SAFETY DATA SHEET

According to Canadian Hazardous Products Regulations (HPR) (SOR/2015/17)

SDS # : 33906

COPAL SPRAY / AEROSOL

Date of the previous version: not applicable **Revision Date:** *2018-06-01* **Version** *1*

1. IDENTIFICATION

Product identifier

Product name COPAL SPRAY / AEROSOL

Other means of identification

Product Code(s) 33906

Number LF9
Substance/mixture Mixture

Recommended use of the chemical and restrictions on use

Identified uses Lubricating grease Gear

Uses advised against Do not use for any purpose other than the one for which it is intended.

Details of the supplier of the safety data sheet

Supplier TOTAL CANADA INC.
220, LAFLEUR
LASALLE, QUEBEC
H8R 4C9
Tel: (514) 595-7579
Fax: (514) 595-5950

Contact Point service HSE

E-mail Address ProductSafety@total.com

Emergency telephone number
Emergency telephone 1-800-463-3955
Company Phone Number +1 866 928 0789 (24h/24, 7d/7)
+1 215 207 0061 (24h/24, 7d/7)

2. HAZARDS IDENTIFICATION

Classification

Flammable Liquids Category 1
Serious eye damage/eye irritation - Category 2A
Specific target organ toxicity (single exposure) - Category 3
Aspiration toxicity - Category 1

Label elements

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WARNING

Extremely flammable aerosol
Pressurized container: May burst if heated
Causes serious eye irritation
May cause drowsiness or dizziness

Precautionary Statements - Prevention
Wash face, hands and any exposed skin thoroughly after handling
Wear protective gloves/protective clothing/eye protection/face protection
Avoid breathing dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
Do not spray on an open flame or other ignition source
Pressurized container: Do not pierce or burn, even after use

Precautionary Statements - Response
Eyes
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 advice/attention
Inhalation
IF INHALED: Remove person to fresh air and keep comfortable for breathing
Call a POISON CENTER or doctor if you feel unwell
Ingestion
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
Do NOT induce vomiting

Precautionary Statements - Storage
Store in a well-ventilated place. Keep container tightly closed
Store locked up
Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

Unknown acute toxicity
10 % of the mixture consists of ingredient(s) of unknown toxicity

Other information

Physical-Chemical Properties	Aerosol: Pressurised container. This product contains a flammable component.
Environmental properties	The product may form an oil film on the water surface that may stop the oxygen exchange.

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Should not be released into the environment.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

Chemical nature Mineral oil of petroleum origin.

Chemical Name	EC-No	CAS-No	Weight %
Hydrocarbons, C6, isoalkanes, <5% n-hexane	931-254-9	^	50-<60
carbon dioxide	204-696-9	124-38-9	10-<20
Phosphorodithioic acid, mixed O,O-bis(iso-Bu and pentyl) esters, zinc salts	270-608-0	68457-79-4	1-<2.5

4. FIRST AID MEASURES

First aid measures for different exposure routes

General advice IN CASE OF SERIOUS OR PERSISTENT CONDITIONS, CALL A DOCTOR OR EMERGENCY MEDICAL CARE.

Eye contact Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash contaminated clothing before reuse.

Inhalation Remove casualty to fresh air and keep at rest in a position comfortable for breathing. If not breathing, give artificial respiration.

Ingestion Clean mouth with water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Call a physician or Poison Control Center immediately. Do not ingest. If swallowed then seek immediate medical assistance.

Protection of First-aiders First aider needs to protect himself. See Section 8 for more detail. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

Most important symptoms/effects, acute and delayed

Skin contact Not classified based on available data.

Eye contact Causes serious eye irritation.

Inhalation Not classified based on available data. Inhalation of vapors in high concentration may

cause irritation of respiratory system.

Ingestion May be fatal if swallowed and enters airways.

Symptoms No information available.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media Carbon dioxide (CO_2). ABC powder. Foam. Water spray or fog.

Unsuitable Extinguishing Media Do not use a solid water stream as it may scatter and spread fire.

Special Hazard Vapors may form explosive mixtures with air. Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Flash back possible over considerable distance. Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot. These may be highly dangerous if inhaled in confined spaces or at high concentration. Phosphorous oxides. Combustion products include sulphur oxides (SO2 and SO3) and Hydrogen sulphide H2S. Mercaptans. Zinc oxides.

Explosion Data

Sensitivity to Mechanical Impact None.
Sensitivity to Static Discharge None.

Special protective equipment for fire-fighters As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Evacuate non-essential personnel.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

General Information Do not touch or walk through spilled material. Contaminated surfaces will be extremely slippery. Use personal protective equipment. Ensure adequate ventilation. Remove all sources of ignition.

