

Product Use:

SECTION I: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: Aeriol ThixOSyn Aviation Grease

Lubricant grease.

Restrictions on Use: Refer to Grease Compatibility Chart

Manufacturer / Supplier: Awsum Outcomes Inc.

Bay 5 409 38 Ave NE

Calgary, Alberta T2E 6R9 Canada

Phone 1 587 353 2000

Emergency phone number:

CANUTEC – 24 hr Emergency No. 1-613-996-6666 Business Hour Number 1 587 353 2000 (Monday through Friday 8:00am to 4:30pm MST)



SECTION II: HAZARDS IDENTIFICATION

GHS Classification:	
Not Applicable:	Not a hazardous substance or mixture.
GHS Label Element:	
Hazard symbol:	None
Hazard statements:	N/A
Other hazards:	Not a hazardous substance or mixture
Precautionary statements:	None
	Disposal: P501 Dispose of contents/container to an approved waste disposal plant. Storage: P411+235: Store at temperatures not exceeding 190°C/374 °F. Keep cool.

	Product: AERIOL TH	AWSUM OUTCOMES INC. SAFETY DATA SHEET IIXOSYN AVIATION GREASE Revision Date: 01 JAN 2019 Version: 7
Carcinogenicity:	Group 1: Carcinogenic to l	humans
IARC	Distillates (petroleum), solvent-refined heavy paraffinic	64741-88-4
OSHA		duct present at levels greater than or as a carcinogen or potential
NTP	Distillates (petroleum), solvent-refined heavy paraffinic	64741-88-4

SECTION III: COMPOSITION/ INFORMATION ON INGREDIENTS

Chemical name	CAS-No.	Concentration (%)
Distillates (petroleum), solvent-refined heavy paraffinic	64741-88-4	>= 10 - < 20 %
calcium carbonate	471-34-1	>= 10 - < 20 %
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	68584-23-6	>= 1 - < 5 %
calcium dodecylbenzenesulphonate	26264-06-2	>= 1 - < 3 %
Sulfonic acids, petroleum, calcium salts	61789-86-4	>= 1 - < 5 %
bis(nonylphenyl)amine	36878-20-3	>= 1 - < 2.5 %
Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts	70024-69-0	>= 1 - < 5 %



SECTION IV: FIRST AID MEASURES

Ingestion:	Obtain medical attention. Never give anything by mouth to an unconscious person. Not expected to be toxic by ingestion.
Skin Contact:	Wash off with warm water and soap. If hot material contacts skin, immediately cool before attempting removal. If skin irritation persists, call a physician. If high pressure forces the product under the skin get immediate medical attention!
Inhalation:	Remove to fresh air. Aspiration may cause pulmonary oedema and pneumonitis. If breathing is difficult, oxygen may be given by qualified personnel. If symptoms persist, consult physician.
Eye Contact:	Flush with clean tepid water for 15 minutes keeping eyelids open. Get medical attention immediately.
Most important symptoms and effects, both acute and delayed:	Irritating to respiratory tract and eyes. Breathing mist caused by high temperature or swallowing large quantities may be irritating to skin, respiratory system, mucous membranes and eyes.

SECTION V: FIRE-FIGHTING MEASURES

Suitable extinguishing media:	On small fires: carbon dioxide (CO_2) , dry chemicals, dry sand - vermiculite. On large fires: treat as an oil fire, water fog, foam,
Unsuitable extinguishing media:	Avoid spreading with water flooding.
Hazardous combustion products:	Oxides of carbon, sulphur, calcium.
Special extinguishing methods:	Keep containers cool with water spray. Prevent fire extinguishing water from contaminating surface water or the ground water system.
Special protective equipment and precautions for firefighters:	When fighting fire, treat as petroleum product, wear full protective clothing, including NIOSH approved self-contained breathing apparatus.
Fire and explosion hazards:	Do not cut, weld, or pressurize empty container. Container may explode in heat of fire.



SECTION VI: ACCIDENTAL RELEASE MEASURES

Personal protection:	Wear suitable protective equipment. Eliminate sources and or potential sources of ignition.
Environmental precautions:	Product has very low solubility in water. Do not flush to sewers, streams or other bodies of water. For disposal, see Section XIII.
Methods for cleaning up:	Absorb on inert material such as sand, earth, vermiculite. Sweep up and collect in a suitable container for disposal. Observe government regulations
Large spills:	Stop leak if without risk. Dike to contain spill. Pump excess material into suitable container (metal drums, metal tanks, or such).

SECTION VII: HANDLING AND STORAGE

Handling:	Keep drums tightly closed to prevent contamination. Avoid contact with eyes, skin and clothing. Wear recommended personal protection equipment.
Storage:	Store in a cool well-ventilated area. Normal precautions common to good safety practice should be followed in storage.



