

# ALEC TIRANTI LIMITED

TOOLS, MATERIALS & EQUIPMENT FOR MODELLING, CARVING, SCULPTURE

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## Material Safety Data Sheet

### Haematite

#### 1. Identification of the Substance/mixture and of the company/undertaking

##### 1.1 Product identifier

Product name: BLACK DIAMOND NF BLACKING SOLUTION

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

Intended Use: Black Diamond solutions are used at 1 part to 3 parts water to produce a chemical black finish on mild steel and cast surfaces. ERC5: Industrial use resulting in inclusion into or onto a matrix PC14: Metal surface treatment products, including galvanic and electroplating products. PROC13: Treatment of articles by dipping and pouring

##### 1.3 Details of the supplier of the safety data sheet

Company Name: **Walsall Chemical Company Ltd**  
**Unit 2 Spring Lane Ind Estate**  
**Willenhall**  
**West Midlands**  
**WV12 4HW**  
**United Kingdom**

Tel: **01902 632617**  
Fax: **01902 635089**  
Email: **enquiries@walsall-chemical.co.uk**

##### 1.4 Emergency Telephone Number

#### 2. Hazards Identification

##### 2.1 Classification of the Substance or Mixture

Classification under CHIP: Xn: R20/21/22; Xn: R33; N: R51/53

Classification under CLP: Aquatic Chronic 2: H411

Most important adverse effects: Harmful by inhalation, in contact with skin and if swallowed. Danger of cumulative effects. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

##### 2.1 Label Elements

Label elements:

Hazard statements:

H411: Toxic to aquatic life with long lasting effects.

Hazard pictograms:

GHS09: Environmental



Precautionary statements:

P273: Avoid release to the environment.

P391: Collect spillage.

P501: Dispose of to.

Label elements under CHIP:

Hazard symbols: Harmful.

Dangerous for the environment.



Risk phrases:

R20/21/22: Harmful by inhalation, in contact with skin and if swallowed.

R33: Danger of cumulative effects.  
 R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
 S36/37: Wear suitable protective clothing and gloves.  
 S61: Avoid release to the environment. Refer to special instructions / safety data sheets.

**Safety phrases:**

**2.3 Other Hazards**

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

**3. Composition/information on Ingredients**

**3.1 Substances**

**3.2 Mixtures**

**COPPER SULPHATE**

EINECS	CAS	CHIP Classification	CLP Classification	Percent
231-847-6	7758-98-7	Xn: R22; Xi: R36/38; N: R50/53	Acute Tox. 4: H302; Eye Irrit. 2: H319; Skin Irrit. 2: H315; Aquatic Chronic 1: H410; Aquatic Acute 1: H400	1-10%

**SODIUM CHLORATE**

231-887-4	7775-09-9	O: R9; Xn: R22; N: R51/53	Ox. Sol. 1: H271; Acute Tox. 4: H302; Aquatic Chronic 2: H411	1-10%
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**SELENIUM COMPOUNDS EXCEPT CADMIUM SULPHOSELENIDE**

-	-	T: R23/25; Xn: R33; N: R50/53	Acute Tox. 3: H331; Acute Tox. 3: H301; STOT RE 2: H373; Aquatic Chronic 1: H410; Aquatic Acute 1: H400	
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**POTASSIUM FLUORIDE**

232-151-5	7789-23-3	T: R23/24/25	Acute Tox. 3: H331; Acute Tox. 3: H311; Acute Tox. 3: H301	1-10%
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**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. Consult a doctor.

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

**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**

**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. Nausea and stomach pain may occur. There may be vomiting.

**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:** Not applicable

**5. Fire Fighting Measures**

**5.1 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.

**5.3 Advice for firefighters**

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

**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

## 6.4 Reference to other sections

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

# 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

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)

No data available

# 8. Exposure Controls/Personal Protection

## 8.1 Control parameters

**Hazardous ingredients:**

**COPPER SULPHATE**

**Workplace exposure limit**

**Respirable dust**

State	8 hour TWA	15 min. STEL	8 Hour TWA	15min. STEL
UK	1mg/m <sup>3</sup>	2mg/m <sup>3</sup>		

## 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:**

Impermeable gloves.

**Eye protection:**

Safety glasses. Ensure eye bath is to hand.

**Skin protection:**

Impermeable protective clothing.

# 9. Physical and Chemical Properties

## 9.1 Information on basic physical and chemical properties

<b>State:</b>	Liquid
<b>Colour:</b>	Blue
<b>Odour:</b>	Characteristic odour
<b>Evaporation rate:</b>	No data available.
<b>Oxidising:</b>	<b>No data available.</b>
<b>Solubility in water:</b>	<b>Miscible in all proportions</b>
<b>Viscosity:</b>	<b>No data available.</b>
<b>Boiling point/range°C:</b>	No data available.
<b>Melting point/range°C:</b>	No data available.
<b>Flammability limits %: lower:</b>	Not applicable.
<b>upper:</b>	<b>Not applicable.</b>
<b>Flash point°C:</b>	Not applicable.
<b>Part.coeff. n-octanol/water:</b>	No data available.
<b>Autoflammability°C:</b>	Not applicable.
<b>Vapour pressure:</b>	No data available.
<b>Relative density:</b>	1.18 pH: 3.1
<b>VOC g/l:</b>	No data available

## 9.2 other information

No data available

# 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.

## 11. Toxicological Information

### 11.1 Information on toxicological effects

#### Hazardous ingredients:

##### COPPER SULPHATE

IVN	RAT	LD50 48900 µg/kg
ORL	MUS	LD50 369 mg/kg
ORL	RAT	LD50 520 mg/kg

##### SODIUM CHLORATE

ORL	MUS	LD50 8350 mg/kg
ORL	RAT	LD50 1200 mg/kg

##### POTASSIUM FLUORIDE

IPR	MUS	LD50 40030 µg/kg
IPR	RAT	LD50 64 mg/kg
ORL	RAT	LD50 245 mg/kg
SCU	FRG	LDLO 420 mg/kg

#### Relevant effects for mixture:

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

#### Symptoms and route 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. Nausea and stomach pain may occur. There may be vomiting.

**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.

## 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/vPvB substance

### 12.6 Other adverse effects

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

## 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.

## 14. Transport Information

### 14.1 UN number

**UN number:** UN3082

### 14.2 UN proper shipping name

**Shipping name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. CONTAINS SELENIOUS ACID & COPPER SULPHATE

### 14.3 Transport Hazard Class

**Transport class:** 9

### 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**

## **15. Regulatory Information**

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

**15.2 Chemical safety assesment**

## **16. 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 s.3: H271: May cause fire or explosion; strong oxidiser.

H301: Toxic if swallowed.

H302: Harmful if swallowed

H311: Toxic in contact with skin.

H315: Causes skin irritation.

H319: Causes serious eye irritation.

H331: Toxic if inhaled.

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>.

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

H411: Toxic to aquatic life with long lasting effects.

R9: Explosive when mixed with combustible material.

R20/21/22: Harmful by inhalation, in contact with skin and if swallowed.

R22: Harmful if swallowed.

R23/24/25: Toxic by inhalation, in contact with skin and if swallowed.

R23/25: Toxic by inhalation and if swallowed.

R33: Danger of cumulative effects.

R36/38: Irritating to eyes and skin.

R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R51/53: Toxic 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.

**date 11/03/2015 Issue No. 1**