


## Castrol Chain Spray O-R

## Section 1. Identification

<b>Product name</b>	Castrol Chain Spray O-R
<b>Product code</b>	450381-AU19
<b>SDS no.</b>	450381
<b>Use of the substance/mixture</b>	Chain lubricant. For specific application advice see appropriate Technical Data Sheet or consult our company representative.
<b>Product type</b>	Aerosol.
<b>Supplier</b>	Castrol New Zealand Limited 73 Remuera Road Newmarket Auckland, New Zealand  www.castrol.com/nz Technical Helpline 0800 10 40 60
<b>Emergency telephone number</b>	0800 243643 (0800 CHEMHELP) (NZ use only)
<b>New Zealand National Poisons Centre</b>	0800 764 766 National Poison Centre

## Section 2. Hazards identification

<b>HSNO Classification</b>	AEROSOLS - Category 1
This material is classified as hazardous according to criteria in the Hazardous Substances (Hazard Classification) Notice 2020.	
This material is classified as DANGEROUS GOODS according to criteria in New Zealand Standard 5433:2012 Transport of Dangerous Goods on Land.	
<b>Routes of entry</b>	Dermal contact. Eye contact. Inhalation.
<b>GHS label elements</b>	
<b>Signal word</b>	Danger
<b>Hazard statements</b>	Extremely flammable aerosol. Pressurised container: may burst if heated.
<b>Precautionary statements</b>	
<b>Prevention</b>	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. Do not pierce or burn, even after use.
<b>Response</b>	Not applicable.
<b>Storage</b>	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
<b>Disposal</b>	Not applicable.
<b>Symbol</b>	
<b>Other hazards which do not result in classification</b>	Solvent "sniffing" (abuse) or intentional overexposure to vapours can produce serious central nervous system effects, including unconsciousness, and possibly death.

## Section 3. Composition/information on ingredients

**Substance/mixture** Mixture

Highly refined base oil (IP 346 DMSO extract < 3%). Hydrocarbon solvent Proprietary performance additives.

Ingredient name	% (w/w)	CAS number
Base oil - unspecified	≥30 - ≤60	-
Distillates (petroleum), solvent-dewaxed heavy paraffinic	≥10 - ≤30	64742-65-0
propane	≥10 - ≤30	74-98-6
Butane	≥10 - ≤30	106-97-8
orthoboric acid, potassium salt	≤3	20786-60-1

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.

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First aid measures

### Description of necessary first aid measures

<b>Inhalation</b>	If inhaled, remove to fresh air. Get medical attention if symptoms occur.
<b>Ingestion</b>	Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Poisoning very unlikely unless deliberate ingestion of large quantities has occurred. Move exposed person to fresh air. Get medical attention if adverse health effects persist or are severe.
<b>Skin contact</b>	Wash skin thoroughly with soap and water or use recognised skin cleanser. Remove contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention if symptoms occur.
<b>Eye contact</b>	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Check for and remove any contact lenses. Get medical attention if symptoms occur.

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

<b>Notes to physician</b>	Treatment should in general be symptomatic and directed to relieving any effects.
<b>Protection of first-aiders</b>	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. Firefighting measures

### Extinguishing media

**Suitable** In case of fire, use water fog, alcohol resistant foam, dry chemical or carbon dioxide extinguisher or spray.

**Not suitable** Do not use water jet.

### Specific hazards arising from the chemical

Bursting aerosol containers may be propelled from a fire at high speed. Extremely flammable aerosol. Gas may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back, causing fire or explosion. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard.

### Hazardous combustion products

Combustion products may include the following:  
metal oxide/oxides  
carbon oxides (CO, CO<sub>2</sub>) (carbon monoxide, carbon dioxide)

### Hazchem code

2YE

### Special precautions for fire-fighters

No action shall be taken involving any personal risk or without suitable training. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

### Special protective equipment for fire-fighters

Fire-fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

#### For non-emergency personnel

If specialised 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 non-emergency personnel".

#### For emergency responders

If specialised 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 non-emergency personnel".

#### Environmental precautions

Avoid dispersal of spilt 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 material for containment and cleaning up

#### Small spill

Stop leak if without risk. Move containers from spill area. Absorb with an inert material and place in an appropriate waste disposal container. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor.

#### Large spill

Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. 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. Use spark-proof tools and explosion-proof equipment. Contaminated absorbent material may pose the same hazard as the spilt product. Dispose of via a licensed waste disposal contractor.

## Section 7. Handling and storage

#### Precautions for safe handling

Put on appropriate personal protective equipment (see Section 8). Pressurised container: protect from sunlight and do not expose to temperature exceeding 50°C. Do not pierce or burn, even after use. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing gas. Avoid breathing vapour or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. 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. Empty containers retain product residue and can be hazardous. Keep away from ignition sources such as heat/sparks/open flame. - No smoking. Do not spray on a naked flame or any incandescent material. Product contaminated rags, paper or material used to absorb spillages, represent a fire hazard, and should not be allowed to accumulate. Dispose of safely immediately after use.

#### Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in a segregated and approved area. Store in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Eliminate all ignition sources. Keep away from heat and direct sunlight. Store and use only in equipment/containers designed for use with this product.

#### Not suitable

Prolonged exposure to elevated temperature

## Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits

Ingredient name	Exposure limits
Base oil - unspecified	<b>NZ HSWA 2015 - GRWM 2016 (New Zealand).</b> WES-STEL: 10 mg/m <sup>3</sup> 15 minutes. Issued/ Revised: 9/2010 Form: Mist WES-TWA: 5 mg/m <sup>3</sup> 8 hours. Issued/ Revised: 6/2016 Form: Mist
propane	<b>NZ HSWA 2015 - GRWM 2016 (New Zealand). Oxygen Depletion [Asphyxiant].</b>
Butane	<b>NZ HSWA 2015 - GRWM 2016 (New</b>

## Section 8. Exposure controls/personal protection

Zealand).

WES-TWA: 1900 mg/m<sup>3</sup> 8 hours. Issued/  
Revised: 1/1994

WES-TWA: 800 ppm 8 hours. Issued/  
Revised: 1/1994

### Biological exposure indices

No exposure indices known.

### Recommended monitoring procedures

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

### Appropriate engineering controls

All activities involving chemicals should be assessed for their risks to health, to ensure exposures are adequately controlled. Personal protective equipment should only be considered after other forms of control measures (e.g. engineering controls) have been suitably evaluated. Personal protective equipment should conform to appropriate standards, be suitable for use, be kept in good condition and properly maintained.

Your supplier of personal protective equipment should be consulted for advice on selection and appropriate standards. For further information contact your national organisation for standards.

Provide exhaust ventilation or other engineering controls to keep the relevant airborne concentrations below their respective occupational exposure limits.

The final choice of protective equipment will depend upon a risk assessment. It is important to ensure that all items of personal protective equipment are compatible.

### 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 protection

Safety glasses with side shields.

#### Hand protection

Wear protective gloves if prolonged or repeated contact is likely. Wear chemical resistant gloves. Recommended: Nitrile gloves. The correct choice of protective gloves depends upon the chemicals being handled, the conditions of work and use, and the condition of the gloves (even the best chemically resistant glove will break down after repeated chemical exposures). Most gloves provide only a short time of protection before they must be discarded and replaced. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. Gloves should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.

#### Skin protection

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

#### Respiratory protection

Respiratory protective equipment is not normally required where there is adequate natural or local exhaust ventilation to control exposure.

Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.

Respiratory protective equipment must be checked to ensure it fits correctly each time it is worn.

In case of insufficient ventilation, wear suitable respiratory equipment.

Provided an air-filtering/air-purifying respirator is suitable, a multiple type of gas filter for organic gases and vapours (boiling point  $\leq 65^{\circ}\text{C}$  and  $>65^{\circ}\text{C}$ ) can be used for vapour. Use filter types A with AX or comparable standard.

Provided an air-filtering/air-purifying respirator is suitable, a filter for particulates can

## Section 8. Exposure controls/personal protection

be used. Use filter type P or comparable standard. Air-filtering respirators, also called air-purifying respirators, will not be adequate under conditions of oxygen deficiency (i.e. low oxygen concentration), and would not be considered suitable where airborne concentrations of chemicals with a significant hazard are present. In these cases air-supplied breathing apparatus will be required. The correct choice of respiratory protection depends upon the chemicals being handled, the conditions of work and use, and the condition of the respiratory equipment. Safety procedures should be developed for each intended application. Respiratory protection equipment should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.

## Section 9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

### Appearance

Physical state	Aerosol.
Colour	Brown. [Dark]
Odour	Characteristic.
pH	Not applicable.
Melting point/freezing point	Not available.
Boiling point, initial boiling point, and boiling range	Not available.
Drop Point	Not available.
Flash point	Not applicable.
Auto-ignition temperature	Not available.
Vapour pressure	

Ingredient name	Vapour Pressure at 20°C			Vapour pressure at 50°C		
	mm Hg	kPa	Method	mm Hg	kPa	Method
propane	6300.51	840				
Butane	1602.88	213.7				
orthoboric acid, potassium salt	0	0				

Relative vapour density	Not available.
Relative density	Not available.
Solubility(ies)	

Media	Result
water	Not soluble

Viscosity	Kinematic: 150 to 170 mm <sup>2</sup> /s (150 to 170 cSt) at 40°C
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### Particle characteristics

Median particle size	Not applicable.
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## Section 10. Stability and reactivity

Chemical stability	The product is stable.
Possibility of hazardous reactions	Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous polymerisation will not occur.
Conditions to avoid	Avoid all possible sources of ignition (spark or flame). High temperatures
Incompatible materials	Reactive or incompatible with the following materials: oxidising materials.
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation</b>	Vapour inhalation under ambient conditions is not normally a problem due to low vapour pressure.
<b>Ingestion</b>	No known significant effects or critical hazards.
<b>Skin contact</b>	No known significant effects or critical hazards.
<b>Eye contact</b>	No known significant effects or critical hazards.