SECTION VIII: EXPOSURE CONTROLS/PERSONAL PROTECTION

Canada

Component	CAS #	Form of Exposure	Permissible Concentration	Basis
		TWAEV	10 mg/m ³	CA QC OEL
		(respirable)		
Calcium carbonate	471-34-1	TWA (total)	10 mg/m ³ Calcium)	CA AB OEL
		TWA	10mg/m3	CAL PEL
			Calcium carbonate	
Distillates(petroleum), solvent-refined paraffinic	64741-88-4	TWA	0.2mg/m3	CA BC OEL
		TWA(Mist)	0.2mg/m3	CA BC OEL
		TWA (Inhalable	5 mg/m3	CA AB OEL
		fraction))		
		TWA(Mist)	1mg/m3	CA BC OEL
		STEL(Mist)	10mg/m3	CA AB OEL
		TWAEV(Mist)	5mg/m3	CA QC OEL
		STEV(Mist)	10mg/m3	CA QC OEL
		TWA(Mist)	1mg/m3	CA BC OEL
Calcium carbonate	471-34-1	TWAEV(Total	10mg/m3	CA QC OEL
		dust)		
		TWA	10mg/m3	CA AB OEL
			(Calcium)	
		TWA	10mg/m3	CA AB OEL
			Calcium carbonate	



AWSUM OUTCOMES INC. SAFETY DATA SHEET Product: AERIOL THIXOSYN AVIATION GREASE Revision Date: 01 JAN 2019 Version: 7

Components	CAS-No.	Form of exposure	Permissible concentration	Basis
Distillates (petroleum), solventrefined heavy paraffinic	64741-88-4	TWA	5 mg/m3	OSHA Z-1
		TWA (Mist)	5 mg/m3	OSHA Z-1
		TWA (Inhalable fraction)	5 mg/m3	ACGIH
		TWA (Mist)	5 mg/m3	NIOSH REL
		ST (Mist)	10 mg/m3	NIOSH REL
		TWA (Mist)	5 mg/m3	OSHA P0
		PEL (particulate)	5 mg/m3	CAL PEL
calcium carbonate	471-34-1	PEL (Total dust)	10 mg/m3	CAL PEL
		PEL (respirable dust fraction)	5 mg/m3	CAL PEL
		TWA (Respirable)	5 mg/m3	NIOSH REL
		TWA (total)	10 mg/m3	NIOSH REL

Exposure Limits:	If used in a way that generates a mist, observe the limits for mineral oil mist
Engineering controls:	For normal application, special ventilation is not necessary. If the user's operation generates mist, use local ventilation to keep exposure to
Respiratory protection:	airborne contaminants below exposure limits.
Eye protection:	None required under normal conditions of use. Use approved respirator with dual organic vapour/mist and particulate cartridge if



Skin protection:	vapour concentration exceeds permissible exposure limit.
Hand protection:	Use safety goggles or face shield.
	Use rubber or plastic apron. Wear protective clothing to minimize skin contact. Use heat protective equipment when handling molten material.

Use oil resistant gloves.

SECTION IX: PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Appearance: Odour: Odour Threshold: pH:	Semi-solid Tan Mild petroleum odour Not established at 20°C (68°F) Not applicable
Drop Point: Boiling Point: Flash Point: Evaporation Rate: Upper Flammability Limit: Lower Flammability Limit: Specific Gravity: Density: Vapour Pressure: Vapour Density: Solubility in Water: Solubility in Organic Solvents: Autoignition Temperature:	$300^{\circ}C (572^{\circ}F)$ Not available >180°C (>356°F) Not available Not determined 0.95 – 1.05 1.05 g/cm ³ at 25°C (77°F) <0.0008 hPa (0.00 mmHg) at 20°C (68°F) Not available Negligible Partly soluble Not available
Partitioning Coefficient:	Not available

SECTION X: STABILITY AND REACTIVITY

Chemical Stability:	Stable.
Incompatibility:	Avoid contact with oxidizing agents.
Reactivity:	No reactivity.



Polymerization:	Will not occur.
Decomposition Products:	Oxides of carbon, sulfur, other hazardous decomposition products may be formed.

