



SAFETY DATA SHEET BROSTEEL ULTRA 60

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

PRODUCT NAME BROSTEEL ULTRA 60

SUPPLIER Bollom Fire Protection
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PRODUCT NO. BM0100006

APPLICATION Intumescent coating for structural steel.

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2 HAZARDS IDENTIFICATION

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

CLASSIFICATION (1999/45) R52/53.

ENVIRONMENT

The product contains a substance which is hazardous to aquatic organisms and which may cause long term adverse effects in the aquatic environment. See section 12.

HUMAN HEALTH

Prolonged contact may cause redness, irritation and dry skin. Prolonged and repeated contact with solvents over a long period may lead to permanent health problems.

3 COMPOSITION/INFORMATION ON INGREDIENTS

Name	EC No.	CAS-No.	Content	Classification (67/548)
White Spirit	265-185-4	64742-82-1	1.0-2.5%	Xn;R65. N;R51/53. R10,R66.
ZINC OXIDE	215-222-5	1314-13-2	< 1%	N;R50/53

The Full Text for all R-Phrases are Displayed in Section 16

4 FIRST-AID MEASURES

GENERAL INFORMATION

General first aid, rest, warmth and fresh air. Do not give victim anything to drink if they are unconscious. Get medical attention if any discomfort continues.

INHALATION

In case of inhalation of spray mist: Move person into fresh air and keep at rest. If breathing stops, provide artificial respiration. Place unconscious person on the side in the recovery position and ensure breathing. Get medical attention.

INGESTION

Get medical attention. NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS!

SKIN CONTACT

Use appropriate hand lotion to prevent defatting and cracking of skin. Immediately remove contaminated clothing. Wash off immediately with plenty of soap and water.

EYE CONTACT

Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes and get medical attention. Get medical attention promptly if symptoms occur after washing.

5 FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA

This product is not flammable. Use fire-extinguishing media appropriate for surrounding materials. Do not use water jet as an extinguisher, as this will spread the fire.

BROSTEEL ULTRA 60**SPECIAL FIRE FIGHTING PROCEDURES**

Use pressurised air mask if product is involved in a fire. Cool containers exposed to flames with water until well after the fire is out. Keep run-off water out of sewers and water sources. Dike for water control.

UNUSUAL FIRE & EXPLOSION HAZARDS

Fire causes formation of toxic gases.

SPECIFIC HAZARDS

The product is non-combustible. If heated, harmful vapours may be formed.

PROTECTIVE MEASURES IN FIRE

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

6 ACCIDENTAL RELEASE MEASURES**PERSONAL PRECAUTIONS**

Wear protective clothing as described in Section 8 of this safety data sheet.

ENVIRONMENTAL PRECAUTIONS

Do not allow to enter drains, sewers or watercourses. Spillages or uncontrolled discharges into watercourses must be IMMEDIATELY alerted to the Environmental Agency or other appropriate regulatory body.

SPILL CLEAN UP METHODS

Dam and absorb spillages with sand, earth or other non-combustible material. Collect in containers and seal securely. Clean with a detergent. Avoid the use of solvents.

7 HANDLING AND STORAGE**USAGE PRECAUTIONS**

Avoid spilling, skin and eye contact. Container must be kept tightly closed.

STORAGE PRECAUTIONS

Store in closed original container at temperatures between 5°C and 30°C. Protect from freezing and direct sunlight.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Name	Std	TWA - 8 hrs		STEL - 15 min		Notes
White Spirit	OES		600 mg/m ³			

INGREDIENT COMMENTS

WEL = Workplace Exposure Limits

PROTECTIVE EQUIPMENT**PROCESS CONDITIONS**

Provide eyewash station.

ENGINEERING MEASURES

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded.

HAND PROTECTION

Protective gloves should be used if there is a risk of direct contact or splash.

EYE PROTECTION

Wear splash-proof eye goggles to prevent any possibility of eye contact.

OTHER PROTECTION

Wear suitable protective clothing as protection against splashing or contamination.

HYGIENE MEASURES

DO NOT SMOKE IN WORK AREA! Wash at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke.

