

G.K. Chemical Specialties Co. Inc. 90 Barbados Blvd. Scarborough, Ontario M1J 1K9 Tel: (416) 261-7182 Fax: (416) 261-5663

# SAFETY DATA SHEET (SDS)

PRODUCT NAME: EASY-CLEAN BATHROOM CLEANER		
HEALTH HAZARD RATING:	(1)- LOW HAZARD NFPA Rating	
FLAMMABILITY HAZARD RATING:	(0)- MINIMAL HAZARD	
REACTIVITY HAZARD RATING:	(0)- MINIMAL HAZARD	
PERSONAL PROTECTION:	B - (Safety glasses, Gloves,)	
HAZARD ALERT SIGN:		

SECTION 1 - IDENTIFICATION	
PRODUCT IDENTIFIER	
PRODUCT NAME	EASY-CLEAN BATHROOM CLEANER
MANUFACTURER'S NAME AND ADDRESS EMERGENCY PHONE NO.	G.K. Chemical Specialties Co. Inc. 90 Barbados Blvd. Scarborough, Ontario M1J 1K9 (416) 261-7182 / 905 427-7605/ 416-526-4037
SUPPLIER'S NAME AND ADDRESS EMERGENCY PHONE NO.	
CHEMICAL NAME	NOT APPLICABLE
CHEMICAL FAMILY	ACID (Phosphoric Acid solution as the major ingredient in the formulation)
TRADE NAME AND SYNONYMS	NOT APPLICABLE
MATERIAL USE	COMMERCIAL, INSTITUTIONAL AND INDUSTRIAL CLEANING

G.K. Chemical Specialties Co. Inc. has compiled the information and recommendations contained in this

Safety Data Sheet from sources believed to be reliable and to represent the most reasonable current opinion on the subject when the SDS was prepared. Although reasonable precautions have been taken in the preparation of the data contained herein, it is offered solely for your information, consideration and investigation.

G.K. Chemical Specialties Co. Inc. extends no warranty and assumes no responsibility as to the accuracy of the content or sufficiency of the information and expressly disclaims all liability for reliance thereon. This SDS provides guidelines for the safe handling of this product. It does not and cannot advise on all possible situations, therefore, your specific use of this product should be evaluated to determine if additional precautions are required. Individuals exposed to this product should read and understand this information and be provided pertinent training prior to working with this product.

G.K. Chemical Specialties Co. Inc. assumes no responsibility for personal injury or property damage to vendors, users or third parties caused by the material. Such vendors or users assume all risks associated with the use of the material.

<u>INGREDIENTS.</u> This SDS, under section of Ingredients, contains all ingredients listed under INGREDIENT DISCLOSURE LIST P.C. 1987-2719, 20/1/88 CANADA GAZETTE PART II VOL. 122, No 2 of HAZARDOUS PRODUCT ACT.

Percentage range of concentration of ingredients is expressed as percentage by weight of the total weight of the product. Ingredient List does not necessarily list all ingredients in the formulation and does not necessarily list all ingredients under the Disclosure List.

<u>T.L.V.</u> (units) or Threshold Limit Values refer to the limiting concentrations recommended by the Ministry of Labour. These values were adopted by the American Conference of Governmental Industrial Hygienists (A.C.G.I.H.). The figures refer to time-weighted average concentrations as P.P.M. (V/V) or mg/m<sup>3</sup> for a normal working day or at any time for some materials.

<u>"C.A.S REG. No."</u> means the identification number assigned to a chemical substance by the Chemical Abstracts Service Division of the American Chemical Society.

<u>"LC 50"</u> means the concentration of a substance in air that when administered by means of inhalation over a specified length of time in an animal assay, is expected to cause the death of 50 per cent of a defined animal population.

<u>"LD 50"</u> means the single dose of a substance that, when administered by a defined route in an animal assay, is expected to cause death of 50 per cent of a defined animal population.

<u>FLASH POINT.</u> The minimum temperature at which a substance gives off flammable vapors which in contact with spark or flame will ignite.