Other information See Section 12 for additional information.

Environmental precautions

General Information Do not allow material to contaminate ground water system. Prevent entry into waterways, sewers, basements or confined areas. Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas. A vapor suppressing foam may be used to reduce vapors.

Methods and material for containment and cleaning up

Methods for containment If necessary dike the product with dry earth, sand or similar non-combustible materials.

Methods for cleaning up Dispose of contents/container in accordance with local regulation. In case of soil contamination, remove contaminated soil for remediation or disposal, in accordance with local regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling For personal protection see section 8. Use only in well-ventilated areas. Do not breathe vapors or spray mist. Avoid contact with skin, eyes and clothing. BEWARE: Aerosol is pressurized. Keep away from direct sun exposure and temperatures over 122 °F. Do not open by force or throw into fire even after use. Do not spray on flames or red-hot objects. Never pierce, drill, grind, cut, saw or weld any empty container.

Prevention of fire and explosion Keep away from open flames, hot surfaces and sources of ignition. Empty containers may contain flammable or explosive vapors.

Hygiene measures Ensure the application of strict rules of hygiene by the personnel exposed to the risk of contact with the product. When using, do not eat, drink or smoke. Provide regular cleaning of equipment, work area and clothing. Wash hands before breaks and immediately after handling the product. Do not use abrasives, solvents or fuels. Do not dry hands with rags that have been contaminated with product. Do not put product contaminated rags into workwear pockets.

Conditions for safe storage, including any incompatibilities

Technical measures/Storage conditions Keep in a dry, cool and well-ventilated place. For safety reasons in case of fire, cans should be stored separately in closed containments. Do not remove the hazard labels of the containers (even if they are empty). Keep away from heat. Protect from moisture.

Materials to Avoid Oxidizing agents. Strong acids.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure limits Mineral oil mist:
USA: OSHA (PEL) TWA 5 mg/m^3, NIOSH (REL) TWA 5 mg/m^3, STEL 10 mg/m^3, ACGIH (TLV) TWA 5 mg/m^3 (highly refined).

Ingredients with workplace control parameters.

Chemical Name	Alberta	British Columbia	Ontario	Quebec
carbon dioxide	TWA 5000 ppm	TWA 5000 ppm	TWA 5000 ppm	TWAEV 5000 ppm

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124-38-9	TWA 9000 mg/m³ STEL 30000 ppm STEL 54000 mg/m³	STEL 15000 ppm	STEL 30000 ppm	TWAEV 9000 mg/m³ STEV 30000 ppm STEV 54000 mg/m³

Legend See section 16

Exposure controls

Engineering Measures Apply technical measures to comply with the occupational exposure limits. Ensure adequate ventilation, especially in confined areas. When working in confined spaces (tanks, containers, etc.), ensure that there is a supply of air suitable for breathing and wear the recommended equipment.

Individual protection measures, such as personal protective equipment

General Information Protective engineering solutions should be implemented and in use before personal protective equipment is considered. These recommendations apply to the product as supplied.

Eye/face protection If splashes are likely to occur, wear safety glasses with side-shields.

Skin and body protection Wear suitable protective clothing. Protective shoes or boots.

Hand Protection Hydrocarbon-proof gloves: Fluorinated rubber, Nitrile rubber. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment. Respirator with combination filter for vapor/particulate. Warning ! filters have a limited use duration. The use of breathing apparatus must comply strictly with the manufacturer's instructions and the regulations governing their choices and uses.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and chemical properties

Color	black
Physical State @20°C	Aerosol
Odor	Characteristic
Odor Threshold	No information available

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Property	Values	Remarks	Method
pH		Not applicable	
Melting point/range		Not applicable	
Boiling point/boiling range		Not applicable	
Flash point	**< 0 °C** < 32 °F		.
Evaporation rate		No information available	
Flammability Limits in Air		No information available	
upper		No information available	
Lower		No information available	
Vapor Pressure		No information available	
Vapor density		No information available	
Relative density	0.780		
Density	780 kg/m³		
Water solubility		Insoluble	
Solubility in other solvents		No information available	
logPow		No information available	
Autoignition temperature		No information available	
Decomposition temperature		No information available	
Viscosity, kinematic		No information available	
Explosive properties	No information available		
Oxidizing Properties	No information available		
Possibility of hazardous reactions	No information available		
Other information			
Freezing Point		No information available	

10. STABILITY AND REACTIVITY

Reactivity None under normal processing.

Chemical stability Stable under recommended storage conditions.

Possibility of hazardous reactions No dangerous reaction known under conditions of normal use.

