

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

1.1. Product identifier

Product name: SENTINEL MOLYBDATE NO.1 TABLETS

Product code: MOLY-TAB-250-GB

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

1.3. Details of the supplier of the safety data sheet

Company name: Sentinel Performance Solutions Ltd
The Heath Business & Technical Park
Runcorn
Cheshire
WA7 4QX
United Kingdom

Tel: +44(0)1928 588330

Fax: +44(0)1928 588368

Email: info.uk@sentinel-solutions.net

1.4. Emergency telephone number

Emergency tel: +44(0)1928 588339

Section 2: Hazards identification

2.1. Classification of the substance or mixture

Classification under CHIP: T: R60; T: R61; Xi: R41

Classification under CLP: Eye Dam. 1: H318; Repr. 1A: H360FD

Most important adverse effects: May impair fertility. May cause harm to the unborn child. Risk of serious damage to eyes.

2.2. Label elements

Label elements under CLP:

Hazard statements: H318: Causes serious eye damage.

H360FD: May damage fertility. May damage the unborn child.

Signal words: Danger

Hazard pictograms: GHS08: Health hazard

GHS05: Corrosion



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Precautionary statements: P280: Wear protective gloves/protective clothing/eye protection/face protection.
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310: Immediately call a POISON CENTER or doctor.
P405: Store locked up.

Label elements under CHIP:

Hazard symbols: Toxic.



Risk phrases: R60: May impair fertility.
R61: May cause harm to the unborn child.
R41: Risk of serious damage to eyes.

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.
S38: In case of insufficient ventilation, wear suitable respiratory equipment.
S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S53: Avoid exposure - obtain special instructions before use.

Precautionary phrases: Restricted to professional users.

2.3. Other hazards

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

Section 3: Composition/information on ingredients

3.2. Mixtures

Hazardous ingredients:

BORIC ACID [1] BORIC ACID, CRUDE NATURAL, CONTAINING NOT MORE THAN 85% OF H3BO3 CALCD. BY DRY WEIGHT [2]

EINECS	CAS	CHIP Classification	CLP Classification	Percent
233-139-2, 234-343-4	10043-35-3, 11113-50	T: R60; T: R61	Repr. 1A: H360FD	20-40%

SODIUM HYDROGENSULPHATE

231-665-7	7681-38-1	Xi: R41	Eye Dam. 1: H318	10-20%
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ADIPIC ACID

204-673-3	124-04-9	Xi: R36	Eye Irrit. 2: H319	10-20%
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Section 4: First aid measures

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4.1. Description of first aid measures

Skin contact: Remove all contaminated clothes and footwear immediately unless stuck to skin. Wash immediately with plenty of soap and water.

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.

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

Eye contact: There may be pain and redness. The eyes may water profusely. There may be severe pain. The vision may become blurred. May cause permanent damage.

Ingestion: There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur.

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest.

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: In combustion emits toxic fumes of sulphur oxides. In combustion emits toxic fumes of nitrogen oxides. Sodium Oxides.

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: Mark out the contaminated area with signs and prevent access to unauthorised personnel. Do not attempt to take action without suitable protective clothing - see section 8 of SDS. Do not create dust.

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6.2. Environmental precautions

Environmental precautions: Do not discharge into drains or rivers.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Transfer to a closable, labelled salvage container for disposal by an appropriate method.

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. Avoid the formation or spread of dust in the air.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in 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

8.2. Exposure controls

Engineering measures: Ensure there is sufficient ventilation of the area.

Respiratory protection: Self-contained breathing apparatus must be available in case of emergency. Respiratory protective device with particle filter. Particle filter class P2S (EN143).

Hand protection: Protective gloves (EN374).

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

Skin protection: Protective clothing.

Environmental: No special requirement.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State: Tablets

Colour: White

Odour: Odourless

Solubility in water: Soluble

Boiling point/range°C: 265

Flash point°C: >93

Relative density: 1.541g/cm³ @20°C

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pH: 2.2 (9.95g/l @20°C)

9.2. Other information

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: Direct sunlight. Heat. Moist air.

10.5. Incompatible materials

Materials to avoid: Bases. Metals. Alcohols. Oxidising agents.

10.6. Hazardous decomposition products

Haz. decomp. products: In combustion emits toxic fumes of sulphur oxides. In combustion emits toxic fumes of nitrogen oxides.

