

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: G-250 LIQUID DISHWASHING DETERGENT

HEALTH HAZARD RATING:
(1)- SLIGHT HAZARD
NFPA Rating

FLAMMABILITY HAZARD RATING:
(0)- MINIMAL HAZARD
REACTIVITY HAZARD RATING:
(0)- MINIMAL HAZARD

PERSONAL PROTECTION:
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SECTION 1 – IDENTIFICATION	
PRODUCT IDENTIFIER	
PRODUCT NAME	G-250 LIQUID DISHWASHING DETERGENT
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	N/A
CHEMICAL FAMILY	N/A
TRADE NAME AND SYNONYMS	N/A
MATERIAL USE	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 ingredient range of concentration, other than 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/m³ 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 Hazard Class: D, 2B (Toxic material) OSHA HAZARDS: Irritant GHS CLASSIFICATION Eye irritation- Category 2A GHS Label Elements, including precautionary statements: Hazard Statements Signal word-DANGER HAZARD STATEMENTS H320-Causes eye irritation H302: Harmful if swallowed PREVENTION (see also section 4 – First aid and measures) P264: Wash skin thoroughly after handling P280; Wear eye protection/ face protection RESPONSE: P305 + P351 + P338- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313: If eye irritation persists: Get medical advice/ attention POTENTIAL HEALTH EFFECTS Eye: May cause irritation	

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 & ROUTE}
Sodium (C10-16) Benzene	5 - 10	68081-81-2	Oral(Rat): >1000 mg/kg	
Sulfonate			Dermal(Rabbit):>2000mg/kg	
Sodium Dodecyl Sulfate	3 - 7	151-21-3	Oral(Rat): 1288 mg/kg Dermal (Rabbit):580 mg/kg	
Cocamidopropyl Betaine	1 - 5	70851-07-9	Oral (Rat): >2335 mg/kg Dermal(Rabbit):>2000mg/kg	
Cocamidopropylamine Oxide	< 1	68155-09-9	Oral(Rat): 4350 mg/kg Dermal(Rabbit):>2000mg/kg	
Lauramine Oxide	< 1	1643-20-5	Oral(Rat): > 1065 mg/kg Dermal(Rabbit):>2000mg/kg	
Cocoamide DEA	< 1	68603-42-9	Oral(Rat): >5000 mg/kg Dermal(Rabbit);>2000mg/kg	
Sodium Sulphate	< 1	7757-82-6	Oral(Moose): 5989 mg/kg	
Ethoxylated Lanolin 75 EO	< 1	61790-81-6	Oral(Rat): > 54 mg/kg	
Water, inert and other non -hazardous ingredients	Balance			

SECTION 4 – F	SECTION 4 – FIRST AID MEASURES		
SKIN CONTACT	No known significant effects or critical hazards expected		
EYE CONTACT	Immediately hold eyelids open and flush with water for at least 15 minutes. Seek medical attention if required		
INHALATION	No known significant effects or critical hazards		
INGESTION	May be 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 occur spontaneously, keep head below hips to prevent aspiration of liquid into the lungs.		
NOTES TO PHYSICIAN	Treatment based on sound judgment of physician and individual reaction of patient. If swallowed Symptoms may include nausea, vomiting and diarrhea		

SECTION 5 – FIRE-FIGHTING MEASURES		
FLASH POINT (°C)	Not flammable	
FLASH POINT METHOD	Not applicable	
AUTOIGNITION TEMPERATURE (^o C)	Not applicable	
UPPER FLAMMABLE LIMIT (% VOL.)	Not applicable	
LOWER FLAMMABLE LIMIT (% VOL.)	Not applicable	
HAZARDOUS COMBUSTION PRODUCTS	Carbon Dioxide (CO ₂), Carbon monoxide, Halogenated compounds, Nitrogen Oxides and oxides of Sulphur.	
UNUSUAL FIRE/ EXPLOSION HAZARDS	None known	
SENSITIVITY TO MECHANICAL IMPACT	Not sensitive	
SENSITIVITY TO STATIC DISCHARGE	Not sensitive	
EXTINGUISHING MEDIA	Water spray, foam, dry powder or Carbon Dioxide. Use media appropriate for surrounding fire	
SPECIAL FIRE FIGHTING PROCEDURES	Fire fighters should wear full protective clothing, including self- contained breathing equipment	

SECTION 6 – ACCIDENTAL RELEASE MEASURES		
LEAK AND SPILL PROCEDURE	Stop leak. Move containers from spill area. Dilute with water and mop up. Material can create slippery conditions. Use non-slip safety shoes in areas where spills or leaks can occur	
ENVIRONMENTAL PRECAUTIONARY	Prevent entry into sewers or streams.	
PERSONAL PRECAUTIONARY MEASURES	Wear protective clothing during cleanup	

SECTION 7 – HANDLING AND STORAGE		
HANDLING PROCETURES	Avoid contact with eyes. Avoid ingestion. Use good industrial hygiene practices in	
HANDEING FROCETORES	handling this product. Keep container closed when not in use.	
STORAGE NEEDS	Keep container tightly closed. Keep away from children. Do not store in unlabeled	
STORAGE NEEDS	containers. Do not store with strong oxidizing agents.	

SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION		
VENTILATION REQUIREMENTS	General ventilation is recommended.	
PROTECTIVE EQUIPMENT	Ensure that eyewash stations are proximal to the work-station location	
EYE/TYPE	Safety glasses	
RESPIRATORY/TYPE	None required	
GLOVE/TYPE	None required	
FOOTWEAR/TYPE	No special footwear is required	
BODY/TYPE	No special protective clothing is required	

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES		
APPEARANCE – PHYSICAL STATE	Clear Green liquid	
ODOUR	Pleasant aroma	
ODOUR THRESHOLD (PPM)	Not available	
РН	7.80 ±0.50 in water	
MELTING POINT (^o C)	Not applicable	
BOILING POINT (^o C)	100°C	
FREEZING POINT (°C)	0°C	
EVAPORATION RATE	As water	
FLAMMABILITY	Not applicable	
FLASH POINT (ºC)	Not applicable	
AUTO IGNITION TEMPERATURE	Not applicable	
DECOMPOSITION TEMPERATURE	Not available	
VAPOUR DENSITY	Not applicable	
VAPOUR PRESSURE	Not applicable	
SOLUBILITY	Soluble in water	
VISCOSITY	Viscous liquid	
% VOLATILE BY VOLUME	84 ± 1	
SPECIFIC GRAVITY	$1.01 \pm 0.02 \text{ gm} / \text{cm}^3$	

SECTION 10 – STABILITY AND REACTIVITY		
REACTIVITY	The product is stable	
CHEMICAL STABILITY	Stable	
POSSIBILITY OF HAZARDOUS REACTIONS	Not applicable	
CONDITIONS TO AVOID	No specific data	
INCOMPATIBLE MATERIALS	Strong Oxidizing agents	
HAZARDOUS DECOMPOSITION PRODUCTS	Carbon Dioxide (CO ₂), Carbon Monoxide, Nitrogen compounds,	
	Halogenated compounds, Oxides of Sulphur	

SECTION 11-TOXICOLOGICAL INFORMATION		
	For Sodium (C10-16) Benzene Sulfonate (68081-81-2): Acute Oral toxicity LD50	
	(Rat): >1000 mg/kg, LD50 Dermal (Rabbit):>2,000 mg/kg .	
TOXICITY EFFECTS ON ANIMALS	For Sodium Dodecyl Sulfate (151-21-3): Acute Oral toxicity LD50 (Rat):1288 mg	
TOXICITY EFFECTS ON ANIMALS	/kg, LD50 Dermal (Rabbit): 580 mg/kg.	
	For Cocamidopropyl Betaine (70851-07-9): Acute Oral toxicity LD50 (Rat):>2335	
	mg/kg. LD50 Dermal (Rabbit): >2,000 mg/kg.	

	For Cocamidopropylamine Oxide (68155-09-0): Acute Oral toxicity LD50 (Rat):	
	4,350 mg / kg. LD50 Dermal (Rabbit): >2,000 mg/kg.	
	For Lauramine Oxide (1643-20-5): Acute Oral toxicity LD50 (Rat): >1,065 mg/kg.	
	LD50 Dermal (Rabbit):>2,000 mg/kg.	
	For Cocoamide DEA (68603-42-9): Acute Oral toxicity LD50 (Rat): >5,000 mg/kg.	
	LD50 Dermal (Rabbit): >2,000 mg/kg.	
	For Sodium Sulphate (7757-82-6): Acute Oral toxicity LD50 (Moose): 5989	
	mg/kg.	
	For Ethoxylated Lanolin 75 EO (61790-81-6): Acute Oral Toxicity LD50 (Rat): 54	
	mg / kg.	
	For the mix estimated Acute Oral Toxicity is much >5,000 mg/kg. Therefore	
	product is classified as non-toxic. Acute Dermal Toxicity for the mix is also	
	estimated to be much >5,000 mg/ kg. Therefore the product is classified as non-	
	toxic	
TOXIC EFFECTS ON HUMANS	May cause mild irritation of eyes	
CHRONIC EFFECTS ON HUMANS	No known significant effects	
	-	
CARCINOGENICITY	No evidence	
TERATOGENICITY	No evidence	
MUTAGENICITY	No evidence	
REPRODUCTIVE EFFECTS	No evidence	

