

Safety Data Sheet

AEROPHOS BT



AEROCHEM

1. Identification

Product identifier	AEROPHOS BT
Product code	FLAEROBT20LT ; FLAEROBT205LT
Other means of identification	N.Av.
Recommended use of the chemical and restrictions on use	Concrete floor and cement mixer cleaner. Not recommended for any other use not detailed on product data sheet or label.
Manufacturer	<p>AEROCHEM Inc. 5977 Trans Canada Highway Pointe-Claire, QC H9R 1C1 Canada</p> <p>General Information: 1-888-592-5837</p> <p>www.aerochem.ca info@aerochem.ca</p>
Emergency phone number	<p>INFOTRAC®: 1-800-535-5053 International call collect: 1-352-323-3500 24 hours/day, 7 days/week</p>

2. Hazard identification

Summary	Avoid all contact with the skin, eyes and clothing. Do not breathe vapours, mists or aerosols. Do not ingest. If medical advice is needed, have this SDS or label at hand. Wear eye protection, gloves and other protective clothing that are adapted to the task being performed and the risks involved.
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WHMIS 2015/GHS/OSHA HCS 2012



Corrosive to Metals (Category 1)
 Acute toxicity, inhalation (Category 3)
 Skin corrosion/irritation (Category 1)
 Serious eye damage/eye irritation (Category 1)
 Health hazards not otherwise classified (HHNOC)

DANGER

H290: May be corrosive to metals
 H331: Toxic if inhaled
 H314: Causes severe skin burns and eye damage
 H3xx: May cause burns and serious injury to the respiratory tract
 P234: Keep only in original packaging.
 P260: Do not breathe vapours and spray.
 P264: Wash face, hands and any exposed skin thoroughly after handling.
 P271: Use only outdoors or in a well-ventilated area.
 P280: Wear protective gloves, protective clothing, eye protection and/or face protection.
 P301+330+331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
 P303+361+353: IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water and soap or take a shower if necessary.
 P363: Wash contaminated clothing before reuse.
 P304+P340+P311: IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/ physician.

P305+351+338: IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

P310: Immediately call a POISON CENTER or a doctor.

P390: Absorb spillage to prevent material damage.

P403+233: Store in a well ventilated place. Keep container tightly closed.

P405: Store locked up.

P406: Store in corrosive resistant container.

P501: Dispose of contents and container to a licensed chemical disposal agency in accordance with local, regional and national regulations.

3. Composition/information on ingredients

Common name	CAS	Weight % content
Hydrochloric acid	7647-01-0	25 - 40 %
2-Butoxyethanol	111-76-2	10 - 30 %
Polyethylene glycol mono(branched p-nonylphenyl) ether	127087-87-0	1 - 5 %

Note: The manufacturer withholds the actual concentration range of the ingredients as a trade secret.

4. First-aid measures

Inhalation	Move person to fresh air. If breathing is difficult, give oxygen by trained personnel. If not breathing, give artificial respiration. If a problem develops or persists, seek medical attention.
Skin contact	Flush with water for at least 15 minutes. Remove contaminated clothing and wash before reuse. If a problem develops or persists, seek medical attention.
Eye contact	IMMEDIATELY flush with plenty of water. Remove contact lenses if easy to do. Flush with water for at least 20 minutes. Hold eyelids apart to rinse properly. Seek medical attention immediately. Have an ophthalmologist make an evaluation of eye injury.
Ingestion	DO NOT induce vomiting, unless recommended by medical personnel. Never give anything by mouth if victim is unconscious or convulsing. If victim is conscious wash out mouth with water and give 1-2 glasses of water to drink. If spontaneous vomiting occurs, keep head below hip level to prevent aspiration into the lungs. Seek medical attention or contact a Poison Centre immediately.
Other	No information available.
Symptoms	May cause severe eye irritation or eye damage. May cause skin irritation and burns. May cause irritation and burns to the respiratory tract.
Notes to the physician	Treat according to person's condition and specifics of exposure. If gastric lavage is performed, suggest endotracheal and/or esophageal control. Danger from lung aspiration must be weighed against toxicity when considering emptying the stomach. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

5. Fire-fighting measures

Suitable extinguishing media	Dry chemicals, water spray, chemical foam, carbon dioxide (CO ₂). Do not use a heavy water jet.
Specific hazards arising from the chemical	Emits toxic and corrosive fumes under fire conditions.
Special protective equipment	Firefighters must wear self contained breathing apparatus with full face mask. Firefighting suit may not be efficient against chemicals.