9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	Liquid
COLOUR	White / off-white
ODOUR	Odourless

BROSTEEL ULTRA 60

SOLUBILITY	Slightly soluble in water.		
BOILING POINT (°C)	100@ 760mmHg	MELTING POINT (°C)	<0
RELATIVE DENSITY	1.3 - 1.5 g/ml @25°C.	VAPOUR DENSITY (air=1)	Heavier than air
VAPOUR PRESSURE	2.4 kPa @20°C.	pH-VALUE, DILUTED SOLUTION	8.0 - 9.5
VISCOSITY	75 - 110 Poise @20°C.	FLASH POINT (°C)	N/A
FLAMMABILITY LIMIT - LOWER(%)	N/A	FLAMMABILITY LIMIT - UPPER(%)	N/A
VOLATILE ORGANIC COMPOUND (VOC)	21 g/l		

10 STABILITY AND REACTIVITY

STABILITY

Stable under normal temperature conditions and recommended use.

MATERIALS TO AVOID

Strong acids. Strong alkalis. Strong oxidising substances.

HAZARDOUS DECOMPOSITION PRODUCTS

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

11 TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION

No information available.

GENERAL INFORMATION

No specific health warnings noted.

SKIN CONTACT

Prolonged contact may cause redness and irritation.

EYE CONTACT

Slightly irritating.

Name	ZINC OXIDE
Toxic Dose 1 - LD 50	>2000 mg/kg (oral rat)
Toxic Dose 2 - LD 50	7950 mg/kg (oral-mouse)
Name	White Spirit
Toxic Dose 1 - LD 50	>5000 mg/kg (oral rat)
Name	Octylphenoxyethoxyethanol
Toxic Dose 1 - LD 50	2800 - 4190 mg/kg (oral rat)
Name	Boric acid
Toxic Dose 1 - LD 50	3500 - 4100 mg/kg (oral rat)

OTHER HEALTH EFFECTS

May cause skin and eye irritation. May irritate the respiratory system.

12 ECOLOGICAL INFORMATION

ECOTOXICITY

The product contains a substance which is harmful to aquatic organisms and which may cause long term adverse effects in the aquatic environment.

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Name White Spirit

LC 50, 96 Hrs, FISH mg/l 10

Mobility

Water: Insoluble, the product will spread over the surface and rapidly evaporate. Soil: The product has only slight mobility in the soil and will partially evaporate

Bioaccumulation potential

Likely to bio-accumulate, but with short retention of the order of a week or less.

Degradability

The product is readily biodegradable.

Name Octylphenoxyethoxyethanol

LC 50, 96 Hrs, FISH mg/l 4 - 8.9

EC 50, 48 Hrs, DAPHNIA, mg/l 18 - 26

Degradability

The product is >60% biodegradable.

Name Boric acid

Ecotoxicity

Not regarded as dangerous for the environment.

LC 50, 96 Hrs, FISH mg/l 133

Mobility

The product is soluble in water.

13 DISPOSAL CONSIDERATIONS

GENERAL INFORMATION

Waste to be treated as controlled waste. Disposal to licensed waste disposal site in accordance with local Waste Disposal Authority.

DISPOSAL METHODS

Dispose of waste and residues in accordance with local authority requirements. Absorb in vermiculite or dry sand and dispose of at a licensed hazardous waste collection point.

WASTE CLASS

EWC Code : 08 01 20

14 TRANSPORT INFORMATION

GENERAL

The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID).

No transport warning sign required.

15 REGULATORY INFORMATION

RISK PHRASES

R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

SAFETY PHRASES

S13 Keep away from food, drink and animal feeding stuffs.

S36/37 Wear suitable protective clothing and gloves.

S46 If swallowed, seek medical advice immediately and show this container or label.

S56 Dispose of this material and its container to hazardous or special waste collection point.

EU DIRECTIVES

System of specific information relating to Dangerous Preparations. 2001/58/EC. Dangerous Preparations Directive 1999/45/EC.

APPROVED CODE OF PRACTICE

Safety Data Sheets for Substances and Preparations. Classification and Labelling of Substances and Preparations Dangerous for Supply.

NATIONAL REGULATIONS

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2002. No. 1689. Workplace Exposure Limits 2005 (EH40)

16 OTHER INFORMATION

INFORMATION SOURCES

Croner's Emergency Spillage Guide Croner's Emergency First Aid Guide Croner's Substances Hazardous to Health

REVISION COMMENTS

Amended in line with HSE requirements.

ISSUED BY

D Charles

BROSTEEL ULTRA 60

REVISION DATE 08/06/2011

REV. NO./REPL. SDS GENERATED 3

SDS NO. 16273

SAFETY DATA SHEET STATUS

Approved.

DATE 08/06/2011

RISK PHRASES IN FULL

R10 Flammable.

R65 Harmful: may cause lung damage if swallowed.

R66 Repeated exposure may cause skin dryness or cracking.

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

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

DISCLAIMER

This 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. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.