

Material Safety Data Sheet

Page 1 of 8 Review date: OCTOBER 2016

Hazardous according to criteria of Worksafe Australia

NEUTRON XF

1. IDENTIFICATION OF THE MATERIAL & SUPPLIER

Product Name: NEUTRON XF

Synonyms: DE-SMUTTER

FOR 24 HOUR EMERGENCY CONTACT TELEPHONE: RING (03) 9799 9833

Use: ALUMINIUM DE-SMUTTER

Manufacturer

Australian Chemicals and Coatings P/L

69 Quantum Close, Dandenong South VIC 3175

Tel: (61 3) 9799 9833

Fax: (61 3) 9799 9033

Email: sales@auschem.com.au

Website: www.auschem.com.au

A.C.N. 007 345 351

A.B.N. 92 884 104 142

Emergency Advice All Hours:

A.H. Emergency No (03) 9799 9833 Technical Manager

Supplied by

Caswell Australia P/L

FACTORY 1, 51 ELM PARK DRIVE

HOPPERS CROSSING 3029

VICTORIA

PH 03 9741 7103

A/H 0427 70 80 90

2. HAZARD IDENTIFICATION

Hazardous according to criteria of NOHSC/ASCC

Hazardous according to the criteria of Worksafe Australia

Dangerous According to the Australian Code for the Transport of Dangerous Goods

Hazard Category: Harmful, Corrosive

Hazard Classification: HAZARDOUS SUBSTANCE, DANGEROUS GOOD

RISK PHRASES

R8 Contact with combustible material (e.g. rags or sawdust) may cause fire

R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.

R35 Causes severe burns.

SAFETY PHRASES

S1/2 Keep locked up and out of reach of children.

S7/9 Keep container tightly closed and in a well ventilated place.

S23 Do not breathe gas/fumes/vapour/spray

S26 In case of contact with eyes, rinse immediately with plenty of water and contact a doctor or Poisons Information Centre.

S30 Never add water to this product. (When mixing, always add product to water)

S36/37/39 Wear suitable protective clothing and gloves, pvc or neoprene. Wear eye & face protection.

S45 In case of accident or if you feel unwell, contact a doctor or Poisons Information Centre immediately and show this container or label.

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Poison Schedule: S6

Warning Statement:

HIGHLY CORROSIVE

CONTACT WITH EYES, EVEN FOR SHORT PERIODS CAN CAUSE BLINDNESS

CAUSES SEVERE BURNS WHICH ARE NOT LIKELY TO BE IMMEDIATELY PAINFUL OR VISIBLE

3. COMPOSITION / INFORMATION ON INGREDIENTS

SUBSTANCE NAME	Proportion	CAS Number
SULFURIC ACID	15% - 30%	7664-93-9
NITRIC ACID	20% - 40%	7697-37-2
HYDROFLUORIC ACID	0.1 - 1%	7664-39-3
WATER		

4. FIRST AID MEASURES

For advice, contact a Poisons Information Centre (Phone e.g. Australia 13 11 26; New Zealand 03 4747 000 [not after May 2005] or 008 764 766) or a doctor (at once)

First aiders should don personal protective equipment, including PVC or neoprene gloves and eye, protection before going to the aid of persons affected by this product.

FOR EXPOSURE BY ANY ROUTE - SEEK URGENT MEDICAL ATTENTION

Swallowed:

If swallowed, DO NOT induce vomiting. Seek urgent medical assistance.

Eye:

If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by the Poisons Information Centre or doctor or for at least 15 minutes. Seek urgent medical assistance.

Skin:

If skin contact occurs, immediately remove contaminated clothing. Flush skin under running water for 15 minutes.

Then apply calcium gluconate gel. Contact the Poisons Information Centre. Seek urgent medical assistance.

NOTE: Ensure that supplies of GLUCONATE GEL are within expiry date

Inhaled:

Remove victim to fresh air. Do Not use mouth-to-mouth method if victim inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

Administer oxygen if breathing is difficult. Seek urgent medical assistance.

