Safety Data Sheet
CS-3000

1. Identification

Product identifier	CS-3000
Product code	GRCS300017KG, GRCS300055KG, GRCS3000180KG
Other means of identification	CS-3000, liquid grease format. This SDS sheet is not for the product in aerosol format. Multipurpose Tacky Grease.
Recommended use of the chemical and restrictions on use	High Viscosity Grease for High Temperature and High Loads.
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 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

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

Other hazards which do not result in classification :
Skin irritation (Category 3).
Acute hazard to the aquatic environment (Category 2).
Long-term hazard to the aquatic environment (Category 2)

WARNING
H319: Causes serious eye irritation
H317: May cause an allergic skin reaction
H316: Causes mild skin irritation
H411: Toxic to aquatic life with long lasting effects
P261: Avoid breathing vapours, mist and spray.
P264: Wash skin thoroughly after handling.
P272: Contaminated work clothing should not be allowed out of the workplace.
P273: Avoid release to the environment.
P280: Wear protective gloves, protective clothing and eye protection.

P302+352: IF ON SKIN: Wash with soap and water.
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.
P391: Collect spillage.
P501: Dispose of contents and container to an approved waste disposal plant.

3. Composition/information on ingredients

Common name	CAS	Weight % content
Distillates (petroleum), solvent-refined heavy paraffinic	64741-88-4	50 - 70 %
Distillates (petroleum), solvent-dewaxed heavy paraffinic	64742-65-0	10 - 20 %
Calcium carbonate	471-34-1	5 - 10 %
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	68584-23-6	1 - 5 %
Calcium dodecylbenzenesulfonate	26264-06-2	1 - 5 %
Sulfonic acids, petroleum, calcium salts	61789-86-4	1 - 5 %
Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts	70024-69-0	1 - 5 %

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. 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. If victim is conscious wash out mouth with water. 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 to eyes. May cause dry skin, itching and irritation. 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	Dry chemicals, water spray, chemical foam, carbon dioxide (CO2). Do not use a heavy water jet.
Specific hazards arising from the chemical	Non-Flammable. May be combustible at high temperature. Emits toxic and irritating fumes under fire conditions.
Special protective	Firefighters must wear self contained breathing apparatus with full face mask. Firefighting suit may not

equipment	be efficient against chemicals.
Special protective actions for fire-fighters	Use water spray to cool fire-exposed containers. Water spray can reduce the intensity of the flames. However, the water jets can spread the fire. Product floating on water can travel to an ignition source and spread the fire. 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 in sewer and other enclosed area. 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. Remove sources of ignition. Stop leak, if it's possible to do so without risk. 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 the contaminated surface by rinsing with soapy water. 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. Avoid contamination with another chemical product. Keep containers tightly closed when not in use. Keep away from heat and open flame. 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 oxidizing materials and incompatible materials (see section 10). Keep away from direct sunlight and heat.
Storage temperature	0 to 50°C (32 to 122°F)

8. Exposure controls/personal protection

Immediately Dangerous to Life or Health	No IDLH value is reported.

Distillates (petroleum), solvent-refined heavy paraffinic	TWA (8h)	Mist	5 mg/m^3	ACGIH , RSST
Distillates (petroleum), solvent-dewaxed heavy paraffinic	STEL	Mist	10 mg/m^3	ON , RSST
	TWA (8h)	Mist	5 mg/m^3	ACGIH , ON, RSST
Calcium carbonate	TWA (8h)	Total Dust	10 mg/m^3	ACGIH , 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 measures	
Eye	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. 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 normal work clothing covering arms and legs as required by employer code. Wear synthetic or a neoprene apron, if necessary, to prevent repeated or prolonged contact with skin.
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 organic vapour cartridges fitted with P100 filters. For an APF until maximum 100 times of exposure limit, wear a full face respirator mask with organic vapour cartridges and P100 filters.
Feet	Wear rubber boots to clean up a spill.

Goggles

Nitrile gloves

9. Physical and chemical properties

Physical state	Grease (Liquid)	**Flammability**	Non-flammable.
Colour	Tan	**Flammability limits**	N/Av.
Odour	Slightly, mineral-oil-like	**Flash point**	>180°C (356°F)
Odour threshold	N/Av.	**Auto-ignition temperature**	N/Av.
pH	N/Ap.	**Sensibility to electrostatic charges**	No
Melting point	N/Av.	**Sensibility to sparks and/or friction**	No
Freezing point	N/Av.	**Vapour density**	N/Av. (Air = 1)
Boiling point	N/Av.	**Relative density**	1.2 kg/L (Water = 1)
Solubility	Insoluble in water.	**Partition coefficient n-octanol/water**	N/Av.
Evaporation rate	< Butyl Acetate	**Decomposition temperature**	N/Av.
Vapour pressure	N/Av.	**Viscosity**	460 cSt @ 40°C (104°F)
Percent Volatile	N/Av.	**Molecular mass**	N/Ap.

