

Safety Data Sheet (SDS) FLUSHFLO/ 01

According to SANS 11014:2010 & 10234:2008
Revision Date: 2017/06/02

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First print date: 2017/06/02

Version: 1.0

SECTION 1. IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY/UNDERTAKING

Product identifier:

Identification as on the label/Trade name: **FLUSHSOL®FLO**

Additional information: Product code FLUSHFLO/01.

Relevant identification uses of the substance and uses advised against:

Identified uses: Tank cleaner.

Uses advised against: Use only as directed.

Details of the supplier of the Safety Data Sheet:

AECI Limited
14 Field Road, LILANTON

Emergency telephone numbers:

Griffon Poison information centre: 082 446 8946
Poisons Information Helpline: 0861 555 777
AECI Limited: (011) 823 8000 (o/h) Spill Tech: 086 100 0366 (a/h)

SECTION 2. HAZARD IDENTIFICATION

Classification of the substances or mixture

The mixture is classified according to

SANS 10234:2008, Regulation EC 1272/2008 [EU-GHS/CLP]	
Hazard classes/Hazard categories	Hazard statement
Acute toxicity oral (Category 4)	H302
Skin corrosion (Category 1B)	H314
Serious eye damage (Category 1)	H318
Specific Target Organ Toxicity single exposure (Category 3)	H335

For full text of H statements see section 16

The most important adverse effects

The most important adverse physiochemical effects: None.

The most important adverse human health effects: Causes serious skin burns, eye damage and may cause respiratory irritation.

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Label elements

Hazard pictograms:



Signal Word: Danger

Hazard Statements: H302 Harmful if swallowed. H314 Causes severe skin burns and eye damage. H335 May cause respiratory irritation.

Precautionary Statements: P102: Keep out of reach of children. P264 Wash thoroughly after handling. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P302+P352: IF ON SKIN: Wash with plenty of soap and water. P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P313 call a POISON CENTER/doctor if you feel unwell.

Special labelling of certain mixtures: None

Other hazards: None.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture: Mixture

Ingredients: Classification is based on the following ingredients which may be present.

Substance name (IUPAC/EC)	CAS –No.	Concentration % by weight	Classification
	EC-No.		EC1272/2008
Mono-ethanolamine (2 aminoethanol)	141-43-5	10-20%	Acute toxicity oral, dermal, inhalation (Category 4) H302+H312+H332. Skin corrosion (Category 1 B) H314. STOT SE 3 H335.
	205-483-3		
Isotridecanoethoxylate, polymer	-	10-20%	Acute toxicity oral (Category 4) H302.Serious eye damage (Category 1) H318
	-		

For full text of H statements see section 16

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4. FIRST AID MEASURES

Description of first aid measures:

In case of inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

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In case of skin contact: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately.

In case of 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 immediately.

In case of ingestion Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention.

Most important symptoms and effects, both acute and delayed:

Inhalation: May cause respiratory irritation.

Ingestion: May be harmful if swallowed, may cause burns to mouth, oesophagus and stomach.

Skin contact: Causes skin severe skin burns.

Eye contact: Causes eye serious eye damage.

Indication of any immediate medical attention and special treatment needed:

Treat symptomatically.

SECTION 5. FIRE -FIGHTING MEASURE

Extinguisher media:

Suitable extinguisher media:

SMALL FIRE: Water spray, dry powder and foam.

LARGE FIRE: Water spray, dry powder and foam.

Unsuitable extinguishing media: Do not use water jet as an extinguisher, as this will spread the fire.

Special hazards arising from the mixture:

Harmful vapours, evolution of fumes/fog.

Advice for fire-fighters:

Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear. Be sure to use an approved/certified respirator or equivalent.

SECTION 6. ACCIDENTAL RELEASE

Personal precautions, protective equipment and emergency procedures:

For non-emergency personnel: No action shall be taken without appropriate training or involving any personal risk. Keep unnecessary and unprotected personnel away from the spillage, splash goggles and gloves.

For emergency responders: Splash goggles, gloves. Avoid inhalation of product, wear respirator if necessary.

