



SAFETY DATA SHEET

1. Product and company identification

Product name Bel-Ray Blue Tac Chain Lube
Product code 99060

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Recommended use and Limitations on use

Recommended use Lubricant

2. Hazards identification

GHS classification

Physical hazards	Flammable aerosols	Category 1
Health hazards	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 2
	Specific target organ toxicity following single exposure	Category 3 narcotic effects
Environmental hazards	Hazardous to the aquatic environment, acute hazard	Category 1
	Hazardous to the aquatic environment, long-term hazard	Category 1

Label elements

Symbols



Signal word

Danger

Hazard statement

Extremely flammable aerosol. Causes skin irritation. Causes serious eye irritation. May cause drowsiness or dizziness. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

Precautionary statement

Prevention

Keep out of reach of children. Read label before use. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Keep only in original container. Pressurised container: Do not pierce or burn, even after use. Avoid breathing mist or vapour. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear eye protection/face protection. Wear protective gloves.

Response

If medical advice is needed, have product container or label at hand. IF ON SKIN: Wash with plenty of soap and water. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a POISON CENTRE or doctor/physician if you feel unwell. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash before reuse. Collect spillage.

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.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Supplemental information	52.89 % of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 52.89 % of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.

3. Composition/information on ingredients

Substance or mixture	Mixture	
Chemical property	CAS Number	Concentration (%)
Heptane	142-82-5	40 - < 50
Propane	74-98-6	10 - < 20
Butane	106-97-8	5 - < 10
Isobutane	75-28-5	5 - < 10
Hydrotreated Light Distillates (petroleum)	64742-47-8	1 - < 3
2,5-bis(octyldithio)-1,3,4-thiadiazole	13539-13-4	< 0.3
Other components below reportable levels		20 - < 30

4. First aid measures

Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTRE or doctor/physician if you feel unwell.
Skin contact	Remove contaminated clothing. Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
Ingestion	In the unlikely event of swallowing contact a physician or poison control centre. Rinse mouth.
Potential delayed effects	May cause drowsiness and dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain.
Personal protection for first-aid responders	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.
Notes to physician	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

5. Fire-fighting measures

Extinguishing media	Foam. Powder. Carbon dioxide (CO2).
Extinguishing media to avoid	Do not use water jet as an extinguisher, as this will spread the fire.
HAZCHEM Code Number	None.
Specific hazards during fire fighting	Contents under pressure. Pressurised container may explode when exposed to heat or flame. During fire, gases hazardous to health may be formed.
Special fire fighting procedures	Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build up. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.
Protection of fire-fighters	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.
Hazards from combustion products	None.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. In the event of fire and/or explosion do not breathe fumes.
General fire hazards	Extremely flammable aerosol.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist or vapour. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8.
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Environmental precautions	Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.
Spill cleanup methods	Refer to attached safety data sheets and/or instructions for use. Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Keep combustibles (wood, paper, oil etc) away from spilled material. Prevent product from entering drains. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water. Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. For waste disposal, see section 13 of the SDS.

7. Handling and storage

Handling

Precautions	Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Pressurised container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Avoid breathing mist or vapour. Avoid contact with eyes, skin, and clothing. Avoid release to the environment. Do not re-use empty containers.
Safe handling advice	Avoid prolonged exposure. Observe good industrial hygiene practices. Use personal protection recommended in Section 8 of the SDS.
Prevention of fire and explosion	Pressurised container: Do not pierce or burn, even after use. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. Ground and bond containers when transferring material.
Local and general ventilation	Use only in well-ventilated areas.

Storage

Suitable storage conditions	Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C. Do not handle or store near an open flame, heat or other sources of ignition. Refrigeration recommended. Keep out of the reach of children. Store away from incompatible materials (see Section 10 of the SDS).
Incompatible materials	Nitrates. Strong oxidising agents. Fluorine. Chlorine. For further information, please refer to section 10.
Safe packaging materials	Pressurised container: Do not pierce or burn, even after use. Ground and bond containers when transferring material. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. Do not use if spray button is missing or defective. Store in original tightly closed container. Do not re-use empty containers.

8. Exposure controls/personal protection

Exposure limits

New Zealand. WES. (Workplace Exposure Standards)

Components	Type	Value
Butane (CAS 106-97-8)	TWA	1900 mg/m3 800 ppm
Heptane (CAS 142-82-5)	STEL	2050 mg/m3 500 ppm
	TWA	1640 mg/m3 400 ppm

ACGIH

Components	Type	Value	Form
Hydrotreated Light Distillates (petroleum) (CAS 64742-47-8)	TWA	200 mg/m3	As Total Hydrocarbon Vapor.