### Symptoms related to the physical, chemical and toxicological characteristics

<b>Inhalation</b>	Adverse symptoms may include the following: respiratory tract irritation coughing nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness Exposure to high concentrations can cause dizziness, lightheadedness, headache, nausea and blurred vision. Higher levels may cause unconsciousness. May be harmful by inhalation if exposure to vapour, mists or fumes resulting from thermal decomposition products occurs.
<b>Ingestion</b>	No specific data.
<b>Skin contact</b>	No specific data.
<b>Eye contact</b>	Adverse symptoms may include the following: irritation redness

### Potential chronic health effects

<b>General</b>	No known significant effects or critical hazards.
<b>Inhalation</b>	Overexposure to the inhalation of airborne droplets or aerosols may cause irritation of the respiratory tract.
<b>Ingestion</b>	Ingestion of large quantities may cause nausea and diarrhoea.
<b>Skin contact</b>	Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.
<b>Eye contact</b>	No known significant effects or critical hazards.
<b>Carcinogenicity</b>	No known significant effects or critical hazards.
<b>Mutagenicity</b>	No known significant effects or critical hazards.
<b>Teratogenicity</b>	No known significant effects or critical hazards.
<b>Developmental effects</b>	No known significant effects or critical hazards.
<b>Fertility effects</b>	No known significant effects or critical hazards.

## Section 12. Ecological information

**Ecotoxicity** No known significant effects or critical hazards.

### Persistence and degradability

Expected to be biodegradable.

### Bioaccumulative potential

This product is not expected to bioaccumulate through food chains in the environment.

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
propane	1.09	-	low
Butane	2.89	-	low

### Mobility in soil

<b>Mobility</b>	Spillages may penetrate the soil causing ground water contamination.
<b>Soil/water partition coefficient (K<sub>oc</sub>)</b>	Not available.





**Other ecological information** Spills may form a film on water surfaces causing physical damage to organisms. Oxygen transfer could also be impaired.

## Section 13. Disposal considerations

### Disposal methods

The generation of waste should be avoided or minimised wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. 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. 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. Empty containers or liners may retain some product residues. Do not puncture or incinerate container.

## Section 14. Transport information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
New Zealand Class	UN1950	AEROSOLS	2.1	-		<b>Hazchem code</b> 2YE
ADG Class	UN1950	AEROSOLS	2.1	-		<b>Hazchem code</b> 2YE <b>Initial emergency response guide</b> 49
IATA Class	UN1950	AEROSOLS, flammable	2.1	-		-
IMDG Class	UN1950	AEROSOLS	2.1	-		<b>Emergency schedules</b> F-D,S-U

PG\* : Packing group

## Section 15. Regulatory information

### New Zealand Regulatory Information

<b>HSNO Approval Number</b>	HSR002515
<b>HSNO Group Standard</b>	Aerosols (Flammable) Group Standard 2020
<b>HSNO Classification</b>	AEROSOLS - Category 1

### Regulation according to other foreign laws

<b>REACH Status</b>	For the REACH status of this product please consult your company contact, as identified in Section 1.
<b>United States inventory (TSCA 8b)</b>	Not determined.
<b>Australia inventory (AIC)</b>	All components are listed or exempted.
<b>Canada inventory status</b>	At least one component is not listed.
<b>China inventory (IECSC)</b>	All components are listed or exempted.
<b>Japan inventory (CSCL)</b>	At least one component is not listed.
<b>Korea inventory (KECI)</b>	All components are listed or exempted.
<b>Philippines inventory (PICCS)</b>	At least one component is not listed.
<b>Taiwan Chemical Substances Inventory (TCSI)</b>	At least one component is not listed.

## Section 16. Other information

### History

<b>Date of issue/Date of revision</b>	18 August 2023
<b>Date of previous issue</b>	16 August 2023.
<b>Version</b>	1.02
<b>Prepared by</b>	Not available.
<b>Key to abbreviations</b>	Varies = may contain one or more of the following 64741-88-4, 64741-89-5, 64741-95-3, 64741-96-4, 64742-01-4, 64742-44-5, 64742-45-6, 64742-52-5, 64742-53-6, 64742-54-7, 64742-55-8, 64742-56-9, 64742-57-0, 64742-58-1, 64742-62-7, 64742-63-8, 64742-65-0, 64742-70-7, 72623-85-9, 72623-86-0, 72623-87-1

### Notice to reader

✔ Indicates information that has changed from previously issued version.

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