



**SAFETY DATA SHEET**  
BLACKFAST 181 CHEMICAL BLACKING SOLUTION

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Issued: 05/08/2008  
Revision No: 1

### 1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING

**Product name:** BLACKFAST 181 CHEMICAL BLACKING SOLUTION

**Product code:** 181

**Use of substance / preparation:** Chemical preparation for blacking of iron and steel

**Company name:** Blackfast Chemicals Limited

78 Coombe Road

New Malden

Surrey

KT3 4QS

United Kingdom

Tel: +44 (0) 20 8336 2900

Fax: +44 (0) 20 8336 0909

Emergency tel: +44 (0) 7985 975545

Email: sales@blackfast.com

### 2. HAZARDS IDENTIFICATION

**Main hazards:** Harmful by inhalation and if swallowed. Danger of cumulative effects. Causes burns. Limited evidence of a carcinogenic effect. May cause sensitisation by inhalation and skin contact. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**Workplace exposure limit:** This substance does not have a workplace exposure limit.

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

**Directive 1999/45/EC:** This preparation meets the criteria for classification as dangerous in accordance with Directive 1999/45/EC.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

**Hazardous ingredients:** POTASSIUM BIFLUORIDE 1-10%

EINECS: 232-156-2 CAS: 7789-29-9

[T] R25; [C] R34

- SELENIUM COMPOUNDS EXCEPT CADMIUM

SULPHOSELENIDE 1-10%

[T] R23/25; [Xn] R33; [N] R50/53

- NICKEL SULPHATE 1-10%

EINECS: 232-104-9 CAS: 7786-81-4

[Xn] R22; [Xn] R40; [Sens.] R42/43; [N] R50/53

- COPPER SULPHATE 1-10%

EINECS: 231-847-6 CAS: 7758-98-7

[Xn] R22; [Xi] R36/38; [N] R50/53

[cont...]

**4. 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.
- Eye contact:** Bathe the eye with running water for 15 minutes. Transfer to hospital for specialist examination.
- Ingestion:** Wash out mouth with water. If conscious, give half a litre of water to drink immediately.
- Inhalation:** Remove casualty from exposure ensuring one's own safety whilst doing so.

**5. FIRE-FIGHTING MEASURES**

- Extinguishing media:** Water spray. Water fog.
- Protection of fire-fighters:** Wear protective clothing to prevent contact with skin and eyes. Wear protective clothing to prevent contact with skin and eyes.

**6. ACCIDENTAL RELEASE MEASURES**

- Personal precautions:** Refer to section 8 of SDS for personal protection details.
- Environmental precautions:** Do not discharge into drains or rivers.
- Clean-up procedures:** Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method. Wash the spillage site with large amounts of water.

**7. HANDLING AND STORAGE**

- Handling requirements:** Ensure there is sufficient ventilation of the area.
- Storage conditions:** Store in cool, well ventilated area. Keep container tightly closed. Keep away from direct sunlight.
- Suitable packaging:** Must only be kept in original packaging.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

- Hazardous ingredients:** POTASSIUM BIFLUORIDE  
UK - 8 hour TWA: 2.5 mg/m<sup>3</sup>
- COPPER SULPHATE  
UK - 8 hour TWA: 1 mg/m<sup>3</sup>  
UK - 15 min. STEL: 2 mg/m<sup>3</sup>
- Engineering measures:** Ensure there is sufficient ventilation of the area.
- Respiratory protection:** Respiratory protection not required.

**Hand protection:** PVC gloves.  
**Eye protection:** Safety goggles.  
**Skin protection:** Plastic apron.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**State:** Liquid  
**Colour:** Blue  
**Odour:** Perceptible odour  
**Solubility in water:** Soluble  
**Boiling point/range°C:** 100  
**Relative density:** 1.18  
**pH:** 3.75

**10. STABILITY AND REACTIVITY**

**Stability:** Stable at room temperature.  
**Conditions to avoid:** Heat. Sources of ignition.  
**Haz. decomp. products:** In combustion emits toxic fumes of carbon dioxide.