Environmental precautions:

Contain contaminated water/firefighting water. Do not discharge into drains/surface waters/groundwater.

Methods for containment and cleaning up:

For small spills: Contain spilled material if possible. Collect in suitable and properly labelled containers. Absorb with materials such as: sand, earth, vermiculite or diatomaceous earth.

For large spills Keep unnecessary people away; isolate hazard area and deny entry. Pump off product, for residues pick-up with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in well labelled container for disposal according to local regulations.

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Reference to other sections:

See section 7 for information on safe handling.

See section 8 for information on personal protection equipment.

See section 13 for information on disposal.

Additional information:

None.

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling:

Avoid prolonged contact with concentrate. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Do not get in eyes or on skin or clothing.

Protective measures: Observe directions on label and instructions for use.

Advice on general occupational hygiene: Do not eat drink or smoke when handling this product.

Conditions for safe storage, including incompatibilities:

Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use.

Specific end uses:

Use as directed. Use original container.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters:

Occupational exposure limits (OEL):

2 aminoethanol TWA OEL-RL 3ppm, 8 mg/m³, STEL OEL-RL 6ppm, 15 mg/m³.

Biological exposure indices (BEI):

None.

Exposure control:

Appropriate engineering controls: Use in well ventilated area but provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below level of overexposure.

Hygiene measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection: Use safety glasses. If there is a potential for exposure to vapours/mist which could cause eye discomfort, wear chemical goggles that are dust tight.

Hand protection: Use chemical resistant gloves. Examples of preferred glove barrier materials include Nitrile/butadiene rubber, Polyethylene, Ethyl vinyl alcohol laminate, Polyvinyl alcohol, Polyvinyl chloride.

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Body protection: Protective clothing complying with an approved standard should be worn if a risk assessment indicates skin contamination is possible.

Respiratory protection: Usually, no respirator is necessary when using this product. Respiratory protection such as an approved respirator must be used when there is a potential to exceed the exposure limit requirements or guidelines.

Environmental exposure controls: Prevent product from entry into sewers and water courses.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance (form): Liquid.

Colour: Clear yellow.

Odour: No information available.

Odour threshold: No information available.

pH (at concentration): 11-13 (as is).

Melting point/range (°C): No information available.

Boiling point/range (°C): No information available.

Flash point (°C): No information available.

Evaporation rate: No information available.

Flammability (solid, gas, liquid): No information available.

Ignition temperature (°C): No information available.

Upper/lower flammability/explosive limits: No information available.

Vapour pressure (20°C): No information available.

Vapour density: No information available.

Specific gravity: No information available.

Water solubility: No information available.

Octanol/Water partition coefficient: No information available.

Auto-ignition temperature: No information available.

Decomposition temperature: No information available.

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Viscosity, dynamic (cPa s): No information available.

Physical hazards:

Explosive properties: None.

Other information:

Fat solubility (solvent-oil to be specified): No information available.

Bulk density: No information available.

Dissociation constant in water (p Ka): No information available.

Oxidation-reduction potential: No information available.

SECTION 10. STABILITY AND REACTIVITY

Reactivity:

The product is stable under normal conditions.

Chemical stability:

Stable under normal storage conditions for 2 years.

Possibility of hazardous reactions:

Hazardous polymerization will not occur.

Conditions to avoid:

There are no known conditions that are likely to result in a hazardous situation.

Incompatible materials:

Other caustics, halogens, alkalines, acids and reactive metals.

Hazardous decomposition products:

Not known.

SECTION 11. TOXICOLOGICAL INFORMATION

Toxicokinetics, metabolism and distribution:

Non-human toxicological data: No Information available.

Method: No Information available.

Dosage: No Information available.

Routes of administration: No Information available.

Results: No Information available.

Absorption: No Information available.

Distribution: No Information available.

Metabolism: No Information available.

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Excretion: No Information available.

Information on toxicological effects:

Acute toxicity:

Isotridecanoethoxylate, polymer

Acute toxicity oral LD₅₀ for rats 500-2000 mg/kg (experimental calculated data).