US. ACGIH Threshold Limit Values

Components	Type	Value
Butane (CAS 106-97-8)	STEL	1000 ppm
Heptane (CAS 142-82-5)	STEL	500 ppm
	TWA	400 ppm
Isobutane (CAS 75-28-5)	STEL	1000 ppm

UK. EH40 Workplace Exposure Limits (WELs)

Components	Type	Value
Butane (CAS 106-97-8)	STEL	1810 mg/m3

UK. EH40 Workplace Exposure Limits (WELs)

Components	Type	Value
Heptane (CAS 142-82-5)	TWA	750 ppm
		1450 mg/m3
	TWA	600 ppm
		2085 mg/m3
		500 ppm

Australia. National Workplace OELs (Workplace Exposure Standards for Airborne Contaminants, Appendix A)

Components	Type	Value
Butane (CAS 106-97-8)	TWA	1900 mg/m3
Heptane (CAS 142-82-5)	STEL	800 ppm
		2050 mg/m3
	TWA	500 ppm
		1640 mg/m3
		400 ppm

Australia. OELs. (Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment)

Components	Type	Value
Butane (CAS 106-97-8)	TWA	1900 mg/m3
Heptane (CAS 142-82-5)	STEL	800 ppm
		2050 mg/m3
	TWA	500 ppm
		1640 mg/m3
		400 ppm

Biological limit values

No biological exposure limits noted for the ingredient(s).

Engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

Personal protective equipment**Respiratory protection**

Chemical respirator with organic vapour cartridge and full facepiece.

Hand protection

Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.

Skin protection

Wear appropriate chemical resistant clothing.

Eye/face protection

Chemical respirator with organic vapour cartridge and full facepiece.

Radioactive or thermal hazards

Follow standard monitoring procedures.

Hygiene measures

When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance	Tacky Aerosol
Physical state	Liquid.
Form	Aerosol
Colour	Blue.
Odour	Hydrocarbon-like.
Odour threshold	Not available.
pH	Not available.
Melting point/freezing point	-187.6 °C (-305.68 °F) estimated
Boiling point, initial boiling point, and boiling range	-32 °C (-25.6 °F)
Flash point	-104.0 °C (-155.2 °F) Pensky-Martens Closed Cup
Auto-ignition temperature	210 °C (410 °F) estimated
Flammability (solid, gas)	Not applicable.
Flammability limit - lower (%)	0.7 % estimated

Flammability limit - upper (%)	9.5 % estimated
Explosive limit - lower (%)	Not available.
Explosive limit – upper (%)	Not available.
Vapour pressure	Not available.
Density	600.00 kg/m3
Vapour density	Not available.
Evaporation rate	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Negligible
Solubility (other)	Oil
Partition coefficient (n-octanol/water)	Not available.
Decomposition temperature	Not available.
Viscosity	4.5 cSt
Viscosity temperature	40 °C (104 °F)
Other data	
Explosive properties	Not explosive.
Oxidising properties	Not oxidising.
Specific gravity	0.6
VOC	71.5 %

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Stability	Material is stable under normal conditions.
Conditions to avoid	Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible materials	Strong oxidising agents. Nitrates. Fluorine. Chlorine.
Hazardous decomposition products	Irritants. At thermal decomposition temperatures, carbon monoxide and carbon dioxide.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.

11. Toxicological information

Information on likely routes of exposure

Ingestion	Expected to be a low ingestion hazard.
Inhalation	May cause drowsiness and dizziness. Headache. Nausea, vomiting. Prolonged inhalation may be harmful.
Skin contact	Causes skin irritation.
Eye contact	Causes serious eye irritation.
Acute toxicity	Narcotic effects.

