



MATERIAL SAFETY DATA SHEET

1. PRODUCT & COMPANY IDENTIFICATION

Product Name: CROSSFIRE

Uses: Detergent degreaser.

Supplier Details: ED Oates Pty Ltd Trading As: RESEARCH PRODUCTS

Address: 13-21 Maygar Boulevard, Broadmeadows, Victoria, 3047

ABN 61 004 329 462 **ACN:** 004 329 462

Telephone: (03) 9355 6994

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Poisons Information Centre Telephone: 13 11 26

2. HAZARDS IDENTIFICATION

Hazardous according to criteria of NOHSC/ASCC

Xi; Irritant

Risk Phrases

R36/37/38 Irritating to eyes, respiratory system and skin.

Safety Phrases

S2 Keep out of reach of children.

S24/25 Avoid contact with skin and eyes.

S36/37 Wear suitable protective clothing.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Identity	Percentage	CAS No.
Sodium metasilicate	< 2	6834-92-0
2-Butoxyethanol	< 10	111-76-2
Non ionic Surfactant	< 5	Non Hazardous
Sodium Hydroxide	< 0.5	1310-73-2
Anionic surfactant	< 5	Non Hazardous
Colour	Trace	Non Hazardous
Ethanol	< 2	64-17-5
Phosphate Salt	< 5	Non Hazardous
Processing Aid	< 5	Non Hazardous
Water	> 50	7732-18-5

4. FIRST AID MEASURES

Swallowed: Drink 1 or 2 glasses of water. Do Not induce vomiting. Seek medical attention. Never give anything by mouth to an unconscious person.

Eye Exposure: Immediately flush eyes with plenty of water holding eyelids open. If eye irritation persists, seek medical advice.

Skin Exposure: Remove all contaminated clothing. Wash affected area with plenty of water. If skin irritation persists seek medical advice.

Inhalation: Remove victim from exposure to fresh air. If not breathing, apply artificial respiration. If breathing is difficult, give oxygen and seek medical attention.

Advice to Doctor

Treat symptomatically based on individual reactions of patient and judgement of doctor.

5. FIRE FIGHTING MEASURES

Hazchem Code: None Allocated

Product is water based and is unlikely to play a contributing role in any fire.

Special protective precautions and equipment for fire fighters

Fire fighters should use the appropriate equipment for the surrounding fire.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:

Use personal protective equipment.

Keep people away from and upwind of spill/leak.

Material can create slippery conditions.

Environmental precautions:

CAUTION: Keep spills and cleaning runoff out of drains and open bodies of water.

Methods & Materials for Containment & Clean Up:

Contain spills immediately with inert absorbent materials (e.g. sand, earth).

Transfer liquids and used absorbent material to separate suitable containers for recovery or disposal.

7. HANDLING & STORAGE

Handling:

Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Keep container tightly closed. Do not breathe vapours, mist or fumes.

Conditions for safe storage

Store in a cool, dry, well-ventilated area. Keep container tightly closed when not in use.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limit(s): There is no exposure data for this product. The Exposure Standards for 2-Butoxyethanol CAS No: 111-76-2; TWA: 20ppm (96.9mg/m³) STEL: 50ppm (242mg/m³). Absorption through skin may be a significant source of exposure.

Exposure controls:

Eye protection: Wear safety glasses with side-shields.

Hand protection: Wear suitable gloves.

Respiratory protection: If working in confined space or poor ventilation use appropriate respiratory protection.

Engineering measures: Use only in a well ventilated area. If handling large amounts a system of local and/or general exhaust is recommended.

9. PHYSICAL & CHEMICAL PROPERTIES

Physical state:	Liquid
Colour:	Blue
Odour:	Mild
pH:	12.5 – 13.0
Boiling point/range:	100-171°C Water
Melting point/range:	<0°C Water
Flash point:	Non combustible
Lower explosion limit:	Not applicable
Upper explosion limit:	Not applicable
Vapour pressure:	Not established
Relative vapour density:	Not established
Water solubility:	Miscible with water at all proportions
Relative density:	1.05
Viscosity, dynamic:	Not applicable
Evaporation rate:	Not established
Percent volatility:	Not determined

NOTE: The physical data presented above are typical values and should not be construed as a specification.

10. STABILITY & REACTIVITY

Hazardous Reactions:	Product is stable under normal conditions of use, storage and temperature.
Materials to avoid:	Strong acids.
Polymerization:	Product will not undergo polymerization.

