

Legend of Products Co., Ltd.

76/3 Village No. 11, Ladsawai Sub-district, Lam Luk Ka District, Pathum Thani 12150 Thailand

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CLASSIC ALCOHOL SPRAY

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SAFETY DATA SHEET

SECTION 1 : Identification

Product Name	CLASSIC ALCOHOL SPRAY	
Utilization	Hand Sanitizer	
Company name	Legend of Products Co., Ltd.	
Address	76/3 Village No. 11, Ladsawai Sub-district, Lam Luk Ka District, Pathum Thani	
	12150 Thailand	
Emergency telephone	(+66)2-0064553	
Website	www.lopmetic.com	
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SECTION 2: Hazards identification

Hazard class and	Elam Lia 2	
	Flam. Liq. 2 Eve Irrit. 2	
category	Eye Irrit. 2	
Description	Flammable Liquid (Category 2)	
	Eye irritation (Category 2)	
Pictogram		
Signal word	Danger	
Hazard not and	Highly flammable liquid and vapor.	
statement	Causes serious eye irritation.	
Precautionary	Prevention : Wear eye or face protection. Keep away from heat, hot surfaces,	
statements	sparks, open flames and other ignition sources. No smoking. Use explosion- proof electrical, ventilating, lighting and all material-handling equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Keep container tightly closed.	
	Response : IF ON SKIN (or hair): Take off immediately all contaminated clothing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.	
	Storage : Store in a well-ventilated place. Keep cool.	
	Disposal : Dispose of contents and container in accordance with all local,	
	regional, national and international regulations.	
Hazards not otherwise classified	None known.	

Section 3. Composition/information on ingredients

Substance/mixture Mixture

Hazardous ingredients	CAS number	% (by weight)	% (by volume)	GHS Classification
Ethanol	64-17-5	69.47% w/w	75% v/v	Flam. Liq. 2; H225
				Eye Irrit 2; H319

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.

Section 4. First aid measures

Description of necessary	Eye contact : Immediately flush eyes with plenty of water, occasionally lifting
first aid measures	the upper and lower eyelids. Check for and remove any contact lenses.
first ald measures	Continue to rinse for at least 10 minutes. Get medical attention.
	Inhalation - Remove victim to fresh air and keep at rest in a pecition
	Inhalation : Remove victim to fresh air and keep at rest in a position
	comfortable for breathing. If not breathing, if breathing is irregular or if
	respiratory arrest occurs, provide artificial respiration or oxygen by trained
	personnel. It may be dangerous to the person providing aid to give mouth-to-
	mouth resuscitation. Get medical attention if adverse health effects persist or
	are severe. If unconscious, place in recovery position and get medical
	attention immediately. Maintain an open airway. Loosen tight clothing such
	as a collar, tie, belt or waistband.
	Chin contact . Demove conteminated elething and shape. Cot medical
	Skin contact : Remove contaminated clothing and shoes. Get medical
	attention if symptoms occur. Wash clothing before reuse. Clean shoes
	thoroughly before reuse.
	Ingestion : Wash out mouth with water. Remove dentures if any. Remove
	victim to fresh air and keep at rest in a position comfortable for breathing. If
	material has been swallowed and the exposed person is conscious, give small
	quantities of water to drink. Stop if the exposed person feels sick as vomiting
	may be dangerous. Do not induce vomiting unless directed to do so by
	medical personnel. If vomiting occurs, the head should be kept low so that
	vomit does not enter the lungs. Get medical attention if adverse health effects
	persist or are severe. Never give anything by mouth to an unconscious person.
	If unconscious, place in recovery position and get medical attention
	immediately. Maintain an open airway. Loosen tight clothing such as a collar,
Most important	tie, belt or waistband. Potential acute health effects
symptoms/effects, acute	-Eye contact : Causes serious eye irritation.
and delayed	-Inhalation : No known significant effects or critical hazards.
and delayed	-Skin contact : No known significant effects or critical hazards.
	-Ingestion : No known significant effects or critical hazards.
	-ingestion . No known significant effects of critical hazards.
	Quer en este size (en este este
	Over-exposure signs/symptoms -Eye contact : Adverse symptoms may include the following: pain or irritation
	watering redness
	Inhalation : No specific data.
	-Skin contact : No specific data.
	-Ingestion : No specific data.

