

SAFETY DATA SHEET

BW SERIES: FE LIQUID METAL

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product Code	BW SERIES	Product Name	FE LIQUID METAL
Recommended use	A paint or paint constituent product		
Company Name	Promac Paints (Pty) Ltd		
Address	PO Box 75351 Lynwood Ridge 0040		
Telephone	012 804 7305		
Facsimile	012 804 2040		
Emergency Contact	- M.Soobramoney- 012 8047305		

SECTION 2. HAZARDS IDENTIFICATION

Overall Nature HAZARDOUS MIXTURE, DANGEROUS GOODS

Classification reference SANS10234 (1272/2008/EC) :

Classification of the substance or mixture

- (H316) Skin corrosion/irritation, Hazard Category 3
 (H402) Hazardous to the aquatic environment ^ AcuteHazard, Category 2

GHS label elements, including precautionary statements

Signal word Warning
Pictograms None

Hazard and Precautionary Statements

Hazard Statements
 Causes mild skin irritation
 Toxic to aquatic life

Precautionary Statements

Prevention Statements
 Avoid release to the environment. – if this is not the intended use.

Response Statements
 If skin irritation occurs: Get medical advice/ attention.

Disposal Statements

Dispose of contents/container in accordance with local/regional/ national/international regulations in accordance with local/regional/ national/international regulation

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Product type : Mixture

Generic name :

CAS No. : Not applicable

EU Index No : Not applicable

UN No : Not applicable

HAZARDOUS AND/OR OTHER RELEVANT COMPONENTS

Name	% m/m	EC Labels	CAS Number	EC Index
ALUMINIUM POWDER	<6 %	F	007429-90-5	013-002-00-1
DODECANE/ALKANE	<1.4 %	XN	000112-40-3	
AMMONIUM HYDROXIDE SOLUTION >25%	<0.5 %	C N	001336-21-6	007-001-01-2
TRIMETHYL-PENTADIOL- MONOISOBUTYRATE	<1.7 %		025265-77-4	n/q

Classification reference SANS10234 (1272/2008/EC) :

EC Index Classification | Hazard Code | Note |
 013-002-00-1 Water-react. 2;Flam. Sol. 1 | H261;H228 | T^ |
 007-001-01-2 Asp. Tox. 1 | H304;EUH066 | |
 Skin Corr. 1B;Aquatic Acute 1 | H314;H400 | B^ |

SECTION 4. FIRST AID MEASURES

Inhalation	Move to fresh air until dust subsides.
Skin	Always wash after being in contact with chemical substances.
Eyes	Rinse immediately with plenty of water. Get medical attention if discomfort persists.
Ingestion	Seek medical aid if any symptoms persist.

SECTION 5. FIRE FIGHTING MEASURES

Suitable extinguishing media :

Specific hazards arising from the chemical :

No direct explosion hazard expected.
Dried residues - combustible with toxic fumes.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Contain & collect - use an inert! CAUTION dry material can form explosive dust.
Wear protective equipment (see Section 8). Keep unprotected persons away.
Do not allow product to reach sewage system or any water course.
Remove ignition sources and provide sufficient ventilation

SECTION 7. HANDLING AND STORAGE

Storage :

Ensure that this substance is kept dry at all times. Store away from oxidisers.

Handling :

Ensure good ventilation/exhaustion at the workplace
Do not spray on a naked flame or any incandescent material
Eating, drinking and smoking in work areas is prohibited
Wash hands after use
Remove contaminated clothing and protective equipment before entering eating areas

Inhalation	In case of insufficient ventilation, use suitable respiratory protection.
Skin	Observe the rules of hygiene. Wash before eating, drinking or smoking.
Eyes	Avoid contact with dust. Use goggles. Never touch eyes with dirty hands or gloves.
Ingestion	Observe the rules of hygiene. Wash before eating, drinking or smoking

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

HAZARDOUS AND/OR OTHER RELEVANT COMPONENTS

Name	CAS Number	TWA OEL (mg/m3)	TWA OEL (ppm)	STOEL (mg/m3)	STOEL (ppm)	OEL Type	Vap.Press. (mmHg)
FE LIQUID METAL	Not applicable						
Components :							
ALUMINIUM POWDER	007429-90-5	10/4				T/R	
DODECANE/ALKANE	000112-40-3						.2
AMMONIUM HYDROXIDE SOLUTION >25%	001336-21-6	17	25	24	35	RL	153
TRIMETHYL-PENTADIOL- MONOISOBUTYRATE	025265-77-4	400	100			RL	