SECTION XI: TOXICOLOGICAL INFORMATION

Effects of Acute and Chronic Exposure:	
Skin Contact:	May cause irritation.
Skin Absorption:	If high pressure forces the product under the skin get immediate medical attention.
Acute dermal toxicity:	
Calcium carbonate: Acute oral toxicity	LD50(Rat):6450mg/kg
Calcium dodecylbenzenesulphonate (component):	LD50: > 4,199 mg/kg Species: rabbit Remarks: information given is based on data obtained from similar substances.
Sulfonic acids, petroleum, calcium salts (component):	
Acute oral toxicity:	LD50: > 5,000 mg/kg Species: rabbit Method: OECD Test Guideline 401 GLP: yes LD50: > 4,000 mg/kg
Acute dermal toxicity:	Species: rabbit Method: OECD Test Guideline 402 GLP:yes
Bis(nonylphenyl) amine:	LD50(Rat):>16,000mg/kg LD50(Rat):>16,000mg/kg
Skin irritation:	
Calcium carbonate (component):	LD50: > 2,000 mg/kg Species: rat

Calcium



dodecylbenzenesulphonate (component):	Species: rabbit Result: no skin irritation
Bis(nonylphenyl) amine:	Species: rabbit Result: No skin irritation Exposure time: 4h
Eye Contact:	Remarks: information given is based on data obtained from similar substances
Eye irritation:	Species: rabbit Result: no skin irritation Method: OECD Test Guideline 404
Calcium carbonate (component):	May cause irritation.
Calcium dodecylbenzenesulphonate (component):	Species: rabbit
Benzenamine, N-phenyl-reaction products with 2,4,4- trimethylpentene (component):	Result: no eye irritation Species: rabbit Result: rise of serious damage to eyes. Remarks: information given is based on data obtained from
Inhalation:	similar substances.
Ingestion:	Species: rabbit Result: no eye irritation Method: OECD Test Guideline 405
Acute oral toxicity (product):	No information available. Mist or spray may cause delayed onset of pulmonary oedema.
Irritancy:	No significant hazard. No evidence of harmful effect from available information. May cause diarrhea.
Sensitization:	Acute toxicity estimate: > 5,000 mg/kg Method: Calculation method Remarks: No data available
Benzenamine, N-phenyl-reaction	Irritation to eyes and respiratory tract. Frequent and prolonged contact may irritate skin. If misted, inhalation of mist may cause



porudcts with 2,4,4-	irritation.
trimethylpentene (component): Sulfonic acids, petroleum, calcium salts (component):	Repeated or prolonged contact may cause sensitization in some individuals.
Benzenesulfonic acid, mono- C20-24-alkyl derivatives, calcium salts (component):	Species: guinea pig Classification: did not cause sensitization on laboratory animals. Method: OECD Test Guideline 406 Result: the product is a skin sensitizer, sub-category 1B.
Repeated Dose Toxicity (Product): Carcinogenicity:	Result: the product is a skin sensitizer, sub-category 1B.
Reproductive Toxicity:Calcium carbonate (component):CMR Effects:Calcium carbonate (component):Benzenamine, N-phenyl-reaction products with 2,4,4- trimethylpentene (component):Further Information:	 This information is not available. This product container material that has not been listed as a carcinogen or potential carcinogen by the National Toxicology Program. Internation Agency for Research on Cancer, or the Occupational Safety and Health Administration. No adverse effects are anticipated. Species: rat Application route: oral Teratogenicity: No effect on or via lactation. Reproductive toxicity: no toxicity to reproduction.
	Mutagenicity: not mutagenic in Ames Test.

No evidence of harmful effects from available information.



SECTION XII: ECOLOGICAL INFORMATION

Toxicity to Fish:

Calcium dodecylbenzenesulphonate (component):	LC50: 22 mg/L Exposure time: 96h Species: Pimephales promelas (fathead minnow) Static test analytical monitoring: no Method: OECD Test Guideline 203 Remarks: information given is based on data obtained from similar substances.
Bis(nonylphenyl) amine	LC50:>1000mg/l Exposer time 96h Species: Cyprinodon variegatus (sheepshead minnow) LC50: > 1,000 mg/l Exposure time: 96 h Species: Pimephales promelas (fathead minnow) LC50: > 10,000 mg/l Exposure time: 96 h Species: Pimephales promelas (fathead minnow)
Sulfonic acids, petroleum, calcium salts (component):	LC50: > 10,000 mg/L Exposure time: 96h Species: Cyprinodon variegatus (sheepshead minnow) Static test method: OECD Test Guideline 203
Toxicity to Daphnia and Other Aquatic Invertebrates:	
Calcium dodecylbenzenesulphonate (component):	EC50: 2.5 mg/L Exposure time: 48h Species: Daphnia magna (water flea) Static test method: OECD Test Guideline 202 Remarks: information given is based on data obtained from similar substances.
bis(nonylphenyl)amine (Component	LC50: 14 - 28 mg/l Exposure time: 96 h Species: Crangon crangon (shrimp) LC50: 18.9 - 39.2 mg/l Exposure time: 96 h Species: Crangon crangon (shrimp) LC50: 463 - 631 mg/l



AWSUM OUTCOMES INC. SAFETY DATA SHEET Product: AERIOL THIXOSYN AVIATION GREASE Revision Date: 01 JAN 2019 Version: 7