NIOSH- National institute for occupational safety and health STEL- Short term exposure limit TWA- Time-weighted average PEL- Permissible exposure limit ACGIH- American conference of governmental industrial hygienist OSHA- Occupational safety and health act

# **SECTION 2** – HAZARD IDENTIFICATION

Dangerous Goods: WHMIS: Class D. DIV. 2B

## GHS CLASSIFICATION

Acute Toxicity (oral, dermal) – Category 4 Eye Damage/ Irritation – Category 2B Skin Corrosion/Irritation – Category 2 Toxic to the Aquatic Environment- Acute Hazard – Category 2 Metal Corrosion- Category 1 HAZARDOUS SUBSTANCE (HSNO) CLASSIFICATION Corrosive liquid: CLASS D, DIV 2B

GHS Label Elements, including precautionary statements: Hazard Statements: Signal word- DANGER

## HAZARD STATEMENTS

H315: Causes skin irritationH320: Causes eye irritationH303: May be harmful if swallowedH290: May be corrosive to metals

# PREVENTION



P261- Avoid breathing dust/fumes/gas/mist/vapors/spray
P264: Wash skin thoroughly after handling
P280: Wear protective gloves/ protective clothing/ eye protection/ face protection
P405: Store locked up
P273: Avoid release to the environment

### RESPONSE

P305+P351+P338- IF IN EYES: Rinse cautiously with water for several minutes: Remove contact lenses if present and easy to do so. Continue rinsing. P301 + P310: If swallowed: Immediately call a POISON CENTER or doctor/ physician. P301 + P330 + P331" IF SWALLOWED: Rinse mouth. Do NOT induce vomiting P304 +P340 + P310: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician P303 + P361 + P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water. Shower

### POTENTIAL HEALTH EFFECTS

INHALATION: If mist is inhaled may be harmful. May Cause respiratory tract irritation. SKIN: May cause skin irritation EYE: May cause irritation INGESTION: May be harmful if swallowed

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS				
HAZARDOUS INGREDIENTS	APPROXIMATE CONCENTRATION%	C.A.S., N.A. OR U.N. NUMBERS	LD50 {SPECIFY SPECIES & ROUTE}	LC 50 {SPECIFY SPECIES)
Phosphoric acid	15-25	7664-38-2	Oral(Rat): 1530 mg/kg Derm.(Rabbit): 2730mg/kg	Inhalation ,(Rat): > 850 mg/m³/1h
ALCOHOLS, C9-C11 Ethoxylated	<1	68439-46-3	Oral(Rat): 1400 mg/kg Dermal (Rat):>5000mg/kg	
2-Butoxyethanol	2 - 5	111-76-2	Oral (Rat): 1300 mg/kg Dermal(Guinea pig): >2000mg/kg	TLV: 25 ppm
Poly(oxy-1,2 ethanediyl) a- Hydro-w hydroxyl- decylethers phosphate	<1	9004-80-2	Oral (Rat): >1,500 mg/kg Dermal(Rabbit):>5000mg/ kg	
Water, inert	Balance	Non hazardous		

SECTION 4-	FIRST AID MEASURES
SKIN CONTACT	Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and wash using soap. Get medical attention if necessary.
EYE CONTACT	Immediately hold eyelids open and flush with water for at least 15 minutes. Seek medical attention.
INHALATION	Move casualty to fresh air and keep at rest. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention if necessary
INGESTION	Harmful if swallowed. Do not induce vomiting. Drink 1 or 2 glasses of water. Seek immediate medical attention. Never give anything by mouth to an unconscious or convulsing person. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs.
NOTES TO PHYSICIAN	Product is corrosive material. Causes respiratory irritation if inhaled. Symptoms may include: Burning of nose and throat, constriction of airways, difficulty breathing, bronchial spasms, chest pain, and pink frothy sputum. If ingested may cause burns or irritation of the lining of the mouth, throat, and gastrointestinal tract. Swallowing a small quantity of this product may result in serious health hazard. Treat symptomatically

SECTION 5 – FIRE-FIGHTING MEASURES		
FLASH POINT ( °C)	Nil	
FLASH POINT METHOD	Not applicable	
AUTOIGNITION TEMPERATURE ( °C )	Non-combustible	
UPPER FLAMMABLE LIMIT ( % VOL.)	Not applicable	
LOWER FLAMMABLE LIMIT ( % VOL. )	Not applicable	
HAZARDOUS COMBUSTION PRODUCTS	Oxides of Phosphorus, Phosphine	
UNUSUAL FIRE/ EXPLOSION HAZARDS	Releases flammable hydrogen gas when reacting with metals	
SENSITIVITY TO MECHANICAL IMPACT	No.	

