Safety Data Sheet LOK 2222



1. Identification	
Product identifier	LOK 2222
Product code	RALOK222250ML; RALOK222250ML; RALOK22424LT
Other means of identification	Low strength Threadlocker.
Recommended use of the chemical and restrictions on use	Anaerobic resins and cyanoacrylate glues.
Manufacturer	AEROCHEM Inc. 5977 Trans Canada Highway Pointe-Claire, QC H9R 1C1 Canada Tel. 514-630-2800 General Information: 1-888-592-5837 Fax 514-630-2828 www.aerochem.ca
Emergency phone number	Quebec Poison Center: 1-800-463-5060 (toll free in QC) Ontario and Manitoba Poison Centres: 1-800-268-9017 or 419-813-5900 BC Drug and Poison Information Centre: 1-800-567-8911 (toll free in BC) or contact your local poison control centre in the state/province or territory where you live. INFOTRAC® 1-800-535-5053. International call collect: 1-352-323-3500 24 hours/day, 7 days/week.

2. Hazard identification

Summary Avoid contact with skin, eyes and clothing. Do not breathe vapours, mists or aerosols. Do not ingest. If ingested consult physician immediately and show this Safety Data Sheet. Wear eye protection, gloves and other protective clothing that are adapted to the task being performed and the risks involved.

WHMIS 2015/OSHA HCS 2012/GHS



Skin corrosion/irritation (Category 2) Serious eye damage/eye irritation (Category 2) Skin sensitizer (Category 1) Carcinogenicity (Category 2)

WARNING

- H319: Causes serious eye irritation
- H315: Causes skin irritation
- H317: May cause an allergic skin reaction
- H351: Suspected of causing cancer
- P201: Obtain special instructions before use.
- P202: Do not handle until all safety precautions have been read and understood.
- P261: Avoid breathing vapours and dust.
- P264: Wash skin thoroughly after handling.
- P272: Contaminated work clothing should not be allowed out of the workplace.
- P280: Wear protective gloves, protective clothing and eye protection.
- P308+313: IF exposed or concerned: Get medical attention.
- P302+352: IF ON SKIN: Wash with plenty of water and soap.

P333+313: If skin irritation or a rash occurs: Get medical advice or attention.

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

P337+313: If eye irritation persists: Get medical advice or attention.

P362+364: Take off contaminated clothing and wash before reuse.

P405: Store locked up.

P501: Dispose of contents and container in accordance with local regulations.

3. Composition/information on ingredients

Common name	CAS	Weight % content
Polyglycol dimethacrylate	Proprietary 25	60 - 100 %
Polyglycol oleate	Proprietary 26	10 - 30 %
Saccharin	81-07-2	1 - 5 %
Synthetic Amorphous Fumed Silica	112945-52-5	1 - 5 %
Cumene hydroperoxide	80-15-9	1 - 5 %
Propylene glycol	57-55-6	1 - 5 %
Cumene	98-82-8	0.1 - 1 %

Note: Polyglycol dimethacrylate (Proprietary 25) and Polyglycol oleate (Proprietary 26) are Trade Secret from Henkel Corporation. No registration number and registration date have been provided in the original SDS mentioning these proprietary ingredients. Moreover, no acute toxicity data have been provided.

4. First-aid	measures
Inhalation	Move person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen by trained personnel. 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. Avoid touching eyes with contaminated body parts. 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 15 minutes. Hold eyelids apart to rinse properly. If a problem develops or persists, seek medical attention.
Ingestion	DO NOT induce vomiting, unless recommended by medical personnel. Never give anything by mouth if victim is unconscious or convulsing. Seek medical attention or contact a Poison Centre immediately.
Other	No information available.
Symptoms	May cause redness and irritation of the skin and to eyes. May cause an allergic reaction of the skin.
Notes to the physician	Apply a symptomatic and supportive treatment. 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	Dried powder, water fog, water spray, carbon dioxide (CO2), ABC fire extinguishing, chemical foam.			
Specific hazards arising from the chemical	In a fire or if heated, a pressure increase will occur and the container may burst.			