Dermal LD₅₀ >2000 mg/kg.

Chronic toxicity: No information available.

Skin corrosion/irritation:

Isotridecanoethoxylate, polymer

For rabbit, non-irritant.

Serious eye damage/irritation:

Isotridecanoethoxylate, polymer

Irreversible damage for rabbit.

Respiratory or skin sensitization: No information available.

Germ cell mutagenicity: No information available.

Carcinogenicity: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity: No information available.

STOT-single exposure: No information available.

STOT-repeated exposure: No information available.

Aspiration hazard: No information available.

SECTION 12. ECOLOGICAL INFORMATION

Toxicity:

Isotridecanoethoxylate, polymer

Fish: LC₅₀ (96 h) for *Leciscus idus* 1-10 mg/ℓ.

Aquatic invertebrates: EC₅₀ (48 h) 1-10 mg/ℓ.

Aquatic plants: EC₅₀ (72 h) 1-10 mg/ℓ.

Microorganisms/effect on activated sludge: EC₁₀ (17 h) >10 000 mg/ℓ.

Persistence and degradability:

Isotridecanoethoxylate, polymer

Elimination information:

>=90% Bismuth active substance.

>60% CO₂ formation relative to the theoretical value (28 d) readily biodegradable.

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Bioaccumulative potential:

Isotridecanoethoxylate, polymer

Accumulation in organisms is not expected.

Mobility in soil:

Isotridecanoethoxylate, polymer

Assessment transport between environment compartments: The substance will not evaporate into the atmosphere from the water surface. Adsorption to solid soil phase is possible.

Results of PBT& vPvB assessment:

Isotridecanoethoxylate, polymer

Does not fulfil the requirement.

Other adverse effects:

No information available.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste treatment methods:

Treat as hazardous waste and dispose of in accordance with municipal, provincial and national regulations.

Product/ packaging disposal:

Treat as hazardous waste and dispose of in accordance with municipal, provincial and national regulations.

SECTION 14. TRANSPORT INFORMATION

Information:

	Land transport (ADR/RID)	Sea transport (IMDG)	Air transport (ICAO/IATA)
UN-Number	3266	3266	3266
UN Proper shipping name:	CORROSIVE LIQUID, BASIC, INORGANIC N.O.S (2 Aminoethanol)	CORROSIVE LIQUID, BASIC, INORGANIC N.O.S (2 Aminoethanol)	CORROSIVE LIQUID, BASIC, INORGANIC N.O.S (2 Aminoethanol)
Transport hazard class:	8	8	8
Packaging group:	III	III	III
Marine pollutant:	No	No	No
Special precautions for user:	Not required	Not required	Not required
Transport in bulk according to MARPOL 73/78 Annex II and the IBC code	Not required	Not required	Not required

Inland waterways: Not required.

Emergency response information: No information.

SECTION 15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation for the mixture:

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Relevant information regarding authorization: Occupational Health and Safety Act 1993 Regulation for Hazardous Chemical Substances.

ACGIH: American Conference of Governmental Industrial Hygienists (ACGIH)

Relevant information regarding restrictions:

EU regulations: Regulation EC 1272/2008 [EU-GHS/CLP]

Other National regulations: National Road Traffic Act, 1996 (ACT NO. 93 of 1996).

SANS 10228:2012- The identification and classification of dangerous goods for transport by road and rail modes.

National Environmental Management: Waste Act 59 of 2008.

Chemical Safety Assessment carried out? No

SECTION 16. OTHER INFORMATION

Indication of changes:

GHS aligned

Relevant classification and H statements (number and full text):

STOT SE 3- Specific Target Organ Toxicity single exposure (Category 3).

H302 Harmful if swallowed. H302+H312+H332 Harmful if swallowed, in contact with skin or if inhaled. H314 Causes severe skin burns and eye damage. H318 Causes serious eye damage. H335 May cause respiratory irritation.

Training instructions:

Use as indicated on the label, special training may be required for application.

Further information:

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

Notice to readers:

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees.

This information is furnished without warranty, and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.