Indication of immediate medical attention and special treatment	Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
needed, if necessary	Specific treatments : No specific treatment.
	Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

Section 5. Fire-fighting measures

Suitable extinguishing	Water spray
media	Alcohol-resistant form
	Dry chemical
	Carbon dioxide (CO ₂)
Unsuitable extinguishing	High volume water jet
media	
Specific hazards arising	Highly flammable liquid and vapor. In a fire or if heated, a pressure increase
from the chemical	will occur and the container may burst, with the risk of a subsequent
	explosion. Runoff to sewer may create fire or explosion hazard.
Hazardous thermal	Decomposition products may include the following materials: carbon dioxide
decomposition products	carbon monoxide
Special protective	Promptly isolate the scene by removing all persons from the vicinity of the
actions for fire-fighters	incident if there is a fire. No action shall be taken involving any personal risk
	or without suitable training. Move containers from fire area if this can be
	done without risk. Use water spray to keep fire-exposed containers cool.
Special protective	Fire-fighters should wear appropriate protective equipment and self-
equipment for fire-	contained breathing apparatus (SCBA) with a full face-piece operated in
fighters	positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.	
	For emergency responders : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For nonemergency personnel".	
Environmental precautions	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).	
Methods and materials for containment and cleaning up	Small spill : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.	

Large spill : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from
upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows.
Contain and collect spillage with non-combustible, absorbent material e.g.
sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a
licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for
emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe	Protective measures : Put on appropriate personal protective equipment (see
handling	Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.
	Advice on general occupational hygiene : 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. See also Section 8 for additional information on hygiene measures.
	Conditions for safe storage, including any incompatibilities : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Ingredient name	CAS number	Exposure limits	
ethanol	64-17-5	ACGIH TLV (United States, 3/2016).	
		-STEL: 1000 ppm 15 minutes.	
		OSHA PEL 1989 (United States, 3/1989).	
		-TWA: 1000 ppm 8 hours.	

-TWA: 1900 mg/m ³ 8 hours.
NIOSH REL (United States, 10/2013).
-TWA: 1000 ppm 10 hours.
-TWA: 1900 mg/m ³ 10 hours.
OSHA PEL (United States, 6/2016).
-TWA: 1000 ppm 8 hours.
-TWA: 1900 mg/m ³ 8 hours.

Appropriate engineering controls	Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.	
Environmental exposure controls	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.	
Individual protection measures	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. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.	
	Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.	
	 Skin protection : Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear antistatic protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed by a specialist before handling this product. 	

•	Respiratory protection : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other
	important aspects of use.

Section 9. Physical and chemical properties

Appearance	Liquid. [Gel]
Color	Clear , Blue
Odor	Alcoholic
рН	6.5 to 8.5
Melting point	Not available.
Boiling point	>60 °C
Flash point	<23 °C
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Lower and upper explosive	Not available.
(flammable) limits	
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	Not available.
Solubility	Easily soluble in the following materials: cold water. Soluble in the following materials: hot water.
Partition coefficient:	Not available.
noctanol/water	
Auto-ignition temperature	Not available.
Decomposition	Not available.
temperature	
Viscosity	Not available.

Section 10. Stability and reactivity

Reactivity	No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	The product is stable.
Possibility of hazardous reactions	Under normal conditions of storage and use, hazardous reactions will not occur
Conditions to avoid	Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
Incompatible materials	Reactive or incompatible with the following materials: oxidizing materials.
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Acute toxicity	Oral LC50 (rat) : 7006 mg/kg Inhalation vapor LC50 (rat): 124.7 mg/1/4 h
Irritation/Corrosion	Skin LD50 (rabbit): 20,000 mg/kg

Sensitization	Not available.			
Mutagenicity	Not available.			
Carcinogenicity	Classification : Ethanol IARC1			
	Reproductive toxicity : Not available.			
	Teratogenicity : Not available.			
	Specific target organ toxicity (single exposure) : Not available.			
	Specific target organ toxicity (repeated exposure) : Not available.			
	Aspiration hazard : Not available.			
	Reproductive toxicity : Not available.			
	Teratogenicity : Not available.			
Information on the likely	Routes of entry anticipated: Oral, Dermal, Inhalation.			
routes of exposure				
Potential acute health	Eye contact : Causes serious eye irritation.			
effects	Inhalation : No known significant effects or critical hazards.			
	Skin contact : No known significant effects or critical hazards.			
	Ingestion : No known significant effects or critical hazards.			
Symptoms related to the	Eye contact : Adverse symptoms may include the following: pain or irritation			
physical, chemical and	watering redness			
toxicological	Inhalation : No specific data.			
characteristics	Skin contact : No specific data.			
	Ingestion : No specific data.			
Potential chronic health	General : No known significant effects or critical hazards.			
effects	Carcinogenicity : No known significant effects or critical hazards.			
	Mutagenicity : No known significant effects or critical hazards.			
	Teratogenicity : No known significant effects or critical hazards.			
	Developmental effects : No known significant effects or critical hazards.			
	Fertility effects : No known significant effects or critical hazards.			
Numerical measures of	Acute toxicity estimates : Not available.			
toxicity				