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.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Do not touch spilled material. Make sure to wear personal protective equipment mentioned in this Safety Data Sheet.
Environmental precautions	Prevent entry into sewers, closed areas 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. Absorb with inert material (soil, sand, vermiculite) or wipe up or scrape up and place in an appropriate waste disposal container 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 in well ventilated area. Do not breathe vapours, mists or aerosols. Avoid contact with skin, eyes and clothing. Wear eye protection, gloves and other protective clothing that are adapted to the task being performed and the risks involved. Keep containers tightly closed when not in use. Do not eat, do not drink and do not smoke during use. Wash hands, forearms and face thoroughly after handling this compound and before eating, drinking or using toiletries. Remove contaminated clothing and wash 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. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Store away from incompatible materials (see section 10). Keep away from frost and extreme temperature variations.
Storage temperature	0 to 32°C (32 to 89.6°F)

ImmediatelySynthetic ADangerous to Life orCumene: 9Health		ed Silica: 3000 mg/n	13.	N	
Propylene glycol	TWA (8h)	Mist		10 mg/m ³	ON , US AIHA
			50 ppm	155 mg/m ³	ON
Synthetic Amorphous Fumed Silica	TWA (8h)	Respirable Dust		1.5 mg/m ³	BC
		Respirable Dust		3 mg/m ³	ACGIH , ON
		Total Dust		4 mg/m ³	BC
		Respirable Dust		6 mg/m ³	RSST
		Total Dust		10 mg/m ³	ACGIH , ON
Cumene hydroperoxide	TWA (8h)		1 ppm		US AIHA
Cumene	STEL		75 ppm		BC
	TWA (8h)		25 ppm		BC
			50 ppm		ACGIH , ON
			50 ppm	246 mg/m ³	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.				
Individual protection n	neasures				
Еуе	Wear safety glasses with side shields. If there is a risk of contact with eyes, wear chemical splash goggles.				
Hands	Wear nitrile or neoprene gloves. Disposable nitrile gloves can also be used, but discard after single use. Before using, user should confirm impermeability. Discard gloves with tears, pinholes, or signs of wear.				
Skin	Personal protective equipment for the body should be selected based on the task being performed and the risks involved. Wear normal work clothing covering arms and legs as required by employer code. If necessary, wear an apron or long-sleeve protective coverall 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 confined or enclosed space and for an assigned protection factor (APF) up to 10 times the exposure limit, wear a half mask respirator with appropriate cartridges fitted with P100 filters.				
Feet	Wear rubber boots to clean up a spill.				
	Goggles Nitrile gloves				

Physical state	Liq <mark>uid</mark>	Flammability	Non-flammable.
Colour	Purple	Flammability limits	2.6 to 12.5%
Odour	Slight odor	Flash point	>93.3°C (199.9°F) Tagliabue closed cup
Odour threshold	N/Av.	Auto-ignition temperature	N/Av.
рН	N/Av.	Sensibility to electrostatic charges	N/Av.
Melting point	N/Av.	Sensibility to sparks and/or friction	No
Freezing point	N/Av.	Vapour density	N/Av. (Air = 1)
Boiling point	>149°C (300.2°F)	Relative density	1.08 kg/L (Water = 1)
Solubility	Slightly soluble in water.	Partition coefficient n-octanol/water	N/Av.
Evaporation rate	N/Av.	Decomposition temperature	N/Av.
Vapour pressure	<0.667kPa (5 mm Hg) @ 27°C (80.6°F)	Viscosity	N/Av.
Percent Volatile	N/Av.	Molecular mass	N/Ap.

Reactivity	No information available for this product.			
Chemical stability	Stable under recommended storage conditions.			
Possibility of hazardous reactions (including polymerizations)	A dangerous reaction will not occur.			
Conditions to avoid	Avoid contact with incompatible substances. Avoid high temperatures and intense heat.			
Incompatible materials	Strong oxidizing agents (e.g. chlorine, fluorine, nitric acid, perchloric acid, peroxides, nitrates, chlorates, chromates, permanganates and perchlorates), strong reducing agents (e.g. potassium, sodium, lithium, metal hydrides), strong bases (e.g. hydroxides, solutions of ammonia, amines, carbonates).			
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.			

