

SAFETY DATA SHEET

A.W.F. SUPERQUARTZ RAPID ACTIVATOR

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name	A.W.F. Superquartz Rapid 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

Hazardous ingredients:

BENZYL ALCOHOL	10-30%	
EINECS: 202-859-9	CAS: 100-51-6	[Xn] R20/22
4-TERT-BUTYLPHENOL	10-30%	
EINECS: 202-679-0	CAS: 98-54-4	[Xi] R36/37/38; [N] R51/53
M-PHENYLENEBIS(METHYLAMINE)	10-30%	
EINECS: 216-032-5	CAS: 1477-55-0	[Xn] R20/22; [C] R34; [-] R52/53
TRIMETHYLHEXANE-1,6-DIAMINE	1-10%	
EINECS: 247-134-8	CAS: 25620-58-0	[Xn] R22; [C] R34; [Sens.] R43; [-]R52/53
NONYLPHENOL	10-30%	
EINECS: 246-672-0	CAS: 25154-52-3	[Xn] R22; [C] R34; [N] R50/53

3. HAZARDS IDENTIFICATION

Main hazards: Harmful by inhalation and if swallowed. Causes severe burns. May cause sensitisation by skin contact. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Possible risk of impaired fertility. Possible risk of harm to the unborn child.

Other hazards: Components of the product may affect the nervous system. May cause sensitisation by skin contact.

Severe respiratory irritant.

Severe skin irritant.

4. 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. Transfer to hospital if there are burns or symptoms of poisoning. NOTE TO PHYSICIANS: Application of corticosteroid cream has been effective in treating skin irritation.

continued on page 2

continued from page 1

Eye contact:

Bathe the eye with running water for 15 minutes. Transfer to hospital for specialist examination.

Ingestion:

If conscious, give half a litre of water to drink immediately. If unconscious, check for breathing and apply artificial respiration if necessary. If unconscious and breathing is OK, place in the recovery position. Do not induce vomiting. Give 1 cup of water to drink every 10 minutes. Transfer to hospital as soon as possible.

Inhalation:

Remove casualty from exposure ensuring one's own safety whilst doing so. If conscious, ensure the casualty sits or lies down. If breathing becomes bubbly, have the casualty sit and provide oxygen if available. If unconscious, check for breathing and apply artificial respiration if necessary. If unconscious and breathing is OK, place in the recovery position. Transfer to hospital as soon as possible.

5. FIRE-FIGHTING MEASURES

Extinguishing media: Alcohol resistant foam. Carbon dioxide. Dry chemical powder. Dry sand or limestone.

Exposure hazards: May generate ammonia gas. May generate toxic nitrogen oxide gases. Use of water may result in the formation of very toxic aqueous solutions. Do not allow run-off from fire fighting to enter drains or water courses. May generate toxic, irritating or flammable combustion products. Incomplete combustion may form carbon monoxide. Ammonia gas may be liberated at high temperatures. In case of incomplete combustion an increased formation of oxides of nitrogen (NOx) is to be expected. May generate carbon monoxide and ammonia gas. A sudden reaction and fire may result if product is mixed with an oxidizing agent. Personnel in vicinity and downwind should be evacuated.

Protection of fire-fighters: Wear protective clothing to prevent contact with skin and eyes. Wear self-contained breathing apparatus. A face shield should be worn. Retain expended liquids from fire fighting for later disposal.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Use self-contained breathing apparatus and chemically protective clothing. Wear suitable protective clothing, gloves and eye/face protection. Evacuate the area immediately. Open enclosed spaces to outside atmosphere. Environmental precautions: Contain the spillage using bunding. Do not discharge into drains or rivers.

Clean-up procedures: Approach suspected leak areas with caution. Place in appropriate chemical waste container. Transfer to a closable, labelled salvage container for disposal by an appropriate method. Clean up personnel must be equipped with self contained breathing apparatus and butyl rubber protective clothing. Refer to section 13 of SDS for suitable method of disposal.

7. HANDLING AND STORAGE

Handling requirements: Do not use sodium nitrite or other nitrosating agents in formulations containing this product. Suspected cancer causing nitrosamines could be formed. Emergency showers and eye wash stations should be readily accessible. Adhere to work practice rules established by government regulations.

continued on page 3

continued from page 2

Avoid breathing vapors and/or aerosols. Avoid contact with eyes. Ensure there is sufficient ventilation of the area. Avoid contact with eyes or skin. Use only in well-ventilated areas. Use personal protective equipment. Do not eat, drink or smoke.

Storage conditions:

Do not store near acids. Keep container tightly closed. Store in cool, well ventilated area. Do not store in reactive metal containers. Keep from freezing.

Suitable packaging: Do not store in reactive metal containers.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering measures:

Provide readily accessible eye wash stations and safety showers. Provide natural or explosive-proof ventilation adequate to ensure concentrations are kept below exposure limits.

Respiratory protection:

Self-contained breathing apparatus must be available in case of emergency.

Hand protection:

Neoprene gloves. PVC gloves. Butyl gloves. Nitrile gloves. Impermeable gloves. The breakthrough time of the selected gloves(s) must be greater than the intended use period.