Special protective actions for fire-fighters	Use water spray to cool fire-exposed containers. Prevent run-off from fire control or dilution from entering streams, sewers or drinking water supply.
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6. Accidental release measures

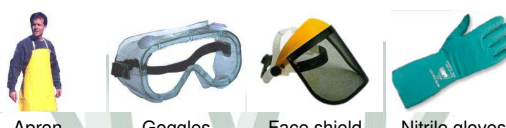
Personal precautions, protective equipment and emergency procedures	Do not touch damaged containers or spilled material. Make sure to wear personal protective equipment mentioned in this Safety Data Sheet.
Environmental precautions	Prevent product from entering drains and release to the environment. For a large spill, consult the Department of Environment or the relevant authorities.
Methods and materials for containment and cleaning up	Ventilate the area well. Stop leak, if it's possible to do so without risk. Absorb with inert material (soil, sand, vermiculite) and place in an appropriate waste disposal clearly identified. Finish cleaning by rinsing with water contaminated surface. Dispose via a licensed waste disposal contractor.

7. Handling and storage

Precautions for safe handling	Use only in well ventilated area. Avoid all contact with the skin, eyes and clothing. Do not breathe vapours, mists or aerosols. Wear eye protection, gloves, respiratory protection and other protective clothing that are adapted to the task being performed and the risks involved. Never add water directly in this product. Add this product instead in small quantities to stirring water to avoid splashing. Keep containers tightly closed when not in use. Do not eat, do not drink and do not smoke during use. After use, wash hands with soap and water. Wash contaminated clothing before reuse.
Conditions for safe storage, including any incompatibilities	Store tightly closed and in properly labelled containers in a cool, dry and well ventilated place. Store away from bases and incompatible materials (see section 10). Keep away from direct sunlight and heat. Keep away from freezing.
Storage temperature	10 to 40°C (50 to 104°F)

8. Exposure controls/personal protection

Immediately Dangerous to Life or Health	Hydrogen Chloride: 50 ppm. 2-Butoxyethanol: 700 ppm.			
Hydrochloric acid	Ceiling	2 ppm 5 ppm	7.5 mg/m ³	ACGIH , BC, ON RSST (RP)
2-Butoxyethanol	TWA (8h)	20 ppm 20 ppm	97 mg/m ³	ACGIH , BC, ON RSST
Appropriate engineering controls	Provide sufficient mechanical ventilation (general or local exhaust) to keep the airborne concentrations of vapours, mists, aerosols or dust below their respective occupational exposure limits. Ensure that eyewash stations and safety showers are close to the workstation.			
Individual protection measures				
Eye	Wear chemical splash goggles. Wear a face shield.			
Hands	Chemical-resistant, impervious gloves should be worn at all times when handling this chemical product. Wear nitrile or neoprene gloves. Before using, user should confirm impermeability. Discard gloves with tears, pinholes, or signs of wear. Gloves must only be worn on clean hands. Wash gloves with water before removing them. After using gloves, hands should be washed and dried thoroughly.			
Skin	Personal protective equipment for the body should be selected based on the task being performed and the risks involved. Wear appropriate chemical impervious clothing. Wear an apron or long-sleeve			

	protective overall suit.
Respiratory	Respiratory protection is not required for normal use. Where the conditions in the workplace require a respirator, it is necessary to follow a respiratory protection program. Moreover, respiratory protection equipment (RPE) must be selected, fitted, maintained and inspected in accordance with regulations and standard 29 CFR 1910.134 (OSHA), ANSI Z88.2 or CSA Z 94.11 (Canada) and approved by NIOSH/MSHA. In case of insufficient ventilation or in enclosed area wear half mask respirator or a full face respirator mask with acidic vapors and organic vapors cartridges and P100 filters.
Feet	Wear rubber boots as needed.
 Apron Goggles Face shield Nitrile gloves	

9. Physical and chemical properties

Physical state	Liquid	Flammability	Non-flammable
Colour	Clear yellow	Flammability limits	N/Av.
Odour	Pungent odor	Flash point	N/Av.
Odour threshold	N/Av.	Auto-ignition temperature	N/Av.
pH	1.1	Sensibility to electrostatic charges	N/Av.
Melting point	N/Av.	Sensibility to sparks and/or friction	N.Det.
Freezing point	N/Av.	Vapour density	<1 (Air = 1)
Boiling point	50 to 100°C (122 to 212°F)	Relative density	1.13 kg/L (Water = 1)
Solubility	Fully soluble in water.	Partition coefficient n-octanol/water	N/Av.
Evaporation rate	< Butyl Acetate	Decomposition temperature	N/Av.
Vapour pressure	N/Av.	Viscosity	N/Av.
Percent Volatile	99%	Molecular mass	N/Av.
N/Av.: Not Available N/Av.: Not Available Und.: Undetermined N/E: Not Established			

10. Stability and reactivity

Reactivity	Violent reaction with bases. Corrosive for metals.
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions (including polymerizations)	Hazardous polymerization will not occur.
Conditions to avoid	Avoid contact with incompatible materials.
Incompatible materials	Strong bases (e.g. hydroxides, solutions of ammonia, amines, carbonates), strong reducing agents, strong oxidants.
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.