Section 11: Toxicological information

11.1. Information on toxicological effects

Relevant effects for mixture:

Effect	Route	Basis
Toxicity for reproduction	--	Hazardous: calculated

Symptoms / routes of exposure

Skin contact: There may be irritation and redness at the site of contact.

Eye contact: There may be pain and redness. The eyes may water profusely. There may be severe pain. The vision may become blurred. May cause permanent damage.

Ingestion: There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur.

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest.

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

Other information: Not applicable.

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Section 12: Ecological information

12.1. Toxicity

12.2. Persistence and degradability

Persistence and degradability: No data available.

12.3. Bioaccumulative potential

Bioaccumulative potential: No data available.

12.4. Mobility in soil

Mobility: No data available.

12.5. Results of PBT and vPvB assessment

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

12.6. Other adverse effects

Other adverse effects: No data available.

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: Not applicable.

Waste code number: 16 05 06

Disposal of packaging: Clean with water. 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

Transport class: This product is not classified for transport.

Section 15: Regulatory information

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

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.

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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: H318: Causes serious eye damage.

H319: Causes serious eye irritation.

H360FD: May damage fertility. May damage the unborn child.

R36: Irritating to eyes.

R41: Risk of serious damage to eyes.

R60: May impair fertility.

R61: May cause harm to the unborn child.

Legal disclaimer: Alteration to this document is strictly prohibited. The format and formulas contained within this document comply with UK laws and legislation. Every effort has been made to ensure that the information in this MSDS is accurate. However some labels printed before the date on this document may have conflicting hazard information that can be disregarded in favour of the information as detailed above.

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

1.1. Product identifier

Product name: SENTINEL MOLYBDATE NO.2 TABLETS

Product code: MOLY-TABNO2-250-GB

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

1.3. Details of the supplier of the safety data sheet

Company name: Sentinel Performance Solutions Ltd
The Heath Business & Technical Park
Runcorn
Cheshire
WA7 4QX
United Kingdom

Tel: +44(0)1928 588330

Fax: +44(0)1928 588368

Email: info.uk@sentinel-solutions.net

1.4. Emergency telephone number

Emergency tel: +44(0)1928 588339

Section 2: Hazards identification

2.1. Classification of the substance or mixture

Classification under CHIP: T: R60; T: R61; Xi: R37; Sens.: R43

Classification under CLP: Skin Sens. 1: H317; Acute Tox. 4: H332; Repr. 1B: H360Fd; Eye Irrit. 2: H319; STOT SE 3: H335

Most important adverse effects: May impair fertility. May cause harm to the unborn child. Irritating to respiratory system. May cause sensitisation by skin contact.

2.2. Label elements

Label elements under CLP:

Hazard statements: H360Fd: May damage fertility. Suspected of damaging the unborn child.

H332: Harmful if inhaled.

H317: May cause an allergic skin reaction.

H335: May cause respiratory irritation.

Signal words: Danger

Hazard pictograms: GHS08: Health hazard

GHS07: Exclamation mark

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Precautionary statements: P261: Avoid breathing dust/fume/gas/mist/vapours/spray.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P308+313: IF exposed or concerned: Get medical advice/attention.
P312: Call a POISON CENTER or doctor if you feel unwell.
P405: Store locked up.

Label elements under CHIP:

Hazard symbols: Toxic.



Risk phrases: R60: May impair fertility.
R61: May cause harm to the unborn child.
R37: Irritating to respiratory system.
R43: May cause sensitisation by skin contact.

Safety phrases: S36/37: Wear suitable protective clothing and gloves.
S38: In case of insufficient ventilation, wear suitable respiratory equipment.
S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S53: Avoid exposure - obtain special instructions before use.

Precautionary phrases: Restricted to professional users.

2.3. Other hazards

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

Section 3: Composition/information on ingredients

3.2. Mixtures

Hazardous ingredients:

CALCIUM THIOGLYCOLATE TRIHYDRATE

EINECS	CAS	CHIP Classification	CLP Classification	Percent
249-881-5	65208-41-5	Xn: R22; Xi: R37; Sens.: R43	Acute Tox. 4: H302; Skin Sens. 1: H317; STOT SE 3: H335	10-20%

BORIC ACID [1] BORIC ACID, CRUDE NATURAL, CONTAINING NOT MORE THAN 85% OF H3BO3 CALCD. BY DRY WEIGHT [2]

233-139-2, 234-343-4	10043-35-3, 11113-50	T: R60; T: R61	Repr. 1A: H360FD	10-20%
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DISODIUM TETRABORATE, ANHYDROUS

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215-540-4	1330-43-4	T: R60; T: R61	Repr. 1A: H360FD	10-20%
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ADIPIC ACID

204-673-3	124-04-9	Xi: R36	Eye Irrit. 2: H319	5-10%
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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. Wash immediately with plenty of soap and water.