First Aid Facilities:

Eye wash fountain, safety shower and normal wash room facilities, calcium gluconate gel, personal protective equipment for use by first-aiders, location of nearest hospital or medical center. (Enter details of your nearest medical help)

Advice to Doctor: RE HYDROFLUORIC ACID

The damage caused by exposure to the Hydrofluoric acid in this product is far more extensive than that caused by other acids. First aid and medical treatment appropriate to other acids is not beneficial with hydrofluoric acid burns. Hydrofluoric acid penetrates rapidly and deeply below fat layers, binding and depleting tissue calcium. Failure to commence the correct medical treatment promptly may be fatal.

Further information about the treatment of hydrofluoric acid burns can be obtained from the National Poisons Information Centre on 13 11 26

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5. FIRE-FIGHTING MEASURES

Fire/Explosion Hazard

EXTINGUISHING MEDIA: Use dry chemical, carbon dioxide, foam or water spray.

SPECIAL FIRE FIGHTING PROCEDURES: Self-contained breathing apparatus (SCBA) required for fire-fighting personnel. If possible to do so safely, shut off fuel to fire. Use water spray to spray to cool fire-exposed surfaces and to protect personnel. Avoid spreading burning liquid with water used for cooling fire exposed containers when using water spray, boil-over may occur when the product temperature reaches the boiling point of water.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Corrosive material. May react with some metals to form potential flammable and toxic gases.

Flammability

Material does not burn.

Containers may explode when heated.

Run-off may pollute waterways.

May be transported in molten form.

Fire will produce irritating, toxic and / or corrosive gases.

HAZCHEM CODE: 2XE

6. ACCIDENTAL RELEASE MEASURES

EMERGENCY ACTION:

Keep unnecessary people away; Isolate hazard area and deny entry. Stay upwind; Keep out of low areas. Do not walk or touch spilt material unless wearing personal protection as outlined under MSDS.

SPILL OR LEAK PROCEDURE:

Shut off ignition sources, no flares, smoking or flames in hazard area. Stop leak if you can do it without risk. Water spray may reduce vapour; but it may not prevent ignition in closed spaces.

SMALL SPILLS:

Take up with sand, dirt or vermiculite. DO NOT use sawdust. Use non-sparking tools. Place into labelled drum(s) for later disposal.

LARGE SPILLS:

Notify Emergency Services (Police or Fire Brigade). Tell them exact location, nature, hazards, quantities, type of vehicle and any other information that would be helpful. Contain spill. Remove all ignition sources and safely stop flow of spill. Bund area. Trained personnel should wear Personal Protective equipment as highlighted in this MSDS. Blanket the spill with foam or use water fog to disperse vapour clouds. Consult an expert regarding disposal of this product.

7. HANDLING AND STORAGE

Store in a cool place and out of direct sunlight. Store away from sources of heat or ignition, strong alkalis, acids and oxidizing agents. All equipment must be earthed. Store in original packages as approved by manufacturer. Check all fittings, valves, reticulation (piping) and any ancillary equipment for leaks. A supplied air respirator or a Self-Contained Breathing Apparatus (SCBA) for emergencies should be available and checked regularly. For further information please refer to the Engineering Controls of this MSDS.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Standards

No exposure standards are available for this product, however, the following exposure standards have been assigned by the National Occupational Health & Safety Commission (NOHSC) to the following components of the product:

SULFURIC ACID

(Worksafe Australia)

[TWA]1 mg/m³

[STEL]3 mg/m³

References: H

NITRIC ACID

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(Worksafe Australia)
[TWA]2 ppm 5.2 mg/m³

[STEL]4 ppm 10 mg/m³

References: H

HYDROFLUORIC ACID

(Worksafe Australia)
[TWA]3 ppm 2.6 mg/m³
[STEL]Peak limitation

References: H

Engineering Controls

Toxic and corrosive material. Single significant exposure may cause death. Maintain adequate ventilation at all times. Prevent accumulation of gas(es) in hollows or sumps. Eliminate any sources of ignition. DO NOT enter room unless monitored by another person (ie buddy-buddy system).

Personal Protection Equipment

CLOTHING: PVC or Neoprene apron or splash suit.

GLOVES: PVC or Neoprene.

EYES: Chemical goggles or face-shield to protect eyes.

