



SAFETY DATA SHEET
BLACKFAST 183 WORKING SOLUTION (20%)

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Compilation date: 10/01/2012
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Revision No: 6

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

1.1. Product identifier

Product name: BLACKFAST 183 WORKING SOLUTION (20%)

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

Use of substance / mixture: PC14: Metal surface treatment products, including galvanic and electroplating products.
PROC4: Use in batch and other process (synthesis) where opportunity for exposure arises
PROC13: Treatment of articles by dipping and pouring
ERC5: Industrial use resulting in inclusion into or onto a matrix

1.3. Details of the supplier of the safety data sheet

Company name: Blackfast Chemicals Ltd.
Unit 5 Russell House
Molesey Road
Walton-on-Thames
Surrey
KT12 3PE
UK

Tel: +44 (0)208 339 7370

Fax: +44 (0)208 339 7371

Email: sales@blackfast.com

1.4. Emergency telephone number

Emergency tel: +44(0)1865 407333

Section 2: Hazards identification

2.1. Classification of the substance or mixture

Classification under CLP: Met. Corr. 1: H290; Aquatic Acute 1: H400; Aquatic Chronic 1: H410; Skin Corr. 1B: H314

Most important adverse effects: Causes severe skin burns and eye damage. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects. May be corrosive to metals.

2.2. Label elements

Label elements:

Hazard statements: H314: Causes severe skin burns and eye damage.

H400: Very toxic to aquatic life.

H410: Very toxic to aquatic life with long lasting effects.

H290: May be corrosive to metals.

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Hazard pictograms: GHS05: Corrosion
GHS09: Environmental



Signal words: Danger

Precautionary statements: P260: Do not breathe dust/mist/spray.
P264: Wash hands, forearms and face thoroughly after handling.
P273: Avoid release to the environment.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
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.
P305+P351+P338: 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.
P321: Specific treatment (see instructions on this label)
P363: Wash contaminated clothing before reuse.
P391: Collect spillage.

2.3. Other hazards

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

Section 3: Composition/information on ingredients

3.2. Mixtures

Hazardous ingredients:

COPPER SULPHATE - REACH registered number(s): 01-2119520556-40-XXXX

EINECS	CAS	PBT / WEL	CLP Classification	Percent
231-847-6	7758-98-7	-	Acute Tox. 4: H302; Eye Irrit. 2: H319; Skin Irrit. 2: H315; Aquatic Chronic 1: H410; Aquatic Acute 1: H400	<5%

ORTHOPHOSPHORIC ACID - REACH registered number(s): 01-2119485924-24-XXXX

231-633-2	7664-38-2	-	Skin Corr. 1B: H314	<5%
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ZINC SULPHATE - REACH registered number(s): 01-2119474684-27-XXXX

231-793-3	7733-02-0	-	Acute Tox. 4: H302; Eye Dam. 1: H318; Aquatic Chronic 1: H410; Aquatic Acute 1: H400	<5%
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SELENIUM DIOXIDE - REACH registered number(s): 01-2120089867-33-XXXX

231-194-7	7446-08-4	-	Acute Tox. 3: H301+H331; STOT RE 2: H373; Aquatic Acute 1: H400; Aquatic Chronic 1: H410	<5%
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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.

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

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

Ingestion: There may be soreness and redness of the mouth and throat. There may be difficulty swallowing. Blood may be vomited. There may be bleeding from the mouth or nose.

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

Delayed / immediate effects: No data available.

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

Immediate / special treatment: Do not induce vomiting. 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.

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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: 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. Turn leaking containers leak-side up to prevent the escape of liquid. Refer to section 8 of SDS for personal protection details.

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. Absorb into dry earth or sand. 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 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. The floor of the storage room must be impermeable to prevent the escape of liquids.

7.3. Specific end use(s)

Specific end use(s): PC14: Metal surface treatment products, including galvanic and electroplating products.

Section 8: Exposure controls/personal protection

8.1. Control parameters

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Hazardous ingredients:

COPPER SULPHATE

Workplace exposure limits:

Respirable dust

State	8 hour TWA	15 min. STEL	8 hour TWA	15 min. STEL
UK	-	2mg/m3	0.2mg/m3	-

ORTHOPHOSPHORIC ACID...100%

UK	1	2	-	-
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SELENIUM DIOXIDE

UK	0.1mg/m3	-	-	-
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DNEL/PNEC Values

Hazardous ingredients:

ORTHOPHOSPHORIC ACID...100%

Type	Exposure	Value	Population	Effect
DNEL	Inhalation	1mg/m3	-	Local

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.