SENSITIVITY TO STATIC DISCHARGE	No
EXTINGUISHING MEDIA	Use extinguishing agents compatible with acid and appropriate for the
	burning material. Use water spray to keep fire-exposed containers cool
SPECIAL FIRE FIGHTING PROCEDURES	Fire fighters should wear full protective clothing, including self-contained
	breathing equipment. The product causes burns of eyes, skin and mucous
	membranes. Thermal decomposition can lead to release of Oxides of
	Phosphorus, Phosphine and Hydrogen gas upon contact with metals. To
	neutralize this product use diluted Soda ash or slaked lime.

SECTION 6 – ACCIDENTAL RELEASE MEASURES		
LEAK AND SPILL PROCEDURE	Stop leak. Move containers from spill area. Absorb spill with vermiculite absorbent material, neutralize the residue with a dilute solution of Limestone or Sodium Carbonate and place in a suitable container for disposal. Clean surfaces thoroughly with water to remove residual contamination. LARGE SPILL: Corrosive liquid. Stop leak if without risk. Do not touch spilled material. Use water spray curtain to knock down vapor drift. Neutralize the residue. Be careful that vapors are not present at a concentration level above TLV	
ENVIRONMENTAL PRECAUTIONARY	Prevent entry into sewers or streams. Any release to the environment should be subject to federal or local reporting requirements.	
PERSONAL PRECAUTIONARY MEASURES	Wear protective clothing during cleanup. See section 8 for recommendations on the use of personal protective equipment. Avoid breathing vapors, mist or gas. Avoid contact with clothing and skin	

SECTION 7 – HANDLING AND STORAGE		
HANDLING PROCETURES	Avoid contact with eyes and skin. Avoid ingestion. Use good industrial hygiene practices in handling this product. Keep container closed when not in use.	
STORAGE NEEDS	Keep container tightly closed. Store in a cool area above freezing point. Keep out of the reach of children. Keep in properly labeled containers. Store in Polyethylene, stainless steel or glass containers. Store away from oxidizing agents and strong bases.	

SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION		
VENTILATION REQUIREMENTS	Good ventilation is recommended. When TLV (Threshold Limit Value over 8 hours of work) is greater than 25ppm (40 mg/m <sup>3</sup> ) as Phosphoric acid provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective. TWA / STEL for USA NIOSH, USA ACGIH, CANADA: 1mg/m <sup>3</sup> (TWA), 3mg / m <sup>3</sup> (STEL) as Phosphoric acid. USA NIOSH IDLE (immediate danger): 1000 mg/m <sup>3</sup> as Phosphoric acid. USA OSHA TWA: 1 mg / m <sup>3</sup>	

PROTECTIVE EQUIPMENT	Ensure that eyewash stations are proximal to the work-station location. The selection of personal protective equipment will vary depending on the condition of use	
EYE/TYPE	Splash goggles, safety glasses	
RESPIRATORY/TYPE         Approved/ certified vapor respirator when airborne concentratio exposure limits.		
GLOVE/TYPE	Nitrile, Vinyl, Butyl impervious gloves	
FOOTWEAR/TYPE	Boots. Chemical resistant and as specified by the workplace	
BODY/TYPE	Protective clothing is required. Use impervious clothing (apron, coveralls). The selection of personal protective equipment will vary depending on the conditions of use.	

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES		
APPEARANCE – PHYSICAL STATE	Thin clear liquid	
ODOUR	Cherry	
ODOUR THRESHOLD (PPM)	Not determined	
РН	2.8 ± 0.5 concentrate	
MELTING POINT ( °C)	See freezing point	
BOILING POINT ( <sup>o</sup> C )	>100°C (212° F) INITIAL	
FREEZING POINT ( <sup>o</sup> C )	0°C (32° F)	
EVAPORATION RATE	>1.00 (n-Butyl Acetate)	
FLAMMABILITY	Not combustible	
FLASH POINT ( <sup>0</sup> C)	Not applicable	
AUTO IGNITION TEMPERATURE	Not available	
DECOMPOSITION TEMPERATURE	300°C (572°F)	
VAPOUR DENSITY	(air= 1) 3.4 @ 20 <sup>o</sup> C	
VAPOUR PRESSURE	@ 20 <sup>o</sup> C 1-4 mmHg	
SOLUBILITY	Completely soluble in water	
VISCOSITY	Thin liquid	
% VOLATILE BY VOLUME	81 ± 0.5 %	
SPECIFIC GRAVITY	1.05 ± 0.04 gm / cm <sup>3</sup> @ 20 <sup>0</sup> C	

