



The Chemical Company

MATERIAL SAFETY DATA SHEET

According to NOHSC: 2011 (2003) and HSNO CoP 8-1 (September 2006)

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product name: FLO-CHEM AGI CLEAN

Other name: None allocated

Recommended use: Concrete agitator cleaner.

Supplier: BASF Construction Chemicals Australia Pty Ltd. BASF New Zealand Ltd.
ABN 46 000 450 288

Address: 11 Stanton Road, 45 William Pickering Drive,
Seven Hills, NSW, 2147 Albany, Auckland,
Australia New Zealand

Telephone number: +61 2 8811 4200 +64 9 414 7233

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2. HAZARDS IDENTIFICATION

Hazard classification: HAZARDOUS SUBSTANCE. DANGEROUS GOODS
Hazardous according to the criteria in the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001

Hazard Designation: C Corrosive

HSNO Classification

6.1C	Acutely toxic (inhalation)
8.2C	Corrosive to dermal tissue
8.3A	Corrosive to ocular tissue

Risk phrase(s):

R23	Toxic by inhalation.
R35	Causes severe burns.
S24/25	Avoid contact with skin and eyes.
S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice

Safety phrase(s):

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 label where possible).

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS Number	Proportion
Hydrochloric acid	7647-01-0	< 20%
Phosphoric acid	7664-38-2	< 20%
Chelating agent(s)	Proprietary	< 10%
Surfactant(s)	Proprietary	< 10%
Corrosion inhibitor(s)	Proprietary	< 5%
Water	7732-18-5	to 100%

4. FIRST AID MEASURES

Inhalation: If inhalation occurs, remove victim from exposure to fresh air location. Avoid becoming a casualty, wear PPE as per Section 8. If difficulty with breathing, administer oxygen. If breathing has stopped administer artificial respiration. If symptoms occur, seek immediate medical attention

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- Eyes: While holding eyes open, gently flood with plenty of fresh running water for at least 15 minutes or until advised by a medical practitioner. If irritation persists or recurs seek medical attention. Skilled personnel should only undertake removal of contact lenses after an eye injury.
- Skin: Remove contaminated clothing. Wash contacted areas thoroughly with soap and running water. If irritation develops seek medical attention. Wash contaminated clothing before re-use.
- Ingestion: Do not induce vomiting; immediately wash out mouth with water and give large quantities of water to drink; get immediate medical attention. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquids into lungs. Do NOT give anything by mouth to an unconscious person.

5. FIRE FIGHTING MEASURES

- Suitable extinguishing media: Chemical extinguisher, carbon dioxide (CO₂) or Foam. DO NOT use water jets.
- Hazards from combustion products: Non flammable, however, may evolve toxic gases (phosphorus oxides, hydrogen chloride) when heated to decomposition
- Precautions and equipment for fire fighters: Non flammable, however, upon contact with metals, explosive hydrogen vapour is generated. Toxic gases may be evolved when heated to decomposition. Remain upwind and notify those downwind of the hazard. Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire. Water reactive product.
- Hazchem code: 2X

6. ACCIDENTAL RELEASE MEASURES

- Methods and materials for containment and clean up: Caution corrosive material. Stop leak if possible without risk. Wear PPE as per Section 8.
- Small Spills:** should be contained by bunding with dry inert filler (vermiculite, sand or soil). Cover with sodium bicarbonate or a 50-50 mixture of sodium bicarbonate and calcium hydroxide. Check that all material is neutralised and pH is in range 6-8. Neutralised material may then be shovelled into appropriately labelled plastic drums for disposal. Wash down area with excess water.
- Large Spills:** Contact emergency services. Clear area of unprotected personnel. Ventilate area where possible. Wear PVC gloves, a full-face Type B (inorganic and acid gas) respirator or air-line respirator, full-length PVC coveralls and boots. Cover with sodium bicarbonate or a 50-50 mixture of sodium bicarbonate and calcium hydroxide. Collect for complete neutralisation and appropriate disposal by an approved commercial waste disposal organisation. Eliminate all ignition sources within at least 50 metres. Do not allow water inside any collection container.
- Environmental precautions: Do not allow to enter into drains, sewers or waterways.

7. HANDLING AND STORAGE

- Precautions for safe handling: Before use, carefully read the product label. Use of safe work practices are recommended to avoid eye or skin contact and inhalation. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas.
- Conditions for safe storage: Store in a secured, cool, dry, well ventilated area, removed from oxidising agents, alkalis, most metals, alcohols, acids, dinitroaniline, cyanides, sulphides, heat sources and foodstuffs. Ensure containers are labelled, protected from physical damage and securely sealed when not in use. Check regularly for leaks and spills.

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Large storage areas should have appropriate ventilation. Also store removed from water and organic materials.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<u>Engineering Controls:</u>	Use in well ventilated areas. Do not inhale vapours. In poorly ventilated areas, mechanical extraction ventilation is recommended. Maintain vapour levels below the recommended exposure standard.
<u>Exposure Standards</u>	Hydrogen chloride (CAS No. 7647-01-0): ES-TWA: 5 ppm (7.5 mg/m ³) – Peak Limitation NZ ES-TWA: 5 ppm (7.5 mg/m ³) – Ceiling Phosphoric acid (CAS No. 7664-38-2): ES-TWA: 1 mg/m ³ ES-TWA: 3 mg/m ³ NZ ES-TWA: 1 mg/m ³
<u>Personal Protective Equipment (PPE):</u>	
<u>Respiratory protection:</u>	Avoid mists. Where an inhalation risk exists, wear a full-face, Type B (inorganic gases and acid vapours) respirator or an air-line respirator.
<u>Glove type (AS2161):</u>	Impervious gloves e.g. PVC or nitrile rubber gauntlets
<u>Eye protection:</u>	Chemical goggles, face shield or safety glasses with side shields.
<u>Clothing:</u>	General protective clothing such as overalls or long pants and a long sleeve shirt. When using large quantities or where heavy contamination is likely, wear PVC or rubber boots and a chemical apron. Remove contaminated clothing as soon as possible. Launder thoroughly before reusing. For large spills or ponded areas impervious footwear is essential.
<u>Other:</u>	Use barrier creams to protect skin from contact with the material. Always wash hands before smoking, eating, drinking or using the toilet and after finishing work. Observe the usual precautions when handling chemicals.