**11. TOXICOLOGICAL INFORMATION**

**Acute effects:** Harmful by inhalation and if swallowed. Causes burns.  
**Sensitisation:** May cause sensitisation by inhalation and skin contact.  
**Repeated dose toxicity:** Danger of cumulative effects.  
**CMR effects:** Limited evidence of a carcinogenic effect.

**11. TOXICOLOGICAL INFORMATION (SYMPTOMS)**

**Skin contact:** There may be irritation and redness at the site of contact.  
**Eye contact:** There may be irritation and redness.  
**Ingestion:** There may be vomiting and diarrhoea.  
**Inhalation:** Exposure may cause coughing or wheezing.

**12. ECOLOGICAL INFORMATION**

**Mobility:** Soluble in water.  
**Persistence and degradability:** Not biodegradable.  
**Bioaccumulative potential:** No data available.  
**Other adverse effects:** Toxic to aquatic organisms.  
**PBT identification:** This substance is not identified as a PBT substance.

**13. DISPOSAL CONSIDERATIONS**

**Disposal operations:** Transfer to a suitable container and arrange for collection by specialised disposal company.  
**Waste code number:** 11 01 98

**Disposal of packaging:** Arrange for collection by specialised disposal company.

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

## 14. TRANSPORT INFORMATION

### ADR / RID

**UN no:** 3264 **ADR Class:** 8  
**Packing group:** III **Classification code:** C1  
**Shipping name:** CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.  
(BLACKFAST 181  
CONTAINS POTASSIUM BIFLUORIDE)  
**Labelling:** 8 **Hazard ID no:** 80



### IMDG / IMO

**UN no:** 3264 **Class:** 8  
**Packing group:** III **EmS:** F-A,S-B  
**Marine pollutant:** . **Labelling:** 8

### IATA / ICAO

**UN no:** 3264 **Class:** 8  
**Packing group:** III **Packing instructions:** 818(P&CA); 820(CAO)  
**Labelling:** 8

## 15. REGULATORY INFORMATION

**Hazard symbols:** Corrosive.

Dangerous for the environment.



**Risk phrases:** R20/22: Harmful by inhalation and if swallowed.

R33: Danger of cumulative effects.

R34: Causes burns.

R40: Limited evidence of a carcinogenic effect.

R42/43: May cause sensitisation by inhalation and skin contact.

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

**Safety phrases:** S23: Do not breathe fumes.  
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).  
S61: Avoid release to the environment. Refer to special instructions / safety data sheets.  
S63: In case of accident by inhalation, remove casualty to fresh air and keep at rest.

**Haz. ingredients (label):** POTASSIUM BIFLUORIDE; SELENIUM COMPOUNDS EXCEPT CADMIUM SULPHOSELENIDE; NICKEL SULPHATE; COPPER SULPHATE

**Note:** The regulatory information given above only indicates the principal regulations specifically applicable to the product described in the safety data sheet. The user's attention is drawn to the possible existence of additional provisions which complete these regulations. Refer to all applicable national, international and local regulations or provisions.

## 16. OTHER INFORMATION

**Other information:** This safety data sheet is prepared in accordance with Regulation (EC) No 1907/2006.  
\* indicates text in the SDS which has changed since the last revision.

**Risk phrases used in s.3:** R25: Toxic if swallowed.  
R34: Causes burns.  
R23/25: Toxic by inhalation and if swallowed.  
R33: Danger of cumulative effects.  
R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
R22: Harmful if swallowed.  
R40: Limited evidence of a carcinogenic effect.  
R42/43: May cause sensitisation by inhalation and skin contact.  
R36/38: Irritating to eyes and skin.

**Legal disclaimer:** The above information is believed to be correct but does

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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.