RESPIRATORY PROTECTION: Avoid breathing of gases/vapours. Select and use respirators in accordance with AS/NZS 1715/1716. When gases exceed the exposure standards then the use of an atmosphere-supplied, positive pressure demand self-contained or airline breathing apparatus supplied air respirator complying with the requirements of AS/NZS 1715 is recommended. Filter capacity and respirator type depends on exposure levels. Use acid-gas filter. If entering spaces where the airborne concentration of a contaminant is unknown then the use of a Self-contained breathing apparatus (SCBA) with positive pressure air supply complying with AS/NZS 1715 / 1716, or any other acceptable International Standard is recommended.

Ensure that items of personal protective equipment are carefully cleaned after use to prevent them being a source of exposure.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	CLEAR STRAW COLORED SOLUTION
Boiling Point Melting Point:	Not established
Vapour Pressure:	Not established
Specific Gravity:	1.2
Flash Point:	Non flammable
Flammability Limits:	Not applicable
Solubility in Water:	Completely soluble
pH Extremely acidic	Less than 1

10. STABILITY AND REACTIVITY

STABILITY:

Stable under normal conditions of use.

HAZARDOUS DECOMPOSITION PRODUCTS:

Emits acrid smoke and fumes when heated to decomposition.

HAZARDOUS POLYMERIZATION:

Will not occur.

INCOMPATIBILITIES:

Strong alkalis, acids, nitrates and oxidizing agents.

CONDITIONS TO AVOID:

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Heat, flames, ignition sources and incompatibles.

11. TOXICOLOGICAL INFORMATION

No adverse health effects are expected, if the product is handled in accordance with this Material Safety Data Sheet and the product label. Symptoms and effects that may arise if the product is mishandled and overexposure occurs are:

ACUTE HEALTH EFFECTS

Swallowed:

Toxic if swallowed.

Will cause severe burns to the mouth, mucous membranes, throat, oesophagus and stomach with effects including: Spontaneous vomiting with diarrhoea and possible bloody stools. Small quantities, approximately 20-50 ml, ingested (swallowed) will cause death.

Eye:

Will cause severe burns to the eyes with effects including: Pain, tearing, corneal opacity and blindness. If prompt action is not taken, permanent eye damage will occur.

Skin:

Toxic by skin contact.

Will cause severe burns to the skin, with effects including; Redness, blistering, localised pain, dermatitis and deep burns.

Inhaled:

Harmful if inhaled.

Mists or vapours will cause severe irritation to the nose, throat and respiratory system with effects including: Dizziness, headache, coughing, loss of co-ordination, tightening of the chest, chest pains and possible pulmonary oedema.

Chronic:

Prolonged or repeated exposure may lead to irreversible damage to health.

Prolonged or repeated skin contact will lead to necrosis (death) of the skin.

Potential Delayed Impact: All personnel need to be aware that HF burns can cause little pain at first but be causing significant damage. ALL burns should be taken seriously & given proper treatment.

SUSDP POISON SCHEDULE S6 (Refer to information section 15)

12. ECOLOGICAL INFORMATION

Ecotoxicity:

No Data available

Mobility:

No Data available

Persistence / Degradability:

No Data available

Chemical Fate Information:

No Data available

This substance may cause long term adverse effects in the aquatic environment.

This substance may cause long term adverse effects in the environment

13. DISPOSAL CONSIDERATIONS

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Refer to appropriate authority in your State. Dispose of material through a licensed waste contractor. Advise toxic and/or corrosive nature if applicable. Normally suitable for disposal by approved waste disposal agent.

14. TRANSPORT INFORMATION

Road Transport

UN Number: 2922

Proper Shipping Name: CORROSIVE LIQUID, TOXIC, N.O.S. - SULPHURIC / NITRIC / HYDROFLUORIC ACID SOLUTION

Dangerous Goods Class: 8

Subsidiary risk: 6.1

Packing Group: II

Label: Xn, C

Air Transport

UN Number: 2922

Proper Shipping Name: CORROSIVE LIQUID, TOXIC, N.O.S. - SULPHURIC / NITRIC / HYDROFLUORIC ACID SOLUTION

Dangerous Goods Class: 8

Subsidiary risk: 6.1

Packing Group: II

Label: Xn, C

Sea Transport

UN Number: 2922

Proper Shipping Name: CORROSIVE LIQUID, TOXIC, N.O.S. - SULPHURIC / NITRIC / HYDROFLUORIC ACID SOLUTION

Dangerous Goods Class: 8

Subsidiary risk: 6.1

Packing Group: II

Label: Xn, C

Classified as a CLASS 6 (TOXIC) and CLASS 8 (CORROSIVE) Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail, 6th Edition.