Conditions to avoid Keep away from open flames, hot surfaces and sources of ignition. Keep away from heat and sparks.

Incompatible materials Oxidizing agents. Strong acids.

Hazardous Decomposition Products Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot. Other decomposition products. Phosphorous oxides. Combustion products include sulphur oxides (SO2 and SO3) and Hydrogen sulphide H2S. Mercaptans. Zinc oxides.

11. TOXICOLOGICAL INFORMATION

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Information on likely routes of exposure

Symptoms No information available.

Skin contact Not classified based on available data.

Eye contact Causes serious eye irritation.

Inhalation Not classified based on available data. Inhalation of vapors in high concentration may cause irritation of respiratory system.

Ingestion May be fatal if swallowed and enters airways.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Acute toxicity - Product Information

Oral Not classified based on available data

Dermal Not classified based on available data

Inhalation Not classified based on available data

Acute toxicity - Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Hydrocarbons, C6, isoalkanes, <5% n-hexane ^	DL50 > 16750 mg/kg bw (rat - OECD 401)	LD50 (4h) > 3350 mg/kg bw (rabbit - OECD 402)	LC50 (4h) = 259354 mg/m³ (vapour) (rat - OECD 403)
Phosphorodithioic acid, mixed O,O-bis(iso-Bu and pentyl) esters, zinc salts 68457-79-4	LD50 3600 mg/kg (Rat - OECD 401)	LD50 > 20000 mg/kg (Rabbit - OECD 402)	

Skin corrosion/irritation Not classified based on available data.
Serious eye damage/eye irritation Irritating to eyes.
Respiratory or skin sensitization Not classified based on available data.
Germ cell mutagenicity Not classified based on available data.
Carcinogenicity Not classified based on available data.

Reproductive toxicity Not classified based on available data.
Target Organ Effects (STOT) None known.
STOT - single exposure May cause drowsiness or dizziness.
STOT - repeated exposure Not classified based on available data.
Aspiration hazard May be fatal if swallowed and enters airways.

12. ECOLOGICAL INFORMATION

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Ecotoxicity

Acute aquatic toxicity - Product Information

No information available

Acute aquatic toxicity - Component Information

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates	Toxicity to microorganisms
Hydrocarbons, C6, isoalkanes, <5% n-hexane ^	ErL50(72h) = 13.6 mg/l (Pseudokirchneriella subcapitata - QSAR Petrotox)	LL50 (96h) = 18.3 mg/l (Oncorhynchus mykiss - QSAR Petrotox)	EL50 (48h) = 31.9 mg/l (Daphnia magna - QSAR Petrotox)	-
Phosphorodithioic acid, mixed O,O-bis(iso-Bu and pentyl) esters, zinc salts 68457-79-4	EbL50 (72h) 21 mg/l (Scenedesmus subspicatus - OECD 201)	LC50 (96h) 4.5 mg/l (Cyprinodon variegatus - OECD 203)	EC50(48h) 23 mg/l (Daphnia magna-OECD 202)	

Chronic aquatic toxicity - Product Information

No information available

Chronic aquatic toxicity - Component Information

Chemical Name	Toxicity to algae	Toxicity to daphnia and other aquatic invertebrates	Toxicity to fish	Toxicity to microorganisms
Hydrocarbons, C6, isoalkanes, <5% n-hexane ^	NOELR (72h) = 3.0 mg/l Pseudokirchneriella subcapitata - growth rate - QSAR Petrotox)	NOELR (21d) = 7.14 mg/l (Daphnia magna - QSAR Petrotox)	NOELR (28d) = 4.09 mg/l (Oncorhynchus mykiss - QSAR Petrotox)	
Phosphorodithioic acid, mixed O,O-bis(iso-Bu and pentyl) esters, zinc salts 68457-79-4		NOEC(21d) 0.8 mg/l (Daphnia magna)		

Effects on terrestrial organisms No information available.

Persistence and degradability

No information available

Bioaccumulative potential

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Product Information No information available.

logPow No information available

Component Information .

Chemical Name	log Pow
Hydrocarbons, C6, isoalkanes, <5% n-hexane ^	3.6
Phosphorodithioic acid, mixed O,O-bis(iso-Bu and pentyl) esters, zinc salts 68457-79-4	0.69

Mobility

Soil Given its physical and chemical characteristics, the product has no soil mobility.
Air the product may evaporate
Water The product is insoluble and floats on water

Other adverse effects

General Information No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment

Waste from residues/unused products Should not be released into the environment. Do not empty into drains. Dispose of in accordance with all applicable national environmental laws and regulations. Where possible recycling is preferred to disposal or incineration. Other Regulatory Status: No Canadian federal standard; however, for general discharge guidance, federal installations limited to 15 mg/L for total oil and grease. Provincial criteria are likely and should be requested when notifying provincial authorities.