Respiratory protection: Self-contained breathing apparatus must be available in case of emergency.

Hand protection: PVC gloves. Butyl gloves. Nitrile gloves. Breakthrough time of the glove material > 8 hours.

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

Skin protection: Boots. Apron.

Environmental: Prevent from entering in public sewers or the immediate environment.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State: Liquid

Colour: Blue

Odour: Perceptible odour

Evaporation rate: No data available.

Oxidising: Non-oxidising (by EC criteria)

Solubility in water: Miscible in all proportions

Viscosity: No data available.

Boiling point/range°C: No data available.

Melting point/range°C: No data available.

Flammability limits %: lower: No data available.

upper: No data available.

Flash point°C: No data available.

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

Autoflammability°C: No data available.

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Relative density: 1.055

VOC g/l: Not applicable.

Vapour pressure: No data available.

pH: <2

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.

10.5. Incompatible materials

Materials to avoid: Strong oxidising agents. Strong acids.

10.6. Hazardous decomposition products

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

Section 11: Toxicological information

11.1. Information on toxicological effects

Hazardous ingredients:

COPPER SULPHATE

ORAL	HMN	LDLO	11	mg/kg
ORAL	RAT	LD50	482	mg/kg

ORTHOPHOSPHORIC ACID...100%

DERMAL	RBT	LD50	2470	mg/kg
ORL	RAT	LD50	1530	mg/kg

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ZINC SULPHATE

IVN	RAT	LD50	69900	µg/kg
ORL	MUS	LD50	245	mg/kg
ORL	RAT	LD50	1710	mg/kg

SELENIUM DIOXIDE

ORAL	RAT	LD50	68.1	mg/kg
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Relevant hazards for product:

Hazard	Route	Basis
Skin corrosion/irritation	DRM	Hazardous: calculated
Serious eye damage/irritation	OPT	Hazardous: calculated

Symptoms / routes of exposure

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

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

Ingestion: There may be soreness and redness of the mouth and throat. There may be difficulty swallowing. Blood may be vomited. There may be bleeding from the mouth or nose.

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

Delayed / immediate effects: No data available.

Section 12: Ecological information

12.1. Toxicity

Hazardous ingredients:

COPPER SULPHATE

ALGAE	48H EC50	0.1	mg/l
Daphnia magna	48H EC50	2.44	mg/l
Daphnia magna	96H LC50	0.1	mg/l
FISH	96H LC50	810	µg/l

SELENIUM DIOXIDE

ALGAE	72H ErC50	0.9	mg/l
DAPHNIA	48H EC50	4.8	mg/l
FISH	96H LC50	7.46	mg/l

12.2. Persistence and degradability

Persistence and degradability: Biodegradable.

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12.3. Bioaccumulative potential

Bioaccumulative potential: No 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/vPvB substance.

12.6. Other adverse effects

Other adverse effects: Negligible ecotoxicity.

Section 13: Disposal considerations

13.1. Waste treatment methods

Disposal operations: Transfer to a suitable container and 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.

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.
(Phosphoric Acid <3%)

14.3. Transport hazard class(es)

Transport class: 8

14.4. Packing group

Packing group: III

14.5. Environmental hazards

Environmentally hazardous: Yes

Marine pollutant: No

14.6. Special precautions for user

Special precautions: No special precautions.

Tunnel code: E

Transport category: 3

Section 15: Regulatory information

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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: according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

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

Phrases used in s.2 and s.3: H290: May be corrosive to metals.

H301+H331: Toxic if swallowed or if inhaled

H302: Harmful if swallowed.

H314: Causes severe skin burns and eye damage.

H315: Causes skin irritation.

H318: Causes serious eye damage.

H319: Causes serious eye irritation.

H373: May cause damage to organs ({{{0||message=<or state all organs affected, if known>||filter=(_)?ORGAN_.+}}}) through prolonged or repeated exposure ({{{1||message=<state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>||filter=(_)?EXP_ROUTE_.+}}}).

H400: Very toxic to aquatic life.

H410: Very toxic to aquatic life with long lasting effects.

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.