Dangerous goods of Class 6 (Toxic) and Class 8 (Corrosive) are incompatible in a placard load with any of the following:

- Class 1
- Class 3, if the Class 3 dangerous goods are nitromethane
- Class 4.3
- Class 5
- Class 8, if the Class 6 dangerous goods are cyanides and the Class 8 dangerous goods are acids; and are incompatible with food and food packaging in any quantity.

Emergency information(Transport):

Dangerous Goods - Initial Emergency Response Guide (SAA/SNZ HB76:1997)

For TOXIC AND/OR CORROSIVE SUBSTANCES - Guide No: 37

HAZCHEM CODE: 2XE

15. REGULATORY INFORMATION

Poison Schedule: S6

This material is a Scheduled S6 Poison and must be stored, handled and used according to the appropriate regulations.

EPG: 37

Inventory Status:

Inventory Status

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Australia (AICS)	Y
United States (TSCA)	Y
Canada (DSL)	Y
Europe (EINECS/ELINCS)	Y
Japan (MITI)	Y
South Korea (KECL)	Y

Y = all ingredients are on the inventory.

16. OTHER INFORMATION

Date of Preparation: APRIL 2016

Issue date: MARCH 2009

Supersedes: MARCH 2009

Reasons for Update:

Review

Key Legend Information:

NOHSC - National Occupational Health & Safety Commission {Formerly Worksafe}[Aust]

SUSDP - Standard for the Uniform Scheduling of Drugs and Poisons [Aust]

TWA - Time Weighted Average [Int]

STEL - Short Term Exposure Limit [Int]

AICS - Australian Inventory of Chemical Substances

EPA - Environmental Protection Agency [Int]

NIOSH - National Institute for Occupational Safety and Health [US]

AS/NZS 1715 - Selection, use and maintenance of respiratory protective devices. [Aust/NZ]

AS/NZS 1716 - Respiratory protective devices. [Aust/NZ]

IATA - International Aviation Transport Authority [Int]

ICAO - International Civil Aviation Organization [Int]

IMO - International Maritime Organisation. [Int]

IMDG - International Maritime Dangerous Goods [Int]

United Nations Recommendations for the Transport of Dangerous Goods and Globally Harmonized System for the classification and labelling of Chemicals. [Int]

EU - European Union

[Aust/NZ] = Australian New Zealand

[Int] = International

[US] = United States of America

Literature References:

(Note: Some documents in this list are updated periodically)

Federal office of Road Safety (FORS) (1998) Australian Dangerous Goods Code 6th Edition. Australian Transport Council

Hydrogen fluoride Hazardtext - Hazard Management

<http://csi.micromedex.com/DATA/DT/DT118-8.htm> (accessed 30/01/03)

National Industrial Chemicals Notification and Assessment Scheme: Full Public Report - Priority Existing Chemical No. 19 (NICNAS, 2001) This report can be found at: <http://www.nicnas.gov.au/publications/>

NICNAS Safety Info Sheets; No 20 - Hydrofluoric acid <http://www.nicnas.gov.au/publications/>

NOHSC (1999) List of designated hazardous substances [NOHSC: 10005 (1999)]. Sydney National Occupational Health and Safety Commission.

NIOSH (National Institute for Occupational Safety and Health) (1996). Documentation for Immediately Dangerous to Life or Health Concentrations (IDLHs) Hydrogen fluoride (as F). IDLH Documentation.

<http://www.cdc.gov/niosh/7664393.html> (accessed 17/8/98)

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PACIA (Plastics and Chemicals Industries Association) (1997) Hydrofluoric acid code of practice. Australia: Melbourne, PACIA.

Removal of the heading of *Poison Schedule [Aust]*, in section 3 and 15 of this Material Safety Data Sheet (MSDS) makes this a valid health and safety document in other international jurisdictions/countries. For full compliance please contact your Federal, State or Local regulators for further information.

Disclaimer

This MSDS summarises our best knowledge of the health and safety hazard information available on the product and the measures to be used to handle and use the product safely. Each user should read this MSDS and consider the information in connection with the way the product is intended to be handled or used.

Principal References:

Information supplied by manufacturer, reference sources including the public domain.

END OF MSDS