Product	Species	Test results
Bel-Ray Blue Tac Chain Lube		
Acute		
Dermal		
LD50	Rabbit	37546 mg/kg estimated
Inhalation		
LC50	Mouse	12800 mg/l, 2 Hours estimated
		827 mg/l, 1 Hours estimated
	Rat	10768 mg/l, 15 Minutes estimated
		184 mg/l, 4 Hours estimated
LD50	Mouse	167 mg/l, 2 Hours estimated
Oral		
LD50	Rat	99474 mg/kg estimated

Components	Species	Test results
Butane (CAS 106-97-8)		
<u>Acute</u>		
Inhalation		
LC50	Mouse	680 mg/l, 2 Hours
	Rat	658 mg/l, 4 Hours
Heptane (CAS 142-82-5)		
<u>Acute</u>		
Inhalation		
LC50	Rat	103 mg/l, 4 Hours
LD50	Mouse	75 mg/l, 2 Hours
Isobutane (CAS 75-28-5)		
<u>Acute</u>		
Inhalation		
LC50	Mouse	52 mg/l, 1 Hours
Propane (CAS 74-98-6)		
<u>Acute</u>		
Inhalation		
LC50	Rat	> 1442.847 mg/l, 15 Minutes

* Estimates for product may be based on additional component data not shown.

Routes of exposure	Inhalation. Skin contact. Eye contact.
Symptoms	May cause drowsiness and dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain.
Skin corrosion/irritation	Causes skin irritation.
Serious eye damage/eye irritation	Causes serious eye irritation.
Respiratory sensitiser	Not a respiratory sensitizer.
Skin sensitiser	Not applicable.
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity	Due to lack of data the classification is not possible.
Toxic to reproduction	This product is not expected to cause reproductive or developmental effects.
Specific target organ toxicity - single exposure	May cause drowsiness and dizziness.
Specific target organ toxicity - repeated exposure	Due to lack of data the classification is not possible.
Aspiration hazard	Not an aspiration hazard.
Chronic effects	Prolonged inhalation may be harmful.
Relevant negative data	Not available.

12. Ecological information

Ecotoxicological data

Product	Species	Test results
Bel-Ray Blue Tac Chain Lube		
<u>Aquatic</u>		
Fish	LC50	186.4435 mg/l, 96 hours estimated
Components	Species	Test results
Heptane (CAS 142-82-5)		
<u>Aquatic</u>		
Fish	LC50	Mozambique tilapia (Tilapia mossambica) 375 mg/l, 96 hours

Components		Species	Test results
Hydrotreated Light Distillates (petroleum) (CAS 64742-47-8)			
Aquatic			
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	2.9 mg/l, 96 hours

* Estimates for product may be based on additional component data not shown.

Ecotoxicity Very toxic to aquatic life with long lasting effects.

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulation

Partition coefficient n-octanol/water (log Kow)

Butane	2.89
Heptane	4.66
Isobutane	2.76
Propane	2.36

Bioconcentration factor (BCF) Not available.

Mobility No data available for this product.

Other hazardous effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal methods/information Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents under pressure. Do not puncture, incinerate or crush. This material and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

Special precautions Dispose in accordance with all applicable regulations.

14. Transport information

IATA

UN number	UN1950
UN proper shipping name	Aerosols, flammable
Transport hazard class(es)	
Class	2.1
Subsidiary risk	-
Packing group	Not applicable.
Environmental hazards	No.
ERG Code	10L
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Other information	
Passenger and cargo aircraft	Allowed with restrictions.
Cargo aircraft only	Allowed with restrictions.

IMDG

UN number	UN1950
UN proper shipping name	AEROSOLS, flammable
Transport hazard class(es)	
Class	2.1
Subsidiary risk	-
Packing group	Not applicable.
Environmental hazards	
Marine pollutant	No.
EmS	Not available.
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

Transport in bulk according to Not established.

**Annex II of MARPOL 73/78
and the IBC Code**



15. Regulatory information

Applicable regulations

New Zealand Inventory of Chemicals (NZIoC): Registration status

2,5-bis(octyldithio)-1,3,4-thiadiazole (CAS 13539-13-4)	May be used as a component in a product covered by a group standard but it is not approved for use as a chemical in its own right.
Butane (CAS 106-97-8)	HSNO Approved
Heptane (CAS 142-82-5)	HSNO Approved
Hydrotreated Light Distillates (petroleum) (CAS 64742-47-8)	May be used as a single component chemical under an appropriate group standard
Isobutane (CAS 75-28-5)	HSNO Approved
Propane (CAS 74-98-6)	HSNO Approved

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no) *
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

* A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information

References Not available.

Issued by
Not available.

Prepared by
Not available.

Disclaimer Bel-Ray Company, LLC cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.

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Revision information This document has undergone significant changes and should be reviewed in its entirety.