Skin protection:

Protective clothing with elasticated cuffs and closed neck. Discard contaminated leather articles. Provide readily accessible eye wash stations and safety showers. Wash at the end of each workshift and before eating, smoking or using the toilet.

9. PHYSICAL AND CHEMICAL PROPERTIES

State: Liquid	Colour: Pale yellow
Odour: Ammoniacal	Oxidising: Non-oxidising (by EC criteria)
Solubility in water: Slightly soluble	Boiling point/range°C: >200.00
Melting point/range°C: No data	Flash point°C: >100
Part.coeff. n-octanol/water: No data	Autoflammability°C: No data
Vapour pressure: 10.34mmHg	Relative density: 0.99
pH: Alkaline	

10. STABILITY AND REACTIVITY

Stability: Stable under normal conditions.

Materials to avoid:

Sodium Hypochlorite. Organic Acids (i.e. acetic acid, citric acid etc) Mineral acids.

Product slowly corrodes copper, aluminium, zinc and galvanized surfaces.

CAUTION !N-Nitrosamines, many of which are known to be potent carcinogens, may be formed when the product comes in contact with nitrous acid, nitrites or atmospheres with high nitrous oxide concentrations.

Reactive metals (e.g. sodium, calcium, zinc etc) Materials reactive with hydroxyl compounds. Oxidizing agents.

Haz. decomp. products:

In case of fire hazardous decomposition products may be produced such as: Carbon Monoxide - Carbon Dioxide(CO₂)-Nitric Acid - Ammonia - Nitrogen Oxides(NO_x)- Nitrogen Oxide can react with water vapors to form corrosive nitric acid. - Aldehydes. Flammable hydrocarbon fragments (e.g. acetylene).

11. TOXICOLOGICAL INFORMATION

Acute toxicity: AWF Superquartz Rapid Activator

ORL RAT LD50 2,951 mg/kg

Hazardous ingredients: BENZYL ALCOHOL

IVN RAT LD50 53 mg/kg

ORL MUS LD50 1360 mg/kg

ORL RAT LD50 1230 mg/kg

NONYLPHENOL

ORL MUS LD50 1231 mg/kg

ORL RAT LD50 580 mg/kg

Chronic toxicity: Results from a battery of short term genotoxicity tests on this material or its components indicate mutagenic activity. The product or a component may be mutagenic, the data is inconclusive. Rats exposed orally to 800mg/kg benzyl alcohol for thirteen weeks exhibited CNS depression and histopathological changes in the brain, thymus and skeletal muscles. The No Observed Adverse Effect Level (NOAEL) was 400mg/kg. No evidence of carcinogenicity was seen in a two-year study with rats and mice.

Routes of exposure: Severe skin irritation. Corrosive to the skin of a Rabbit.

12. ECOLOGICAL INFORMATION

Ecotoxicity: AWF Superquartz Rapid Activator

ALGAE 72H IC50 700 mg/l

FISH 96H LC50 10 mg/l

Bioaccumulative potential: Benzyl alcohol - Low bioaccumulation potential.

Nonylphenol - Moderate bioaccumulation potential.

13. DISPOSAL CONSIDERATIONS

Disposal of packaging: 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

ADR / RID

UN no: 2735

ADR Class: 8

Packing group: II

Classification code: C7

Shipping name:

AMINES, LIQUID, CORROSIVE, N.O.S.

Labelling: 8

Hazard ID no: 80

IMDG / IMO

UN no: 2735

Class: 8

Packing group: II

EmS: F-A,S-B

Marine pollutant: YES

Labelling: 8

IATA / ICAO

UN no: 2735

Class: 8

Packing group: II

Packing instructions: 808(P&CA); 812(CAO)

Labelling: 8

15. REGULATORY INFORMATION

Hazard symbols: Corrosive. Dangerous for the environment.

Risk phrases: R20/22: Harmful by inhalation and if swallowed.

R35: Causes severe burns.

continued on page 5

continued from page 4

R43: May cause sensitisation by skin contact.

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

R62: Possible risk of impaired fertility.

R63: Possible risk of harm to the unborn child.

Safety phrases: S9: Keep container in a well-ventilated place.

S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

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).

S61: Avoid release to the environment. Refer to special instructions / safety data sheets. Precautionary phrases: This product contains nonylphenol and/or

nonylphenol ethoxylates ($\geq 0.1\%$) which are subject to Directive 2003/53/EC.

Water hazard class: Water hazard classification : 3- Highly water endangering (WGK)

Note: The regulatory information given above only indicates the principal regulations specifically applicable to the product described in the safety data sheet. The user's attention is drawn to the possible existence of additional provisions which complete these regulations. Refer to all applicable national, international and local regulations or provisions.

16. OTHER INFORMATION

Risk phrases used in s.2: R20/22: Harmful by inhalation and if swallowed.

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

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

R34: Causes burns.

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

R22: Harmful if swallowed.

R43: May cause sensitisation by skin contact.

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

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.

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 of issue 06/03/2007