SECTION 12 -ECOLOGICA	SECTION 12 - ECOLOGICAL INFORMATION		
	For Sodium (C10-16) Benzene Sulfonate (68081-81-2): Acute Toxicity to fish LC50,		
	Fathead minnow (Pimephales Promelas): 1.67 mg / L /96 h. Acute Toxicity		
	Crustacea EC50, Daphnia magna (Water flea): 2.4 mg / L / 48 h. EC50 Algae: 29		
	mg/ L /96 h. This ingredient is Toxic to aquatic organisms, however it		
	biodegradates very fast. Primary degradation intermediates are Sulfophenyl		
	Carboxylates which further degrades to CO ₂ , SO ₄ and water. Biodegradation		
	intermediates have LC50 > 1,000 mg / L / 96 h for Fathead Minnows and Daphnia		
	magna and are not toxic to aquatic organisms. This ingredient composes the		
	largest portion of the mix.		
	For Sodium Dodecyl Sulfate (151-21-3): Acute Toxicity to fish LC50, Pimephales		
ΕCOTOXICITY DATA	Promelas: 29 mg / L /96 h. Acute Toxicity to aquatic invertebrates LC50,		
	Ceriodaphnia Dubia: 5.5 mg /L /48 h. Acute toxicity to Algae EC50: 60mg /L/72 h.		
	Ingredient readily BIODEGRADABLE		
	For Cocamidopropyl Betaine (70851-07-9): Acute Toxicity to fish LC50: 1.75 - 10		
	mg /L/ 96 h. Acute Toxicity to Crustacea EC50, Daphnia magna (Water flea): 1.9		
	mg /L / 48 h. Acute Toxicity to Algae EC50: 2.4 mg /L /72 h. Ingredient readily		
	BIODEGRADABLE		
	For Cocamidopropylamine Oxide (68155-09-9): Acute Toxicity to fish LC50: 2.3		
	mg /L / 96 h. Acute Toxicity to Crustacea EC50, Daphnia Magna (Water flea): 2.9		
	mg /L /48 h. Acute Toxicity to Algae EC50: 7 mg /L 72 h. Ingredient 98.44 %		
	readily-20 days BIODEGRADABLE, 46.88 % 5 days.		
	For Lauramine Oxide (1643-20-5): Acute Toxicity to fish LC50: 2.67 mg / L /96h.		
	Acute Toxicity to Crustacea EC50, Daphnia magna (Water flea): 3.1 mg /L /48h.		
	Acute Toxicity to Algae EC50: 0.19 mg /L /72 h. Ingredient readily		
	BIODEGRADABLE		

	For Cocoamide DEA (68603-42-9): Acute Toxicity to fish LC50 (Zebra fish): 6.7 mg /L /96 h /static-renewal. Acute Toxicity to aquatic invertebrates EC50 Daphnia magna (Water flea): 3.3 mg / L / 24 h static. Ingredient readily BIODEGRADABLE For Sodium Sulphate (7757-82-6): Acute Toxicity to fish LC50 Pimephales promelas (Fathead minnow): 13,500-14,500 mg /L / 96 h. LC50 , Bluegill/ Sunfish: 3040-4380 mg /L / 96 h. Acute Toxicity to aquatic invertebrates EC50 Daphnia magna (Water flea): 4547 mg / L /96 h. Ingredient Non-toxic. Persistence and Degradability: Soluble in water and Persistence is unlikely based on information available For Ethoxylated Lanolin 75 EO (61790-81-6): No data found for this product
	For Ethoxylated Lanolin 75 EO (61790-81-6): No data found for this product
BIODEGRADABILITY	Readily biodegradable
PRODUCTS OF DEGRADATION	Mostly Sulfophenyl Carboxylates, CO ₂ SO ₄

SECTION 13 – DISPOSAL CONSIDERATIONS		
WASTE DISPOSAL	Disposal of all wastes must be done in accordance with municipal, provincial and federal regulations	
INFORMATION ON SAFE HANDLING FOR DISPOSAL INCLUDING ANY CONTAMINATED PACKAGING	Suitable waste facility	

SECTION 14 – TRANSPORT INFORMATION	
UN NUMBER	Not applicable
UN PROPER SHIPPING NAME	Not applicable
TRANSPORT HAZARD CLASS	Not regulated
PACKAGING GROUP	Not applicable
ENVIRONMENTAL HAZARDS	Nil
TRANSPORT IN BULK, if applicable	Not applicable
SPECIAL PRECAUTIONS	NIL

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:	October 5, 2017	