Eye contact: Bathe the eye with running water for 15 minutes. Consult a doctor.

Ingestion: Wash out mouth with water. Consult a doctor.

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

Eye contact: There may be irritation and redness. The eyes may water profusely.

Ingestion: There may be soreness and redness of the mouth and throat.

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest. 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.

5.2. Special hazards arising from the substance or mixture

Exposure hazards: In combustion emits toxic fumes of carbon dioxide / carbon monoxide. In combustion emits toxic fumes of sulphur oxides. Boron oxides. Calcium Oxides.

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

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out the contaminated area with signs and prevent access to unauthorised personnel. Do not create dust.

6.2. Environmental precautions

Environmental precautions: Do not discharge into drains or rivers.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Transfer to a closable, labelled salvage container for disposal by an appropriate method.

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 dust in the air.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in 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

8.2. Exposure controls

Engineering measures: Ensure there is sufficient ventilation of the area.

Respiratory protection: Self-contained breathing apparatus must be available in case of emergency. Respiratory protective device with particle filter. Particle filter class P2S (EN143).

Hand protection: Protective gloves (EN374).

Eye protection: Safety glasses (EN166). Ensure eye bath is to hand.

Skin protection: Protective clothing.

Environmental: No special requirement.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State: Tablets

Colour: White

[cont...]

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SENTINEL MOLYBDATE NO.2 TABLETS

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Odour: Unpleasant

Solubility in water: Soluble

Boiling point/range°C: 265

Autoflammability°C: 405

Flash point°C: >93

pH: 8.3 (8.6g/l @20°C)

9.2. Other information

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. Direct sunlight. Moist air.

10.5. Incompatible materials

Materials to avoid: Strong oxidising agents.

10.6. Hazardous decomposition products

Haz. decomp. products: In combustion emits toxic fumes of sulphur oxides. In combustion emits toxic fumes of carbon dioxide / carbon monoxide. Calcium Oxides. Boron oxides.

Section 11: Toxicological information

11.1. Information on toxicological effects

Relevant effects for mixture:

Effect	Route	Basis
Irritation	INH	Hazardous: calculated
Sensitisation	DRM	Hazardous: calculated
Toxicity for reproduction	--	Hazardous: calculated

Symptoms / routes of exposure

Skin contact: There may be irritation and redness at the site of contact.

Eye contact: There may be irritation and redness. The eyes may water profusely.

Ingestion: There may be soreness and redness of the mouth and throat.

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Inhalation: There may be irritation of the throat with a feeling of tightness in the chest. Exposure may cause coughing or wheezing.

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

Other information: Not applicable.

Section 12: Ecological information

12.1. Toxicity

12.2. Persistence and degradability

Persistence and degradability: No data available.

12.3. Bioaccumulative potential

Bioaccumulative potential: No data available.

12.4. Mobility in soil

Mobility: No data available.

12.5. Results of PBT and vPvB assessment

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

12.6. Other adverse effects

Other adverse effects: No data available.

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: Not applicable.

Waste code number: 16 05 06

Disposal of packaging: Clean with water. 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

Transport class: This product is not classified for transport.

Section 15: Regulatory information

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

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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: H302: Harmful if swallowed.

H317: May cause an allergic skin reaction.

H319: Causes serious eye irritation.

H332: Harmful if inhaled.

H335: May cause respiratory irritation.

H360FD: May damage fertility. May damage the unborn child.

H360Fd: May damage fertility. Suspected of damaging the unborn child.

R22: Harmful if swallowed.

R36: Irritating to eyes.

R37: Irritating to respiratory system.

R43: May cause sensitisation by skin contact.

R60: May impair fertility.

R61: May cause harm to the unborn child.

Legal disclaimer: Alteration to this document is strictly prohibited. The format and formulas contained within this document comply with UK laws and legislation. Every effort has been made to ensure that the information in this MSDS is accurate. However some labels printed before the date on this document may have conflicting hazard information that can be disregarded in favour of the information as detailed above.