

# SAFETY DATA SHEET

## A.W.F. E.M. ALL PURPOSE METAL ACTIVATOR

### 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name	A.W.F. E.M. All Purpose Metal Activator
Supplier	A.W.F. SMS Ltd
Address	Unit I D Brymau 3 Estate River Lane Saltney Chester, CH4 8RQ
Phone Number	01244 - 677833
Fax Number	01244 - 677844

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/preparation

DIETHYLENETRIAMINE

CAS number	% by weight	EC number	Classification
000111-40-0	10 - 15%	203-865-4	Xn; R21/22, C; R34, R43

4,4-ISOPROPYLIDENEDIPHENOL

CAS number	% by weight	EC number	Classification
000080-05-7	1 - 5%	201-245-8	Repr. Cat. 3; R62, Xi; R37, R41, R43, R53

PHENOL

CAS number	% by weight	EC number	Classification
000108-95-2	1 - 5%	203-632-7	Muta. Cat. 3; R68, T; R23/24/25, Xn; R48/20/21/22, C; R34

See section 16 for the full text of the R-phrases declared above  
Occupational exposure limits, if available, are listed in section 8.

### 3. HAZARDS IDENTIFICATION

The preparation is classified as dangerous according to Directive 1999/45/EC and its amendments.

Classification Muta. Cat. 3; R68, C; R34, R43

Human health hazards Causes burns. Possible risk of irreversible effects. May cause sensitisation by skin contact.

See section 11 for more detailed information on health effects and symptoms.

### 4. FIRST AID MEASURES

Ingestion Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If potentially dangerous quantities of this material have been swallowed, call a physician immediately.

Skin contact Wash contaminated skin with soap and water. Remove contaminated  
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clothing and shoes. Wash clothing before reuse. Get medical attention if irritation occurs.

Eye contact In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Check for and remove any contact lenses. Get medical attention if irritation develops.

See section 11 for more detailed information on health effects and symptoms.

## 5. FIRE-FIGHTING MEASURES

Extinguishing media In case of fire, use water spray (fog), foam, dry chemical or CO<sub>2</sub>. Do not use water jet.

Special exposure hazards No specific hazard.

Hazardous thermal decomposition products

In a fire, the following may be released: carbon oxides (CO, CO<sub>2</sub>) nitrogen oxides (NO, NO<sub>2</sub> etc.)

Protection of fire-fighters

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## 6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Immediately contact emergency personnel. Keep unnecessary personnel away. Use suitable protective equipment (section 8).

Environmental precautions

Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

Methods for cleaning up

If emergency personnel are unavailable, vacuum or carefully scoop up spilt material and place in an appropriate container for disposal.

## 7. HANDLING AND STORAGE

Handling Do not get in eyes, on skin or on clothing. Wash thoroughly after handling.

Storage Store in original sealed containers at temperatures between 5° and 30°C.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredient name	Occupational exposure limits
Diethylenetriamine	EH40-WEL (United Kingdom (UK), 2005). Skin TWA: 4.3 mg/m 3 8 hours.
Phenol	EH40-WEL (United Kingdom (UK), 2005). Skin TWA: 19 mg/m 3 8 hours.

Exposure controls

Respiratory protection A respirator is not needed under normal and intended conditions of product use.

Hand protection Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. >8 hours (breakthrough time): nitrile rubber.

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Skin protection Protective clothing. Repeated or prolonged contact with irritants may cause dermatitis.

Eye protection Safety glasses

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Solid. (Colour paste)	Odour	Ammoniacal.
pH	Neutral.	Boiling point	>250°C (482°F)
Flash point	Closed cup: >150°C (302°F).	Flammability	Non-flammable.
Explosion limits	Not available.	Oxidising properties	Not available
Vapour pressure	Not available.	Relative density	1.73 g/cm <sup>3</sup>
Solubility	Insoluble in cold water.	Vapour density	Not available
Evaporation rate	Not available.	Octanol/water	Not available
(butyl acetate = 1)		partition coefficient	
Auto-ignition temperature	>450°C (842°F)	Melting point	Not available.

## 10. STABILITY AND REACTIVITY

Stability The product is stable.

Conditions to avoid None identified.

Hazardous decomposition products This product should be stored away from oxidising materials and strong bases. acids Amines peroxides These could cause the product to polymerise exothermically. Unintentional contact with them should be avoided.

Materials to avoid In a fire, the following may be released: carbon oxides (CO, CO<sub>2</sub>) nitrogen oxides (NO, NO<sub>2</sub> etc.)

## 11. TOXICOLOGICAL INFORMATION

### Potential acute health effects

Inhalation Corrosive to the respiratory system.