9. PHYSICAL AND CHEMICAL PROPERTIES

<u>Appearance:</u>	Brown liquid
<u>Odour:</u>	Slight, characteristic
<u>pH:</u>	approx. 1
<u>Solubility in water:</u>	Soluble
<u>Specific gravity:</u>	approx. 1.15 g/cm ³ at 23°C
<u>Flash point:</u>	Non-flammable
<u>Boiling point:</u>	> 100°C
<u>Evaporation rate:</u>	Not available

10. STABILITY AND REACTIVITY

<u>Chemical stability:</u>	Stable under recommended conditions of storage. Not sensitive to mechanical impact. Avoid moisture.
<u>Incompatible materials:</u>	Strongly incompatible with oxidising agents (eg hydrogen peroxide), alcohols (eg ethanol), alkalis (eg sodium hydroxide), most metals

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(especially amphoteric metals such as aluminium and brass), strong acids (eg hydrofluoric acid), dinitroaniline, cyanides (eg hydrogen cyanide, thiocyanate's), sulphides (eg hydrogen sulphide), and heat sources. Corrodes most materials when moist. Also incompatible with water (reacts exothermally upon dilution), chlorinated products (eg carbon tetrachloride) and organic materials.

Hazardous decomposition products: May evolve toxic gases (phosphorus oxides, hydrogen chloride) when heated to decomposition.

Hazardous reactions: Hazardous polymerisation will not occur.

11. TOXICOLOGICAL INFORMATION

Health Hazard Summary: Highly corrosive – toxic. Use safe work practices to avoid eye or skin contact and vapour inhalation. Exposure may result in severe and permanent eye, skin and respiratory damage

Inhalation: Corrosive – toxic. Over exposure may result in irritation, coughing and bronchitis. At high level exposure, may result in ulceration, lung tissue damage, chemical pneumonitis and pulmonary oedema. Symptoms may be delayed following exposure. Low volatility reduces inhalation hazard unless sprayed/heated.

Eyes: Highly corrosive – severe irritant. Contact may result in pain, lacrimation, redness, conjunctivitis, corneal burns and ulceration with possible permanent damage.

Skin contact: Corrosive – severe irritant. Contact may result in rash, dermatitis, blistering and severe burns. Effects (e.g. burning sensation) may be delayed.

Ingestion: Highly corrosive – toxic. Ingestion may result in burns to the mouth and throat, nausea, vomiting, ulceration of the gastrointestinal tract, oedema, rapid pulse, shock, unconsciousness, convulsions and death.

Toxicity Data: HYDROCHLORIC ACID (7647-01-0)
LC50 (Inhalation): 1108 ppm/1 hour (human - respiratory irritation)
LD50 (Ingestion): 900 mg/kg (rabbit)
PHOSPHORIC ACID
LC50 (Ingestion): 1530 mg/kg (rat)
LD50 (Skin): 2740 mg/kg (rabbit)

12. ECOLOGICAL INFORMATION

Ecology: SOIL: If released to soil, this product will dissolve the carbonate based soil materials due to its acidic nature.

Water: A significant amount may reach the water table where dilution and dispersion will help to reduce the acidic concentration. Aquatic life may be threatened if the pH falls below 5.

Do not discharge into sewers or waterways.

13. DISPOSAL CONSIDERATIONS

Disposal method and containers: Wearing approved PPE as per Section 8, neutralise to pH 6-8 by SLOW addition to a saturated sodium bicarbonate solution or similar weak basic solution. Do NOT use strong bases such as sodium hydroxide. Once neutralised, solution may be flushed to sewer. Alternatively, dispose of material through a licensed waste contractor. Always dispose of in accordance with relevant local legislation. Refer to local Waste Management Authority.

Special precautions (landfill/incineration): None known

14. TRANSPORT INFORMATION

<u>UN number:</u>	3264
<u>UN proper shipping name:</u>	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Contains HYDROCHLORIC ACID & PHOSPHONIC ACID)
<u>Dangerous goods class:</u>	8
<u>Subsidiary risk:</u>	None allocated
<u>Packing group:</u>	III
<u>Hazchem code:</u>	2X

15. REGULATORY INFORMATION

NICNAS / AICS:	All components are listed
Poisons Schedule:	Schedule 6
HSNO Classifications:	6.1C, 8.2C, 8.3A
ERMA Group Standard:	HSR002542
ERMA / NZIoC:	All components are listed
Tracking:	Not required
Approved Handler:	Not required

16. OTHER INFORMATION

Reason for issue: Update to combined Australia and New Zealand MSDS.

MIXING ACIDS: When mixing acids with water (diluting), caution must be taken as heat will be generated which may cause violent splattering. Always add a small volume of acid to a large volume of water with constant agitation (stirring). NEVER ADD WATER TO ACID AS A VIOLENT HEAT REACTION WILL OCCUR WITH SPLATTERING.

This MSDS summarises our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this MSDS and consider the information in the context of how the product will be handled and used in the workplace including in conjunction with other products. If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company. Our responsibility for products sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available on request. All information contained in this MSDS is as accurate and up-to-date as possible. No warranty expressed or implied is made as to its accuracy, reliability or completeness.