(CL/RL = Controlled/Recommended level 'S' = Skin annotation)

OEL Type : Mixture

Maintain air concentrations below occupational exposure standards, using engineering controls as necessary
Appropriate hand protection and protective clothing must always be used
Keep away from foodstuffs, beverages and feed
Wash hands before breaks and at the end of work

Personal protective equipment :

Skin PPE : Overall and impervious gloves (eg nitrile rubber)

Respiratory PPE : Air purifying respirator (eg cartridge type)

Eye PPE : Faceshield or solvent resistant goggles

HMIS Rating (USA) 1 - 0 - 0 - I (Health-Flam-Reactivity-PPE)

SAPMA Rating 3-H-E PPE : Gloves, Respirator and Eye protection



SPRAYBOOTH

Spraybooth Type Spraybooth complying with National Standards

Skin PPE Nitrile Gloves

Eyes PPE Faceshield or solvent resistant goggles

Respiratory Protection Air supplied full facepiece or head covering respirator suitable for organic vapours/particulates

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Property	Value
Appearance	Water based emulsion
Odour	Slight
pH	>8
Boiling point	>100°C
Melting point	not available
Flash point	n/a°C
Explosive prop	not available
Oxidizing prop	not available
Vapour pressure	not available
Density	1.084-1.184Kg/L
Water solubility	miscible
Fat solubility	Oil : insoluble
Partition coefficient	not available
Viscosity	75-85KU
Vapour density	not available
Evaporation rate	not available
Autoignition temperature	not available
L.E.L.	not available
U.E.L.	not available
% non volatile	29-34%

SECTION 10. STABILITY AND REACTIVITY

Stable under normal conditions

Very unstable with heat &/or water

SECTION 11. TOXICOLOGICAL INFORMATION

Name	CAS Number	LD50 Oral	LD50 Skin	LC50 Inhal(gas)	LC50 Inhal(mist)
-	-	mg/kg	mg/kg	ppmV	mg/lt
FE LIQUID METAL	Not applicable	52632 ATEoral	166667 ATEdermal	333333 ATEgas	-
Components :					
ALUMINIUM POWDER	007429-90-5				
DODECANE/ALKANE	000112-40-3				
AMMONIUM HYDROXIDE SOLUTION >25%	001336-21-6	350 mg (Rat)			
TRIMETHYL-PENTADIOL- MONOISOBUTYRATE	025265-77-4	3200 mg (Rat)	16ml/Gg		

Inhalation

Excessive exposure must be avoided. Treat as nuisance dust.

Skin

Direct contact to be avoided.

Eyes

Particulates may scratch eye or cause mechanical irritation.

Ingestion

No direct hazard expected. minimise possibility.

SECTION 12. ECOLOGICAL INFORMATION

May have short term environmental effects. Contain, monitor & remove

Acquatic toxicity : No further relevant information available

Persistence and degradability : No further relevant information available.

Bioaccumulative potential : No further relevant information available.

Mobility in soil : No further relevant information available.

Available ecological data of ingredients :

Name	CAS Number	Other Tox
AMMONIUM HYDROXIDE SOLUTION >25%	001336-21-6	HUMAN LDLO O

SECTION 13. DISPOSAL INFORMATION

Hazardous. Use reputable waste disposal contractors. Destroy used containers.
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

SECTION 14. TRANSPORT INFORMATION

UN Number Not applicable Not classified as dangerous for transport

SECTION 15. REGULATORY INFORMATION

Classification reference SANS10234 (1272/2008/EC) :

Classification of the substance or mixture

(H316) Skin corrosion/irritation, Hazard Category 3

(H402) Hazardous to the aquatic environment ^ AcuteHazard, Category 2

SECTION 16. OTHER INFORMATION

IN CASE OF ANY DISCOMFORT ALWAYS SEEK MEDICAL ADVICE.