SECTION 10 – STABILITY AND REACTIVITY		
REACTIVITY	Exothermic reaction with incompatible materials	
CHEMICAL STABILITY	Stable under normal conditions	
POSSIBILITY OF HAZARDOUS REACTIONS	Arise in contact with incompatible materials. Forms flammable and explosive Hydrogen gas through corrosion of metals.	
CONDITIONS TO AVOID	Avoid incompatible materials	
INCOMPATIBLE MATERIALS	Avoid contact with strong oxidizers, strong bases, metals, metal oxides, amines, carbonates other alkaline materials. Also Chlorates, Carbamates, , cyanides, sulfides, Nitromethane, Mercaptans, Aldehydes, Sodium tetrahydroborate, Nitrates,	
HAZARDOUS DECOMPOSITION PRODUCTS	Phosphine, Oxides of Phosphorous, Carbon dioxide, Carbon monoxide	

SECTION 11-TOXICOLOGICAL INFORMATION		
TOXICITY EFFECTS ON ANIMALS	<ul> <li>For Phosphoric acid (7664-38-2): Acute Oral Toxicity (LD50): 1530 mg/kg (Rat). Acute Dermal Toxicity LD50 (Rabbit) 2730 mg/kg, LC50- Inhalation (Rat) : &gt;850 mg/m<sup>3</sup> (1 hour).</li> <li>For Alcohols, C9-C11 Ethoxylated (68439-46-3): Acute Oral Toxicity LD50 (Rat): 1,400 mg/kg. Acute Dermal Toxicity LD50 (Rat): &gt;5,000 mg/kg.</li> <li>For 2-Butoxyethanol (111-76-2): Acute Oral Toxicity LD50 (Rat): 1,300 mg/kg. Acute Dermal Toxicity LD50 (Guinea pig): &gt;2,000 mg/kg.</li> <li>For Poly(oxy-1,2 ethanediyl)a-Hydro-w hydroxyl-decylethers phosphate (9002-92-0): Acute Oral Toxicity LD50 (Rat): &gt;500 mg/kg.</li> </ul>	
TOXIC EFFECTS ON HUMANS	<ul> <li>Inhalation: May cause irritation to the respiratory tract, leading to sore throat, coughing.</li> <li>Ingestion: May cause digestive tract burns with abdominal pain, vomiting, and possible death. May cause corrosion and tissue destruction of the esophagus and</li> </ul>	
CHRONIC EFFECTS ON HUMANS	Prolonged contact with skin may defat tissue causing dermatitis or skin problems.	
CARCINOGENICITY	No evidence	
TERATOGENICITY	No data available	
MUTAGENICITY	No evidence	
REPRODUCTIVE EFFECTS	No evidence	