N/Av.: Not Available N/Ap.: Not Applicable Und.: Undetermined N/E: Not Established

10. Stability and reactivity

Reactivity	No information available for this product.
Chemical stability	Stable under recommended storage conditions.
	A dangerous reaction will not occur.

Possibility of hazardous reactions (including polymerizations)	
Conditions to avoid	Avoid contact with incompatible materials.
Incompatible materials	Strong bases, strong acids, strong oxidizing agents (e.g. nitric acid, perchloric acid, peroxides, nitrates, chlorates and perchlorates).
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. Toxicological information

Numerical measures of toxicity	Distillates (petroleum), solvent-refined heavy paraffinic	Ingestion	>5000 mg/kg	Rat	LD50
		Inhalation	2.18 mg/l/4h	Rat	LC50
		Skin	>5000 mg/kg	Rabbit	LD50
	Distillates (petroleum), solvent-dewaxed heavy paraffinic	Ingestion	>5000 mg/kg	Rat	LD50
		Inhalation	2.18 mg/l/4h	Rat	LC50
		Skin	>5000 mg/kg	Rabbit	LD50
	Calcium carbonate	Ingestion	6450 mg/kg	Rat	LD50
		Inhalation	>3 mg/l/4h	Rat	LC50
		Skin	>2000 mg/kg	Rat	LD50
	Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	Ingestion	>16000 mg/kg	Rat	LD50
		Inhalation	>1.9 mg/kg	Rat	LC50
		Skin	>5000 mg/kg	Rabbit	LD50
	Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts	Ingestion	>5000 mg/kg	Rat	LD50
		Skin	>2000 mg/kg	Rabbit	LD50
	Sulfonic acids, petroleum, calcium salts	Ingestion	>5000 mg/kg	Rat	LD50
		Inhalation	>1.9 mg/kg	Rat	LC50
		Skin	>5000 mg/kg	Rabbit	LD50
	Calcium dodecylbenzenesulfonate	Ingestion	4000 mg/kg	Rat	LD50
		Skin	>2000 mg/kg	Rabbit	LD50
Likely routes of exposure	Skin, eyes, inhalation, ingestion.				

Delayed, immediate and chronic effects	**Eye contact**	May cause redness and irritation to eyes. Eye Irritation, Rabbit: Calcium dodecylbenzenesulfonate (CAS no 26264-06-2) is severely irritating (OEDC 405). Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts (CAS no 70024-69-0) is irritating. Sulfonic acids, petroleum, calcium salts (CAS no 61789-86-4) are irritating.
	Skin contact	May cause redness and slight irritation of the skin. Skin Irritation, Rabbit : Calcium dodecylbenzenesulfonate (CAS no 26264-06-2) is moderately irritating. Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts (CAS no 70024-69-0) is irritating. Sulfonic acids, petroleum, calcium salts (CAS no 61789-86-4) are irritating.
	Inhalation	Generally speaking, working cleanly and following basic precautionary measures will greatly minimize the potential for harmful exposure to this product under normal use conditions.
	Ingestion	Low degree of acute toxicity. May cause gastro-intestinal irritation with nausea and vomiting.
	Respiratory or skin sensitization	Benzenesulfonic acid, alkyl derivatives, and sulfonic acids, petroleum are skin sensitizers based on the Beuhler test (guinea pig, OECD Guideline 406). Sulfonic acids, petroleum, calcium salts (CAS no 61789-86-4) have shown equivocal results in human skin sensitization patch test studies. This product is not a respiratory sensitizer.
	IARC/NTP Classification	No ingredients listed.
	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.
	Mutagenicity	Ingredients in this product present at levels greater than or equal to 0.1% are not known to cause mutagenic effects.
	Reproductive toxicity	Ingredients in this product present at levels greater than or equal to 0.1% are not known to cause reproduction effects.
	Specific target organ toxicity - single exposure	No target organ is listed.
	Specific target organ toxicity - repeated exposure	No target organ is listed.
Interactive effects	No information available.	
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 (aerosol/mist) of the mixture was calculated to be greater than 5 mg/L/4h. These values are not classified according to WHMIS 2015 and OSHA HCS 2012.	