11. TOXICOLOGICAL INFORMATION

No data is available for this material.

The information shown is for 2-Butoxyethanol which is present at less than 10%.

Toxicity Data

Oral LD50 Rat: 470mg/Kg. Skin LD50 Rabbit: 220mg/Kg. Inhaled LC50 Rat: 2211 mg/m³ (4hr). Skin Irritation Rabbit: Slight irritation. Eye Irritation: Irritation.

Note: No studies are available on the effects of long term exposure in humans. Studies indicate that repeated exposure causes blood, liver and kidney disorders in animals. Deaths in acute studies were generally caused by narcosis or respiratory failure, with kidney failure seen as a secondary cause.

The main toxic effect observed in acute and repeated dose animal studies is haemolysis. The effect varies between species with rats and mice the most susceptible, rabbits less susceptible and guinea-pigs and humans least susceptible. Changes in kidney, liver, spleen and lungs were found in animals exposed by ingestion, inhalation and skin absorption. Deaths usually result from CNS depression, lung damage and kidney injury.

Health Effects – Acute

Swallowed

May be harmful if swallowed. Ingestion may cause irritation of mucous membranes in mouth, pharynx, oesophagus and gastro-intestinal tracts. Symptoms include nausea, headache, vomiting, ataxia (impaired locomotor co-ordination), acidosis, drowsiness, Agitation, insomnia, changes in the blood pressure, pulmonary oedema and damage to the liver and kidneys.

Eye

Causes eye irritation.

Skin

Irritating to skin. Danger of skin absorption.

Inhaled

Inhalation causes irritation to the mucus membranes, coughing and dyspnoea. Chronic exposure causes damage to blood cells and blood in urine.

12. ECOLOGICAL INFORMATION

Ecotoxicity: No data available

Persistence and degradability: No information available for this product.

Mobility: No information available on this product.

Additional information

Environmental fate (exposure): Avoid contaminating waterways, drains and sewers.

Bioaccumulative potential: No information available for this product.

13. DISPOSAL CONSIDERATIONS

Environmental precautions: CAUTION: Keep spills and cleaning runoff out of municipal sewers and open bodies of water.

Disposal: Dispose of in accordance with local, state and federal regulations.

14. TRANSPORT INFORMATION

Classification for ROAD and RAIL transport;

Not regulated (Not dangerous for transport)

Classification for SEA transport (IMO-IMDG):

Not regulated (Not dangerous for transport)

Classification for AIR transport (IATA/ICAO):

Not regulated (Not dangerous for transport)

Hazchem Code: None allocated.

15. REGULATORY INFORMATION

Label

Classification and labelling have been performed according to regulations.

Poison Schedule None allocated

EPG Not applicable

Australia. Industrial Chemical (Notification and Assessment) Act (AUSTR). All ingredients in this preparation are listed in the Australian Inventory of Chemical Substances, AICS.

16. OTHER INFORMATION

Date of Preparation: 08-08-2008

Key to Abbreviations & Acronyms Used in MSDS:

<	Less Than
>	Greater Than
AICS	Australian Inventory of Chemical Substances
CAS	Chemical Abstracts Service (Registry Number)
LC50	LC stands for lethal Concentration. LC50 is the concentration of a material in air which causes death of 50% (one half) of a group of test animals.
LD50	LD stands for "Lethal Dose". LD50 is the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals.
NOHSC	National Occupational Health and Safety Commission.
OECD	Organisation for Economic Co-operation and Development.
PEL	Permissible Exposure Limit.
STEL	Short Term Exposure Limit
TLV	Threshold Limit Value
TWA	Time Weighted Average
UN	United Nations (Number)
deg C (°C)	Degrees Celsius
g	Gram
g/cm ³	Grams per cubic centimetre
g/l	Grams per litre
Immiscible	Liquids are insoluble in each other
kg	Kilogram
kg/m ³	Kilograms per cubic metre
ltr	Litre
m ³	Cubic metre
mg	Milligram
mg/24H	Milligrams per 24 hours
mg/kg	Milligrams per kilogram
mg/m ³	Milligrams per cubic metre
miscible	Liquids form one homogeneous liquid
ppm	Parts per million
wt	Weight

Literature References: Supplies MSDS

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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Version	7.1
Revision date:	08.08.2008
Print date:	10/09/10