Numerical	Polyglycol dimethacry	/late	Ingestion	>2000 mg/kg	Rat	LD50	
measures of	Polyglycol oleate		-	>2000 mg/kg		LD50	
toxicity	Propylene glycol		Ingestion	18000 mg/kg	Rat	LD50	
			Inhalation	>20 mg/l/4h	Rat	LC50	
			Skin	20800 mg/kg	Rabbi	t LD50	
	Cumene hydroperoxi	de	Ingestion	382 mg/kg	Rat	LD50	
				1.4 mg/l/4h	Rat	LC50	
			Skin	500 mg/kg	Rat	LD50	
	Saccharin		Ingestion	17000 mg/kg		e LD50	
			Skin	4694 mg/kg		t LD50	
	Synthetic Amorphous	Fumed Silica				LD50	
			-	>2.08 mg/l/4h		LC50	
			Skin	>5000 mg/kg			
	Cumene			1400 mg/kg	Rat	LD50	
			-	39 mg/l/4h	Rat	LC50	
			Skin	10578 mg/kg		t LD50	
Likely routes of exposure	Skin, eyes, inhalation	, ingestion.					
Delayed, immediate and chronic effects	Eye contact	80-15-9) caus with dilute 109 Irritation/Corre	ed severe % solutions osion, Rab	eye irritation a s is likely to car	nd cori use sor 405): te	neal dam ne pain ests perf	umene hydroperoxide (CAS no nage in rabbits (IUCLID). Conta and irritation. Eye ormed with the other ingredient sults.
	Skin contact	May cause redness and irritation of the skin. Undiluted cumene hydroperoxide (CAS no 80-15-9) caused severe skin irritation and damages in rabbits (IUCLID). Dilued 10% solution of cumene hydroperoxide is irritating. Skin Irritation/Corrosion, Rabbit (OECD 404) : tests performed with the other ingredients of this mixture gave not irritating to slightly irritating results.					
	Inhalation	Prolonged or excessive exposure may cause respiratory tract irritation.					bry tract irritation.
	Ingestion	Ingestion can cause abdominal pain, nausea, cramps, headache, dizziness, diarrhea and vomiting.					
		May cause an	allergic re	action of the s	kin. Cu	mene hy	droperoxide (CAS no 80-15-9)
	sensitization						(TONEX). The Trade Secret
			•		d to be	a skin se	ensitizer in the original SDS.
	IARC/NTP	Common nar	me IARC I	NTP			
	Classification						

Other information	The oral and skin acute toxicity estimates (ATE) of the mixture were calculated to be greater than 2000 mg/kg. The acute toxicity estimate (ATE) by inhalation of the mixture was calculated to be greater than 2 mg/L/4h. This value is not classified according to GHS. These values are not classified according to WH 2015 and OSHA HCS 2012.	
Interactive effects	No information available.	
	single exposure Specific target No target organ is listed. organ toxicity - repeated exposure)
	Specific target No target organ is listed. organ toxicity -	
	Reproductive toxicityIngredients in this product present at levels greater than or equal to 0.1% are not known to cause reproduction effects.	
	Mutagenicitydepends on duration and level of exposure.Ingredients in this product present at levels greater than or equal to 0.1% are not known to cause mutagenic effects.	
	IARC : 1- Carcinogenic; 2A- Probably carcinogenic; 2B- Possibly carcinogenic. NTP : K- Known to be carcinogens; R- Reasonably anticipated to be carcinogens. Contains a substance that can cause cancer based on animal data. The risk of ca	ncer