	SECTION 12 -ECOLOGICAL INFORMATION		
ECOTOXICITY DATAtoxicity to fish, Mosquito fish: 138 mg/L/ 96 hours. Acute toxicity to fish (blueg sunfish) 96-hr static: LC50= PH3.0-3.5. Acute toxicity to aquatic invertebrates: (Daphnia magna) 12-hr static: EC50= PH4.6; (Daphnia pulex) 12- hr static: EC50 PH 4.1; (Gammarus pulex) 12- hr static: EC50= PH 3.4. Because of the low PH of this product, it would be expected to produce significant ecotoxicity upon exposure to organisms and aquatic system. Most aquatic species do not tolera PH lower than 5.5 for extended period. Dangerous to aquatic life in high concentrations. Phosphates have the potential to increase the growth of freshwater algae.Figures for Alcohols, C9-C11 Ethoxylated (68439-46-3): Acute Toxicity to fish, LC50 Fathead minnow (Pimephales promelas): 8.5 mg /L /96 h. Acute Toxicity aquatic invertebrates, EC50, Daphnia magna (Water flea): 5.3 mgh/ L/ 48 h. Ingredient is readily BIODEGRADABLE.Figures for 2-Butoxyethanol (111-76-2): Material is practically non-toxic to aquatic organisms on an acute basis (LC50 / EC50 >100 mg/ L in most sensitive species tested). Acute Toxicity to aquatic invertebrates, EC50, Daphnia magna (Water flea), static test: 1,550 mg / L / 48 h. Ingredient is BIODEGRADABLE.Figures for Poly(oxy-1,2 ethanediyl)a- Hydro-w hydroxyl-decylethers phosph	TOXICITY DATA	<b>Figures for Phosphoric acid (7664-38-2):</b> Ecotoxicity in water (LC50): Chronic oxicity to fish, Mosquito fish: 138 mg/L/ 96 hours. Acute toxicity to fish (bluegill runfish) 96-hr static: LC50= PH3.0-3.5. Acute toxicity to aquatic invertebrates: Daphnia magna) 12-hr static: EC50= PH4.6; (Daphnia pulex) 12- hr static: EC50= PH 4.1; (Gammarus pulex) 12- hr static: EC50= PH 3.4. Because of the low PH of his product, it would be expected to produce significant ecotoxicity upon exposure to organisms and aquatic system. Most aquatic species do not tolerate PH lower than 5.5 for extended period. Dangerous to aquatic life in high concentrations. Phosphates have the potential to increase the growth of reshwater algae. <b>Figures for Alcohols, C9-C11 Ethoxylated (68439-46-3):</b> Acute Toxicity to fish, .C50 Fathead minnow (Pimephales promelas): 8.5 mg /L /96 h. Acute Toxicity to aquatic invertebrates, EC50, Daphnia magna (Water flea): 5.3 mgh/ L/ 48 h. ngredient is readily BIODEGRADABLE. <b>Figures for 2-Butoxyethanol (111-76-2):</b> Material is practically non-toxic to aquatic organisms on an acute basis (LC50 / EC50 >100 mg/ L in most sensitive pecies tested). Acute Toxicity to aquatic invertebrates, EC50, Daphnia magna Water flea), static test: 1,550 mg / L / 48 h. Ingredient is BIODEGRADABLE. <b>Figures for Poly(oxy-1,2 ethanediyl)a- Hydro-w hydroxyl-decylethers phosphate</b> <b>9002-92-0):</b> No data found. Very small amount in the formulation. Product not	

BIODEGRADABILITY	Does not bioaccumulate. Phosphoric acid dissociates in water and lowers the PH of water. It will be neutralized by naturally occurring alkalinity in water and soil. Under anaerobic conditions, microorganisms may degrade Phosphoric acid to Phosphine
PRODUCTS OF DEGRADATION	Phosphine

SECTION 13 – DISPOSAL CONSIDERATIONS		
WASTE DISPOSAL	Disposal of all wastes must be done in accordance with municipal, provincial and federal regulations. This product is hazardous to the aquatic environment in large volumes. Keep out of waterways.	
INFORMATION ON SAFE HANDLING FOR DISPOSAL INCLUDING ANY CONTAMINATED PACKAGING	Suitable waste facility.	

SECTION 14 – TRANSPORT INFORMATION		
UN NUMBER	1805	
UN PROPER SHIPPING NAME	Phosphoric Acid Solution (less than 25%)	
TRANSPORT HAZARD CLASS	CLASS: 8 (CORROSIVE)	
PACKAGING GROUP	III	
ENVIRONMENTAL HAZARDS	YES	
TRANSPORT IN BULK, if applicable	NOT AVAILABLE	
SPECIAL PRECAUTIONS	Guide to Canadian Transportation/ Emergency Response Guidebook (ERG): # 154	

SECTION 15 – REGULATORY INFORMATION		
SAFETY HEALTH & ENVIRONMENTAL REGULATIONS SPECIFIC TO THE PRODUCT	U.S. TSCA inventory Status: All components of this product are either on the Toxic Substances Control Act (TSCA) INVENTORY List or exempt. Canadian DSL Inventory Status: All components of this product are either on the Domestic Substances List (DSL) or the Non-Domestic Substances List (NDSL) or exempt.	

SECTION 16 – OTHER INFORMATION		
PREPARED BY:	Gus Kaklamanos - Chemist	
TELEPHONE NO.:	416-261-7182	
DATE OF THE LATEST REVISION OF SDS:	May 23, 2018	

NOTE: A lot of the information provided in this SDS may refer to very large or special usage of the product. The basic purpose of this product is to be used as a cleaner, where quantities stored and used at any time by various users are very small.