11. Toxicological information

Numerical measures of toxicity	<p>Hydrochloric acid</p> <p style="text-align: right;">Ingestion 238 mg/kg Rat LD50 Inhalation 0.42 mg/l/4h Rat LC50 555 ppm/4h Mouse LC50 1560 ppm/4h Rat LC50</p> <p>2-Butoxyethanol</p> <p style="text-align: right;">Skin 1449 mg/kg Mouse LD50 Ingestion 560 mg/kg Rat LD50 1414 mg/kg Guinea pig LD50 Inhalation 2.21 mg/l/4h Rat LC50 Skin 400 mg/kg Rabbit LD50 >2000 mg/kg Rat LD50 >2000 mg/kg Guinea pig LD50</p> <p>Polyethylene glycol mono(branched p-nonylphenyl) ether</p> <p style="text-align: right;">Ingestion >2000 mg/kg Rat LD50 Inhalation 1.15 mg/l/4h Rat LC50 Skin 2573 mg/kg Rabbit LD50</p>
Likely routes of exposure	<p>Skin, eyes, inhalation, ingestion.</p>
Delayed, immediate and chronic effects	<p>Eye contact May cause burns and damages to eyes. The product is considered to be corrosive based on the pH (<1.5) of the solution.</p> <p>Skin contact May cause skin irritation and burns. The product is considered to be corrosive based on the pH (<1.5) of the solution.</p> <p>Inhalation Toxic if inhaled. May cause irritation and burns to the respiratory tract. The severity of symptoms may vary depending on exposure conditions.</p> <p>Ingestion May cause gastro-intestinal irritation and burns to mouth, throat and stomach.</p> <p>IARC/NTP Classification No ingredients listed.</p> <p>Carcinogenicity Ingredients present at levels greater than or equal to 0.1% of this product are not listed as a carcinogen by IARC, ACGIH, NIOSH, NTP or OSHA.</p> <p>Mutagenicity Ingredients in this product present at levels greater than or equal to 0.1% are not known to cause mutagenic effects.</p> <p>Reproductive toxicity Ingredients in this product present at levels greater than or equal to 0.1% are not known to cause reproduction effects.</p> <p>Specific target organ toxicity - single exposure Respiratory system.</p> <p>Specific target organ toxicity - repeated exposure No target organ is listed.</p>
Interactive effects	<p>No information available.</p>
Other information	<p>The acute toxicity estimate (ATE) by inhalation of the mixture was calculated to be greater than 0.5 mg/L/4h but lower than 1 mg/L/4h for mists/aerosols, or it was calculated to be greater than 500 ppmV/4h but lower than 2500 ppmV/4h for gaz. These values are classified according to GHS: Acute toxicity, inhalation (Category 3).</p>


12. Ecological information

Ecological toxicity	Fish - Oncorhynchus mykiss - Rainbow trout LC50 1474 mg/L; 96 h (CAS no 111-76-2) Aquatic invertebrates - Daphnia magna EC50 1550 mg/L; 48 h (CAS no 111-76-2) Algae, Pseudokirchneriella subcapitata EC50 1840 mg/L; 72 h (CAS no 111-76-2) Fish - Pimephales promelas (fathead minnow) LC50 1.2-9.3 mg/L; 96h (CAS no 127087-87-0) Aquatic Invertebrate - Daphnia magna (Water flea) EC50 9.3-21.4 mg/L; 48h (CAS no 127087-87-0)
Persistence	Not persistent in environment.
Degradability	The product is a mixture whose ingredients are readily biodegradable (> 60% in 28 days).
Bioaccumulative potential	The product is a mixture of which all ingredients have a low bioaccumulation potential (Log Kow of <3 and / or BCF <500).
Mobility in soil	The product is a mixture of which some ingredients have a high mobility in the soil, while other ingredients have a moderate mobility in the soil.
Other adverse effects	This chemical does not deplete the ozone layer. The observed ecological toxicity presented by this product for the environment was considered a result of pH effects.