12. Ecologic	al information						
Ecological	Fish - Pimephales promelas - Fresh water	LC50 46500 mg/L; 96 h (CAS no 57-55-6)					
toxicity	Aquatic Invertebrate - Daphnia Magna, Water	EC50 43500 mg/L; 48 h (CAS no 57-55-6)					
	Aquatic Plant - Algea, Selenastrum capricornutum	EC50 1900 mg/L; 96 h (CAS no 57-55-6)					
	Fish - Onc <mark>orhynchus mykiss - Rainbow trout</mark>	LC50 3.9 mg/L; 96 h (CAS no 80-15-9) OECD 203					
	Aquatic Invertebrate - Daphnia Magna, Water flea (immobilization)	EC50 18.8 mg/L; 48 h (CAS no 80-15-9) OECD 202					
	Aquatic Plant - Algea, Scenedesmus subspicatus	EC50 3.1 mg/L; 72 h (CAS no 80-15-9) OECD 201					
Persistence	Contains an or many ingredients that may be persistent in aquatic environment.						
Degradability	No information available for this product. Propylene glycol (CAS no 57-55-6) is readily biodegradable (96% in 28 days) OECD Guideline 301D. Cumene hydroperoxide (CAS no 80-15-9) is not readily biodegradable, 2% to 7% after 28 days (OECD 301B).						
Bioaccumulative potential	No information available for this product. Bioconcentration Factor (BCF) <1 indicating a low potential to bioaccumulate (Propylene Glycol). Propylene has a Bioconcentration Factor (BCF) value of 5, and its Log Kow value is 1.77, indicating its potential to bioaccumulate is low.						
Mobility in soil	No information available for this product. Propylene Glycol (CAS no 57-55-6) will be distributed to air (3%), water (48.8%), soil (48.8%), and sediment (0.07%). Based on the high solubility in water, a high mobility in soil is to be expected. Cumene hydroperoxide (CAS no 80-15-9) has no bioaccumulation potential (BCF value of 9).						
Other adverse effects	This chemical does not deplete the ozone layer.						

13. Disposal considerations

Container

Important! Prevent waste generation. Use in full. DO NOT dispose residue in sewers, streams or drinking water supply. 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.

14. Transport in	formation
UN Number	UN N/A
UN Proper Shipping Name	Not regulated by TDG (Canada) and 49 CFR DOT (USA).
Environmental hazards	This material does not contain marine pollutant.
Special precautions for user	No additional information.
TDG - Transportation o	f Dangerous Goods (Canada)
Transport hazard class(es)	Not regulated
Packing group	Not regulated
Emergency response guidebook 2016	
IMO/IMDG - Internation	al Maritime Transport
Classification	Not regulated
IATA - International Air	Tran <mark>sport Association</mark>
Classification	Not regulated
	are provided as a customer service. As the shipper YOU remain responsible for complying with all applicable laws and regulations, including proper ckaging. In addition, if a domestic exemption exists, it is the responsibility of the shipper to define the application of it.

15. Regulatory information

CANADA

Common name	CAS	CEPA	DSL	NDSL	NPRI
Polyglycol dimethacrylate	Proprietary 25				
Polyglycol oleate	Proprietary 26				
Saccharin	81-07-2	81-07-2 X			
Synthetic Amorphous Fumed Silica	112945-52-5		X		
Cumene hydroperoxide	80-15-9		X		Х
Propylene glycol	57-55-6		X		
Cumene	98-82-8	Х	Х		Х
 CEPA: List of Toxic Substances Managed DSL: Domestic Substances List Inventory 	Under Canadian Enviror entory	nmental Prote	ction Act		

Common name	CAS	TSCA	CER	EPCRA	EPCRA				CWA	CWA
			CLA	313	302/304	112(b)	112(b)	112(r)	311	Prio.

