye contact:** There may be irritation and redness. The eyes may water profusely. There may be severe pain. Corneal burns may occur. May cause permanent damage.

**Ingestion:** There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur. There may be vomiting. Corrosive burns may appear around the lips.  
Blood may be vomited.

**Inhalation:** There may be irritation of the throat with a feeling of tightness in the chest. There may be shortness of breath with a burning sensation in the throat.

## Section 12: Ecological information

### 12.1. Toxicity

**Ecotoxicity values:** No data available.

### 12.2. Persistence and degradability

**Persistence and degradability:** Not biodegradable.

### 12.3. Bioaccumulative potential

**Bioaccumulative potential:** Bioaccumulation potential.

### 12.4. Mobility in soil

**Mobility:** Readily absorbed into soil.

### 12.5. Results of PBT and vPvB assessment

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

### 12.6. Other adverse effects

**Other adverse effects:** Harmful to aquatic organisms. Harmful to soil organisms.

[cont...]

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**Section 13: Disposal considerations**

**13.1. Waste treatment methods**

**Disposal operations:** Transfer to a suitable container and arrange for collection by specialised disposal company.

**Recovery operations:** Land treatment resulting in benefit to agriculture or ecological improvement

**Waste code number:** -

**Disposal of packaging:** Dispose of in a regulated landfill site or other method for hazardous or toxic wastes.

**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:** UN3264

**14.2. UN proper shipping name**

**Shipping name:** CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.  
(MANGANESE NITRATE; NITRIC ACID.)

**14.3. Transport hazard class(es)**

**Transport class:** 8

**14.4. Packing group**

**Packing group:** III

**14.5. Environmental hazards**

**Environmentally hazardous:** No

**Marine pollutant:** No

**14.6. Special precautions for user**

**Section 15: Regulatory information**

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

**Specific regulations:** Not applicable.

**15.2. Chemical Safety Assessment**

**Chemical safety assessment:** A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

**Section 16: Other information**

**Other information**

**Other information:** This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010.

\* indicates text in the SDS which has changed since the last revision.

**Phrases used in s.2 and 3:** EUH071: Corrosive to the respiratory tract.

[cont...]

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H302: Harmful if swallowed.

H314: Causes severe skin burns and eye damage.

H318: Causes serious eye damage.

H373: May cause damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.

H412: Harmful to aquatic life with long lasting effects.

R22: Harmful if swallowed.

R34: Causes burns.

R41: Risk of serious damage to eyes.

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

R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**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.