HMIS Rating (USA) : 1 - 0 - 0 - I (Health-Flam-Reactivity-PPE)

Hazard (H) phrases associated with components

H228 : Flammable solid

H261 : In contact with water releases flammable gas

H304 : May be fatal if swallowed and enters airways

H314 : Causes severe skin burns and eye damage

H400 : Very toxic to aquatic life

Abbreviations

Code : Abbreviation : Meaning

C : : corrosive

F : : highly flammable

N : : dangerous for the environment

Xn : : harmful

=====: :
: : Associated pictogram code shown in brackets

H228 : Flam Sol 1/2 : (GHS02) Flammable solids, Hazard Category 1, 2

H261 : With water emits flam gas 2,3 : (GHS02) Substances and Mixtures which, in contact with water, emit flammable gases, Hazard Categories 2 and 3

H304 : Asp. Tox. 1 : (GHS08) Aspiration hazard, Hazard Category 1

H314 : Skin Corr/Irrit 1A/1B/1C : (GHS05) Skin corrosion/irritation, Hazard Category 1A, 1B, 1C

H400 : Aquatic. Acute 1 : (GHS09) Hazardous to the aquatic environment ^ AcuteHazard, Category 1

=====: :
: %m/m : Percent by mass

: ATE : Acute Toxicity Estimate

: CAS : Chemical Abstracts Service

: CHIP : Chemicals (Hazard Information and Packaging for supply)

: CLP : Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures

: CNS : Central Nervous System

: DIN : Standard of the German Institute for Standardisation

: DOT : Department of Transport

: EC : European Community

: EC50 : Effective Concentration (Median) for 50% of the response under test

: ECB : European Chemicals Bureau

: ECHA : European Chemicals Agency, Helsinki (http://echa.europa.eu/home_en.asp)

: EEC : European Economic Community

: EINECS : European Inventory of Existing Chemical Substances

: ELINCS : European List of Notified Chemical Substances

: GHS : Globally Harmonized System of Classification and Labelling of Chemicals

: HMIS : Hazardous Materials Information System (USA only)

: IATA : International Air Transport Association

: IMDG : International Maritime Dangerous Goods Code

: IMO : International Maritime Organization

: INS : Guidance on Identification and Naming of Substances under REACH, ECHA, 2007

: ISO : International Standards Organisation

: L.E.L. : Lower explosive limit

: LD50/LC50 : Median (50%) lethal dose/concentration

: mg/m3 : Milligrams per cubic meter

: MSDS : Material safety data sheet

: n.a. : Not available

: NC : No Classification

: No : Number

: OEL : Occupational exposure limit

: OEL-CL : Occupational exposure limit - control limit

: OEL-RL : Occupational exposure limit - recommended limit

: OHS Act : Occupational Health and Safety Act

: P statement : Precautionary statement

: PPE : Personal protective equipment

: ppm : Parts per million

: REACH : Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals
: RTDG : Regulations on the Transport of Dangerous Goods. Generic term that covers all modal transport regulations (ADR, RID, ADN, IMDG and ITDG)
: SABS : South African Bureau of Standards
: SANS : South African National Standards
: SAPMA : South African Paint Manufacturers Association
: SARA 313 : Toxic Release Inventory Reporting SRA Section 3
: SDS : Safety Data Sheet
: STOEL : Short-term occupational exposure limit
: STOT-RE : Specific Target Organ Toxicity - Repeated Exposure
: STOT-SE : Specific Target Organ Toxicity - Single Exposure
: TDG : Transport of Dangerous Goods
: TSCA : Toxic Substance Control Act (USA only)
: TWA : Time weighted average
: U.E.L. : Upper explosive limit
: UN : United Nations
: WHMIS : Workplace Hazardous Materials Information Systems (Canada only)
===== :

This SDS conforms with General Administrative Regulations of 6 Sept.1996 (SANS11014:2010/ISO11014:2009)
OELs derived from OHS Act Regulations for Dangerous Chemical Substances of 25 Aug.1995 (EH-42)
SAPMA Rating - South African Paint Manufacturers Association Guide to Health Hazards (SABS ARP 006:1991)
All information is given in good faith but without guarantee in respect of accuracy.
No responsibility is accepted for errors or omissions or the consequences thereof.

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