13. Disposal considerations

 Container	Important! Prevent waste generation. Use in full. DO NOT dispose residue in sewers, streams or drinking water supply. Dispose residues as a hazardous waste. Empty containers can be treated (recycled) where there is a recovery program. Dispose via a licensed waste disposal contractor. Observe all federal, state/provincial and municipal regulations. If necessary consult the Department of Environment or the relevant authorities.
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14. Transport information

UN Number	UN 1789
UN Proper Shipping Name	HYDROCHLORIC ACID
Environmental hazards	This material does not contain marine pollutant.
Special precautions for user	Permit required for transportation with proper DANGER placards displayed on vehicle. Exemption available: LTD QTY according to TDG Canada - art. 1.17; Mode of transportation: rail, sea and road, applicable for Canadian domestic shipments. Quantitative limits: applicable for domestic containers (plastic bottles, glass or metal) containing =< 1L each.
TDG - Transportation of Dangerous Goods (Canada)	
Transport hazard class(es)	 Class 8
Packing group	II
Emergency response guidebook 2016	<u>157</u>
IMO/IMDG - International Maritime Transport	
Classification	UN 1789. HYDROCHLORIC ACID. Class 8, PG II. Emergency schedules (EmS-No) F-A, S-B
IATA - International Air Transport Association	
Classification	UN 1789. HYDROCHLORIC ACID. Class 8, PG II.

15. Regulatory information

CANADA

Common name	CAS	CEPA	DSL	NDSL	NPRI
Hydrochloric acid	7647-01-0	X	X		X
2-Butoxyethanol	111-76-2	X	X		X
Polyethylene glycol mono(branched p-nonylphenyl) ether	127087-87-0	X	X		X

- CEPA: List of Toxic Substances Managed Under Canadian Environmental Protection Act
- DSL: Domestic Substances List Inventory
- NDSL: Non-Domestic Substances List Inventory
- NPRI: National Pollutant Release Inventory Substances

UNITED STATE OF AMERICA

Common name	CAS	TSCA	CER CLA	EPCRA 313	EPCRA 302/304	CAA 112(b) HON	CAA 112(b) HAP	CAA 112(r)	CWA 311	CWA Prio.
Hydrochloric acid	7647-01-0	X	X	X	X		X	X	X	
2-Butoxyethanol	111-76-2	X								
Polyethylene glycol mono(branched p-nonylphenyl) ether	127087-87-0	X								

- TSCA: Toxic Substance Control Act
- CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act list of hazardous substances
- EPCRA 313: Emergency Planning and Community Right-to-Know Act, Section 313 Toxic Chemicals
- EPCRA 302/304: Emergency Planning and Community Right-to-Know Act, Section 302/304 Extremely Hazardous Substances
- CAA 112(b) HON: Clean Air Act - Hazardous Organic National Emission Standard for Hazardous Air Pollutant
- CAA 112(b) HAP: Clean Air Act - Hazardous Air Pollutants lists pollutants
- CAA 112(r): Clean Air Act - Regulated Chemicals for Accidental Release Prevention
- CWA 311: Clean Water Act - List of Hazardous Substances
- CWA Priority: Clean Water Act - Priority Pollutant list

California Proposition 65

No ingredients listed.

Other regulations

HMIS	
<input checked="" type="checkbox"/>	Health
<input checked="" type="checkbox"/>	Flamability
<input checked="" type="checkbox"/>	Reactivity
<input type="checkbox"/>	Protective Equipment

NFPA	
3	1
1	1

16. Other information

Date (YYYY-MM-DD)	AEROCHEM Inc. 2020-03-03
Version	03

**Other
information**

REFERENCES:

- Haz-Map, Information on Hazardous Chemicals and Occupational Diseases, <https://haz-map.com/>
- TOXNET Databases, Toxicology Data Network, NIH U.S. National Library of Medicine, <http://toxnet.nlm.nih.gov/>
- Service du répertoire toxicologique de la Commission des normes, de l'équité, de la santé et de la sécurité du travail (CNESST), <http://www.reptox.csst.qc.ca>
- The National Center for Biotechnology Information, National Institutes of Health (NIH), U.S. National Library of Medicine, <https://pubchem.ncbi.nlm.nih.gov/>

DATE OF FIRST VERSION OF SDS:

2017-09-21.

CHANGES MADE IN THE VERSION 02:

section 3.

DATE OF SECOND VERSION OF SDS:

2019-07-31.

CHANGES MADE IN THE VERSION 03:

section 1.

ACGIH: American Conference of Governmental Industrial Hygienists

AIHA: American Industrial Hygiene Association

HMIS: Hazardous Materials Identification System

NFPA: National Fire Protection Association

OSHA: Occupational Safety and Health Administration (USA)

NIOSH: National Institute for Occupational Safety and Health

NTP: National Toxicology Program

RSST: Règlement sur la santé et la sécurité du travail (Québec)

GHS: Globally Harmonized System

IARC: International Agency for Research on Cancer

IDLH: Immediately Dangerous to Life or Health

STEL: Short Term Exposure Limit (15 min)

TWA: Time Weighted Averages

WHMIS: Workplace Hazardous Materials Information System

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TM/MD