Section 12. Ecological information

Toxicity

Product/ingredient	Result	Species	Exposure
name			
ethanol	Acute EC50 17.921 mg/l Marine water Acute EC50 2000 μg/l Fresh water Acute LC50 25500 μg/l Marine water Acute LC50 42000 μg/l Fresh water Chronic NOEC 4.995 mg/l Marine water Chronic NOEC 100 ul/L Fresh water	Algae - Ulva pertusa Daphnia - Daphnia magna Crustaceans – Artemia franciscana - Larvae Fish - Oncorhynchus mykiss Algae - Ulva pertusa Daphnia - Daphnia magna – Neonate	96 hours 48 hours 48 hours 4 days 96 hours 21 days
	Chronic NOEC 0.375 ul/L Fresh water	Fish - Gambusia holbrooki - Larvae	12 weeks

Persistence and degradability : Not available.

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
ethanol	-0.35	-	low

Mobility in soil

Soil/water partition coefficient (KOC)	Not available.
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Other adverse effects : No known significant effects or critical hazards

Section 13. Disposal considerations

Disposal methods	The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and
	sewers.

Section 14. Transport information

	DOT Classificatio n	TDG Classification	Mexico Classificatio n	ADR/RID	IMDG	ΙΑΤΑ
UN number	1993	1993	1993	1993	1993	1993
UN proper shipping name	FLAMMABL E LIQUIDS, N.O. S.	FLAMMABLE LIQUIDS, N.O. S.	FLAMMABL E LIQUIDS, N.O. S.	FLAMMABLE LIQUIDS, N.O. S.	FLAMMABL E LIQUIDS, N.O. S.	FLAMMABLE LIQUIDS, N.O. S.
Transport hazard class(es)	3	3	3	3		3
Packing group	11	11	11	11	11	II
Environment al hazards	No.	Yes.	No.	Yes.	Yes.	No.

Additional	Limited	Product	The	The marine	The
information	quantity	classified as	environmental	pollutant	environmental
mormation	Yes.			mark is not	
	res.	per the	ly hazardous		ly hazardous
		following	substance	required	substance
		sections of	mark is not	when	mark may
		the	required when	transporte	appear if
		Transportatio	transported in	d in sizes of	required by
		n of	sizes of ≤5 L or	≤5 L or ≤5	other
		Dangerous	≤5 kg. Special	kg.	transportation
		Goods	provisions 640		regulations.
		Regulations:	(C) Tunnel		
		2. 18-2.19	code (D/E)		
		(Class 3), 2.7			
		(Marine			
		pollutant			
		mark). The			
		marine			
		pollutant			
		mark is not			
		required			
		when			
		transported			
		by road or			
		rail. Explosive			
		Limit and			
		Limited Quan			
			1		

Special precautions for user	Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.
Transport in bulk according to Annex II of MARPOL and the IBC Code	Not available.

Section 15. Regulatory information

Safety ,health and environmental regulations / legislation specific for the substance or mixture

EU regulations	
Legislation	FLAMMABLE LIQUIDS
	P5c
	Quantity 1:5,000t
	Quantity 1:5,0000t
Regulations (EC) No 1005/2009 on substances	Not regulations
that deplete the ozone layer	
Regulations (EC) No 850/2004 of the European	Not regulations
parliament and of the council of 29 April 2004 on	
persistent organic pollutants and amending	
directive 79/117/EEC	
Substances of very high concern (SVHC)	This product does not contain Substances of very high concern according to regulation (EC) No1907/2006 (REACH), Article 57 above the respective regulatory
	concentration limit of> 0.1 % (w/w)

Section 16. Other information

Abbreviations and acronyms

- ATE = Acute Toxicity Estimate
- BCF = Bioconcentration Factor
- GHS = Globally Harmonized System of Classification and Labelling of Chemicals
- IATA = International Air Transport Association
- IBC = Intermediate Bulk Container
- IMDG = International Maritime Dangerous Goods
- LogPow = logarithm of the octanol/water partition coefficient
- MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
- UN = United Nations

Notice to reader

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