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. TRANSPORT INFORMATION

TDG

UN/ID No UN1950
Proper shipping name AEROSOLS
Hazard class 2.1
Special Provisions 80, 107
Description UN1950, AEROSOLS, 2.1

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DOT

UN/ID No	UN1950
Proper shipping name	AEROSOLS
Hazard class	2.1
Special Provisions	N82
Description	UN1950, AEROSOLS, 2.1
Emergency Response Guide Number	126

MEX

UN/ID No	UN1950
Proper shipping name	AEROSOLS
Hazard class	2.1
Special Provisions	190, 277, 327, 344, 63
Description	UN1950, AEROSOLS, 2.1

ICAO/IATA

UN/ID No	UN1950
Proper shipping name	Aerosols, flammable
Hazard class	2.1
ERG Code	10L
Special Provisions	A145, A167, A802
Description	UN1950, Aerosols, flammable, 2.1
Excepted Quantity	E0
Limited quantity	30 kg G

IMDG/IMO

UN/ID No	UN1950
Proper shipping name	AEROSOLS
Hazard class	2.1
EmS No.	F-D, S-U
Special Provisions	63,190, 277, 327, 344, 381, 959
Marine pollutant	Marine pollutant
Description	UN1950, AEROSOLS (HYDROCARBONS, C6, ISOALKANES, <5% N-HEXANE), 2.1, MARINE POLLUTANT
Excepted Quantity	E0
Limited quantity	See SP277

ADR/RID

UN/ID No	UN1950
Proper shipping name	AEROSOLS
Hazard class	2
Classification Code	5F
Tunnel Restriction Code	(D)
Special Provisions	190, 327, 344, 625
Description	UN1950, AEROSOLS, 2, (D), Environmentally hazardous
ADR/RID-Labels	2.1
Environmental hazard	Yes
Limited quantity	1 L

ADN

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UN/ID No	UN1950
Proper shipping name	AEROSOLS
Hazard class	2
Classification Code	5F
Special Provisions	190, 327, 344, 625
Description	UN1950, AEROSOLS, 2, Environmentally hazardous
Hazard Labels	2.1
Limited quantity	1 L
Ventilation	VE01, VE04
Equipment Requirements	PP, EX, A

15. REGULATORY INFORMATION

This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR) (SOR/2015/17) and the Safety Data Sheet (SDS) contains all the information required by the HPR

International Inventories All the substances contained in this product are listed or exempted from listing in the following inventories:
Canada (DSL/NDSL)
U.S.A. (TSCA)

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

NFPA	**Health Hazard** 2	**Flammability** 2	**Instability** 0	**Special hazards** -
HMIS	**Health Hazard** 2	**Flammability** 2	**Physical Hazard** 0	**Personal protection** X

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Revision Note Initial Release

Abbreviations, acronyms
ACGIH = American Conference of Governmental Industrial Hygienists
bw = body weight
bw/day = body weight/day
EC x = Effect Concentration associated with x% response
GLP = Good Laboratory Practice
IARC = International Agency for Research of Cancer
LC50 = 50% Lethal concentration - Concentration of a chemical in air or a chemical in water which causes the death of 50% (one half) of a group of test animals
LD50 = 50% Lethal Dose - Chemical amount, given at once, which causes the death of 50% (one half) of a group of test animals
LL = Lethal Loading
NIOSH = National Institute of Occupational Safety and Health
NOAEL = No Observed Adverse Effect Level
NOEC = No Observed Effect Concentration
NOEL = No Observed Effect Level
OECD = Organization for Economic Co-operation and Development

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OSHA = Occupational Safety and Health Administration
UVCB = Substance of unknown or Variable composition, Complex reaction products or Biological material
NTP = National Toxicology Program

Section 8

TWA - Time Weight Average
STEL - Short Term Exposure Limits

+	Sensitizer	*	Skin designation
C:	Carcinogen	R:	Toxic to reproduction
Ceiling:	Ceiling Limit Value		

This safety data sheet serves to complete but not to replace the technical product sheets. The information contained herein is given in good faith and is accurate to the best of knowledge at the date indicated above.It is understood by the user that any use of the product for purposes other than those for which it was designed entails potential risk.The information given herein in no way dispenses the user from knowing and applying all provisions regulating his activity.The user bears sole liability for the precautions required when using the product.The regulatory texts indicated herein are intended to aid the user to fulfil his obligations. This list is not to be considered complete and exhaustive.It is the user's responsibility to ensure that he is subject to no other obligations than those mentioned.

End of the Safety Data Sheet