Ingestion Harmful if swallowed. May cause burns to mouth, throat and stomach.

Skin contact Harmful in contact with skin. Corrosive to the skin. May cause sensitisation by skin contact.

Eye contact Corrosive to eyes.

### Acute toxicity

Ingredient name	Test	Result	Route	Species
DIETHYLENETRIAMINE	LD50	1080 mg/kg	Oral	Rat
PHENOL	LD50	414 mg/kg	Oral	Rat
	LD50	670 mg/kg	Dermal	Rabbit

### Potential chronic health effects

#### 4,4-ISOPROPYLIDENEDIPHENOL

Carcinogenic effects	Mutagenic effects	Developmental toxicity	Impairs fertility
-	-	-	Repr. Cat. 3; R62

#### PHENOL

Carcinogenic effects	Mutagenic effects	Developmental toxicity	Impairs fertility
-	Muta. Cat. 3; R68	-	-

Carcinogenicity No carcinogenic effect.

Mutagenicity Contains material which may cause heritable genetic effects, based on animal data.

Reproductive toxicity No known significant effects or critical hazards.

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Over-exposure signs/symptoms

Inhalation No known significant effects or critical hazards.  
 Ingestion No known significant effects or critical hazards.  
 Skin Repeated skin exposure can produce local skin destruction or dermatitis.

## 12. ECOLOGICAL INFORMATION

Ingredient name	Species	Period	Result
DIETHYLENETRIAMINE	Fish (LC50)	96 hours	430 mg/l
	Daphnia (EC50)	48 hours	65 mg/l
4,4-ISOPROPYLIDENEDIPHENOL	Daphnia (EC50)	48 hours	10.2 mg/l

Persistence/degradability

Ingredient name	Aquatic half-life	Photolysis	Biodegradability
AWF E.M. All Purpose metal Activator	-	-	Not readily
4,4-ISOPROPYLIDENEDIPHENOL	-	-	Not readily
PHENOL	-	-	Not readily

Bioaccumulative potential

This product is not expected to bio accumulate through food chains in the environment.

Mobility Do not allow to enter drains or watercourses.

Other adverse effects No known significant effects or critical hazards.

## 13. DISPOSAL CONSIDERATIONS

Methods of disposal

The generation of waste should be avoided or minimised wherever possible. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Hazardous waste

The classification of the product may meet the criteria for a hazardous waste.

## 14. TRANSPORT INFORMATION

International transport regulations

UN number 1759

Proper shipping name Corrosive solid, n.o.s. (Polyamine mixture)

Class 8

Packing group III

Additional information Emergency schedules (EmS) F-A,S-B

## 15. REGULATORY INFORMATION

EU regulations

Hazard symbol/symbols Corrosive

Risk phrases R68- Possible risk of irreversible effects. R34- Causes burns. R43- May cause sensitisation by skin contact.

Safety phrases S24- Avoid contact with skin. S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S28- After contact

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with skin, wash immediately with plenty of soap and water. S36/37/39- Wear suitable protective clothing, gloves and eye/face protection. S45- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Contains:

DIETHYLENETRIAMINE	203-865-4
4,4-ISOPROPYLIDENEDIPHENOL	201-245-8
PHENOL	203-632-7

Product use Classification and labelling have been performed according to EU Directives 67/548/EEC and 1999/45/EC (including amendments) and the intended use.

- Consumer applications

Other EU regulations

EU statistical classification 29212900

(Tariff Code)

National regulations

United States

SARA 313 toxic chemical notification and release reporting 4,4-isopropylidenediphenol, phenol

Germany Hazard class for water 2

## 16. OTHER INFORMATION

Full text of R-phrases referred to in sections 2 and 3 - Europe

R68- Possible risk of irreversible effects. R62- Possible risk of impaired fertility. R23/24/25- Toxic by inhalation, in contact with skin and if swallowed. R21/22- Harmful in contact with skin and if swallowed. R48/20/21/22- Harmful: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed. R34- Causes burns. R37- Irritating to respiratory system. R41- Risk of serious damage to eyes. R43- May cause sensitisation by skin contact. R53- May cause long-term adverse effects in the aquatic environment.

Full text of classifications referred to in sections 2 and 3 - Europe

Muta. Cat.3 - Mutagen Category 3

Repr. Cat.3 - Toxic to reproduction Category 3

T - Toxic

C - Corrosive

Xn - Harmful

Xi - Irritant

Further information

Conforms to EU Directive 91/155/EEC, as amended by 2001/58/EC Canada - This product has been classified according to the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

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