12. Ecological information

Ecological toxicity	Fish - Pimephales promelas [static]	LC50	>100 mg/L; 96h (CAS no 64741-88-4)
	Fish - Oncorhynchus mykiss - Rainbow trout	LC50	>100 mg/L; 96h (CAS no 61789-86-4)
	Fish, various	LC50	>100 mg/L ; 96h (CAS no 70024-69-0)
	Fish, various	LC50	20 mg/L; 96h (CAS no 26264-06-2)
	Aquatic Invertebrate - Daphnia magna	EC50	2.2 mg/L; 48h (CAS no 26264-06-2)
Persistence	Contains an or many ingredients that may be persistent in aquatic environment.		
Degradability	Lubricant base oil attained between 2 to 4% degradation within 28 days and therefore, cannot be considered as ready biodegradable under the conditions of OECD Guideline 301B. The ingredients of calcium alkyl sulphonates salts are not readily biodegradable (<10% in 28 days). Calcium dodecylbenzenesulfonate (CAS no 26264-06-2) should be biodegradable (>70% in 28 days).		
Bioaccumulative potential	Lubricant base oil has Log Kow values ranging from about 5 to 25 and Bioconcentration Factor (BCF) between 0.9 and 750000 for the oil mixture. These values indicate a high degree of bioaccumulation. The potential of calcium alkyl sulfonates salts to bioaccumulate is low. Log Kow >6 and Potential for bioconcentration (BCF) of 71 (estimated) for Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts (CAS no 70024-69-0). Potential for bioconcentration (BCF) of 71 (estimated) for Sulfonic acids, petroleum, calcium salts (CAS no 61789-86-4). Log Kow of 6.7 (estimated) for Calcium dodecylbenzenesulfonate (CAS no 26264-06-2).		
Mobility in soil	This product is stable in water, and can be mechanically separated from water. Lubricant base oil is likely to have high Koc values (>5000), indicating a high degree of sorption to the organic matter in soils. This value suggests that some components will display low mobility and some will be essentially immobile in soil.		
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. Non-use oils or waste oils can be reprocessed (recycle) 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.

14. Transport information

UN Number	UN
UN Proper Shipping Name	Not regulated by TDG (Canada) and 49 CFR DOT (USA).
Environmental hazards	This material is not listed as a marine pollutant.
Special precautions for user	No additional information.
TDG - Transportation of Dangerous Goods (Canada)	
Transport hazard class(es)	Not regulated
Packing group	Not regulated
Emergency response guidebook 2012	
IMO/IMDG - International Maritime Transport	
Classification	Not regulated
IATA - International Air Transport Association	
Classification	Not regulated

These transportation classifications are provided as a customer service. As the shipper YOU remain responsible for complying with all applicable laws and regulations, including proper transportation classification and packaging. 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
Distillates (petroleum), solvent-refined heavy paraffinic	64741-88-4		X		
Distillates (petroleum), solvent-dewaxed heavy paraffinic	64742-65-0		X		
Calcium carbonate	471-34-1		X		
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	68584-23-6		X		
Calcium dodecylbenzenesulfonate	26264-06-2		X		
Sulfonic acids, petroleum, calcium salts	61789-86-4		X		
Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts	70024-69-0		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.
Distillates (petroleum), solvent-refined heavy paraffinic	64741-88-4	X								
Distillates (petroleum), solvent-dewaxed heavy paraffinic	64742-65-0	X								
Calcium carbonate	471-34-1									
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	68584-23-6									
Calcium dodecylbenzenesulfonate	26264-06-2									
Sulfonic acids, petroleum, calcium salts	61789-86-4									
Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts	70024-69-0									

- 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

WHMIS 1988

D2B

Class D2B : Toxic material causing other toxic effects

HMIS

NFPA

16. Other information

Date (YYYY-MM-DD)	AEROCHEM Inc. 2016-01-29
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
- NIOSH Pocket Guide to Chemical Hazards, Centers for Disease Control and Prevention, NIOSH Publications, 2007, http://www.cdc.gov/niosh/npg/npg.html
- OECD Existing Chemicals Database, Chemicals Screening Information DataSet (SIDS) for High Volume Chemicals, UNEP publications, http://webnet.oecd.org/HPV/UI/Search.aspx
- Database, Institut National de Recherche et de Sécurité, http://www.inrs.fr/accueil/produits/bdd.html

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