dimethacrylate24Polyglycol oleatePSaccharin8Synthetic Amorphous1Fumed Silica1Cumene hydroperoxide80Propylene glycol5Cumene90- TSCA: Toxic Substance90- TSCA: Toxic Substance90- CERCLA: Comprehensiv90- EPCRA 313: Emergency- EPCRA 302/304: Emergency- CAA 112(b) HON: Clean- CAA 112(b) HAP: Clean	Proprietary 26 31-07-2 12945-52-5 30-15-9 57-55-6 98-82-8 Control Act ve Environme v Planning an ency Plannin a Air Act - Haz	d Commi	X X X	x	X				
Polyglycol oleate Saccharin Synthetic Amorphous Fumed Silica Cumene hydroperoxide Propylene glycol Cumene - TSCA: Toxic Substance - CERCLA: Comprehensiv - EPCRA 313: Emergency - EPCRA 302/304: Emerge - CAA 112(b) HON: Clean - CAA 112(b) HAP: Clean	Proprietary 26 31-07-2 12945-52-5 30-15-9 57-55-6 98-82-8 Control Act ve Environme v Planning an ency Plannin a Air Act - Haz	X X X X X X ental Resp d Commu	X X	X					
Protygiycol oleate 2d Saccharin 8' Synthetic Amorphous 1' Fumed Silica 1' Cumene hydroperoxide 8' Propylene glycol 5' Cumene 9' - TSCA: Toxic Substance (Comprehensive) 9' - CERCLA: Comprehensive EPCRA 313: Emergency - EPCRA 302/304: Emergency - - CAA 112(b) HON: Clean - - CAA 112(b) HAP: Clean -	26 31-07-2 12945-52-5 30-15-9 57-55-6 98-82-8 Control Act ve Environme v Planning an ency Plannin a Air Act - Haz	X X X X X ental Resp d Commu	X X	X					
Synthetic Amorphous Fumed Silica 1 Cumene hydroperoxide 80 Propylene glycol 5 Cumene 90 - TSCA: Toxic Substance 0 - CERCLA: Comprehensiv - EPCRA 313: Emergency - EPCRA 302/304: Emerge - CAA 112(b) HON: Clean - CAA 112(b) HAP: Clean	12945-52-5 30-15-9 57-55-6 98-82-8 Control Act ve Environme v Planning an ency Plannin a Air Act - Haz	X X X X ental Resp d Commu	X X	X					
Fumed SilicaICumene hydroperoxide80Propylene glycol57Cumene98- TSCA: Toxic Substance (Comprehensive)- CERCLA: Comprehensive- EPCRA 313: Emergency- EPCRA 302/304: Emerge- CAA 112(b) HON: Clean- CAA 112(b) HAP: Clean	30-15-9 57-55-6 98-82-8 Control Act ve Environme v Planning an ency Plannin a Air Act - Haz	X X X ental Resp d Comm	X						
Propylene glycol 5 Cumene 94 - TSCA: Toxic Substance (- CERCLA: Comprehensiv - EPCRA 313: Emergency - EPCRA 302/304: Emerge - CAA 112(b) HON: Clean - CAA 112(b) HAP: Clean	07-55-6 08-82-8 Control Act ve Environme v Planning an ency Plannin o Air Act - Haz	X X ental Resp d Comm	X						
Cumene 94 - TSCA: Toxic Substance (- CERCLA: Comprehensiv - EPCRA 313: Emergency - EPCRA 302/304: Emerge - CAA 112(b) HON: Clean - CAA 112(b) HAP: Clean	98-82-8 Control Act /e Environme / Planning an ency Plannin) Air Act - Haz	X ental Resp d Comm		V					
- TSCA: Toxic Substance (- CERCLA: Comprehensiv - EPCRA 313: Emergency - EPCRA 302/304: Emerge - CAA 112(b) HON: Clean - CAA 112(b) HAP: Clean	Control Act ve Environme v Planning an ency Plannin a Air Act - Haz	ental Resp d Comm		V	Х				
 CERCLA: Comprehensive EPCRA 313: Emergency EPCRA 302/304: Emerge CAA 112(b) HON: Clean CAA 112(b) HAP: Clean 	ve Environme v Planning an ency Plannin n Air Act - Haz	d Commi		X	Х	Х			
- CAA 112(1). Clean All AC - CWA 311: Clean Water A - CWA Priority: Clean Wate California Proposition 65	Act - List of H ter Act - Prior	lazardous	s Substand		lease Prevention		2		
Common name	CAS		Cancer		Reproductive a	and Develo	mental T	oxicity	
Cumene	98-82-8		Curroci	X	neproduotive (montari	Oxiony	
Other regulations WHMIS D2A E Class E Class E)	naterial c	rial causin ausing oth	g other tox er toxic eff	ic effects ects				

16. Other information

Date (YYYY-MM-DD)	AEROCHEM Inc. 2017-01-11
Version	01
Other information	REFERENCES: - Haz-Map, Information on Hazardous Chemicals and Occupational Diseases, http://hazmap.nlm.nih.gov/index.php - 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 - OECD Existing Chemicals Database, Chemicals Screening Information DataSet (SIDS) for High Volume