Exposure time: 96 h Species: Crangon crangon (shrimp)

Method: OECD Test Guideline 202

Sulfonic acids, petroleum, calcium salts (component):

EC50: > 100mg/L Exposure time: 48h Species: Daphnia magna (water flea) Static test method: OECD Test Guideline 202

Toxicity to Algae:

Sulfonic acids, petroleum, calcium salts (component):

EbC50: > 100mg/L Exposure time: 72h Species: green algae (Scenedesmus subspicatus) Static test analytical monitoring: no Method OECD Test Guideline 201

ErC50: > 100 mg/L Species: green algae (Scenedesmus subspicatus) Static test analytical monitoring: no Method: OECD Test Guideline 201

Bioaccumulation:

Species: Lepomis macrochirus (bluegill sunfish)
Exposure time: 21d
Bioconcentration factor (BCF): 104

Biodegradability:

Calcium dodecylbenzenesulphonate (component):

Result: readily biodegradable. Testing period: 28d:73% 10mg/l Remarks: information given is based on data obtained from similar substances.

Sulfonic acids, petroleum, calcium salts (component):

Aerobic. Result: not readily biodegradable. 8.6% Exposure time 28d GLP:yes



Further Information on Ecology:

Additional ecological information (product):

No data available. This product is stable in water, and can be mechanically separated from water. The water may be suitable for disposal in a biological waste water treatment plant.

SECTION XIII: DISPOSAL CONSIDERATION

RCRA 40 CFR 261 Classification: Not Listed

US EPA Waste Number / Classification: Not Available

Waste Disposal:Dispose of waste material in compliance with all federal, state,
provincial and local regulations. Incinerate in a furnace or bury
in an approved landfill where permitted under appropriate
federal, provincial and local regulations.

SECTION XIV: TRANSPORT INFORMATION

Department of Transport: TDG – Canada: DOT/TDG Proper Shipping Name:	Not regulated under DOT Not regulated under TDG None
DOT/TDG Hazard Class:	None
Product Identification Number:	None
Packing Group:	None
DOT/TDG Labels: Primary:	None required
Subsidiary:	None required
DOT/TDG Placards:	None required
ADR:	Not dangerous goods
RID:	Not dangerous goods
MERCOSUR:	Not dangerous goods
IATA:	Not dangerous goods
IMDG:	Not dangerous goods

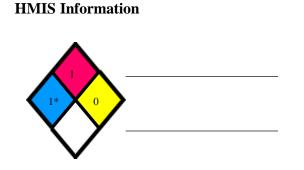


SECTION XV: REGULATORY INFORMATION

CPR Compliance:	This product has been classified in accordance with the hazard criteria of <i>the Controlled Products Regulations</i> and theSDS contains all of the information required by those regulations.
OSHA Hazard Communication Standards 29 CFR 1910.1200:	This product is not known to contain any of the carcinogens required to be listed under OSHA Hazards Communication Standards 29 CFR 1910.1200.
WHMIS Classification:	This is not controlled product under WHMIS.
CERCLA Reportable Quantity:	
Calcium dodecylbenzenesulphonate (component):	CAS# 26264-06-02 Component RQ (lbs): 1000 Calcium product RQ: calculated RQ exceeds reasonably attainable upper limit.
SARA 304 Reportable Quantity:	This material does not contain any components with section 304 EHS RQ.
SARA 311/312 Hazards:	Acute Health Hazard
SARA 302:	No chemical in this material are subject to the reporting requirements of SARA Title III, Section 302
SARA 313:	This material does not contain any chemical components with CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313

AWSUM OUTCOMES INC.
SAFETY DATA SHEET
Product: AERIOL THIXOSYN AVIATION GREASE
Revision Date: 01 JAN 2019
Version: 7
This product does contain a chemical known to State of
California to cause cancer, birth defects, or any other
reproductive harm (Oxirane 75-21-8).
On TSCA inventory.
This product contains the following components listed on the
Canadian NDSL. All other components are on the Canadian
DSL.
On the inventory or in compliance with the inventory.
On the inventory or in compliance with the inventory
Not in compliance with the inventory.

SECTION XVI: OTHER INFORMATION



Degree of Hazard

4= Severe 3= Serious 2= Moderate 1= Slight 0= Minimal *=Chronic

Revision Information

Prepared by:	Awsum Outcomes Inc.
Phone:	1-587-353-2000
Effective Date:	01 JAN 2019
Supersedes:	6
Revision:	7

Awsum Outcomes Inc. (the "Company"), shall not be liable for any damages arising from the information contained on this data sheet howsoever caused, if the product in question is not employed in a normal or foreseeable use or circumstances. The Company shall not be liable for any indirect or consequential damages arising out of the use of the information contained on this data sheet howsoever caused.