SUPERIOL

SAFETY DATA SHEET

READ AND UNDERSTAND THE SAFETY DATA SHEET BEFORE HANDLING OR DISPOSING OF THIS PRODUCT

SECTION 1: IDENTIFICATION OF MATERIAL AND SUPPLIER

Product Name: Superiol Long Life JNK Concentrate Coolant (Pink)

Product Code: SPCC1L, SPCC5L, SPCC20L, SPCC205L

Recommended Use: Automotive engine coolant.

AUS Distributor Details:

Bapcor
Level 2 / 327 Ferntree Gully Road
Mount Waverley
Victoria 3149 Australia
Tel: +61 3 8878 1111

NZ Distributor Details:

Bapcor New Zealand (Trading as BNT)
21 – 27 Omega Street
Albany, Auckland, 0632 New Zealand
Tel: +64 9 414 3200

Supplier Details:

Chiron Coolants Pty Ltd
49 Redgum Drive
Dandenong South
Victoria 3175 Australia
Tel: +61 3 9768 2220

Emergency Telephone Number: Tel: +61 3 9768 2220

After Hours Emergency Telephone Number: 13 11 26 (Australian Poisons Information Line)
0800 764 766 (New Zealand Poisons Information Line)

SECTION 2: HAZARDS IDENTIFICATION

This product is classified as a **HAZARDOUS CHEMICAL** in accordance with the WHS, and as **NON-DANGEROUS GOODS** according to the Australian Dangerous Goods (ADG) Code

GHS CLASSIFICATION (AUSTRALIA):

Hazardous Classes & Categories:

Hazard Class	Hazard Category
Acute Toxicity (Oral)	Category 4
Toxic to Reproduction	Category 2
Specific Target Organ Toxicity (Single Exposure)	Category 3
Specific Target Organ Toxicity (Repeated Exposure)	Category 2 (Kidney)

LABEL ELEMENTS:

Signal Word: **WARNING**

Hazard Pictograms:

Exclamation Mark

Health Hazard

Pictogram Description:

Hazard Statements:
H302 – Harmful if swallowed.
H361 – Suspected of damaging fertility or the unborn child.
H335 – May cause respiratory irritation.
H373 – May cause damage to the kidneys through prolonged or repeated exposure.

Precautionary Statements:

General:
P102 – Keep out of reach of children.
P103 + P104 – Read label and Safety Data Sheet before use.

Prevention:
P260 – Do not breathe mist/vapours/spray.
P261 – Avoid breathing mist/vapours/spray.
P264 – Wash hands thoroughly after handling.
P270 – Do not eat, drink, or smoke when using this product.
P271 – Use only outdoors or in a well-ventilated area.
P280 – Wear protective gloves and eye protection.

Response:
P301 + P312 – IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.
P304 + P340 – IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P308 + P313 – IF exposed or concerned: Get medical advice/attention.
P314 – Get medical advice/attention if you feel unwell.
P330 – Rinse mouth.

Storage:
P403 + P233 – Store in a well-ventilated place. Keep container tightly closed.
P405 – Store locked up.

Disposal:
P501 – Dispose of contents/container in accordance with local regulations.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

No.	Chemical Name	CAS Number	Proportion (% by wt)
1.	Ethylene Glycol	107-21-1	>60%
2.	Potassium 2-ethylhexanoate	3164-85-0	0.1 < 3 %
3.	Sodium-2-ethylhexanoate	19766-89-3	0.1 < 3 %
4.	Denatonium Benzoate	3734-33-6	<1%
5.	*Non-hazardous ingredients	Proprietary	Balance
			100%

**Ingredients present at non-hazardous concentrations, according to criteria of Safe Work Australia, based on available information*

SECTION 4: FIRST AID MEASURES

Inhalation: If irritation, headache, nausea, or drowsiness occurs, remove victim from exposure – avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing and allow victim to assume most comfortable position and keep warm and at rest until fully recovered. If breathing is laboured and patient cyanotic (blue), ensure airways are clear and have a qualified person give oxygen through a face mask. Apply artificial respiration if patient is not breathing. Seek medical attention immediately. Show this sheet to the doctor.

Skin: If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. If irritation develops or persists, seek medical attention. Show this sheet to the doctor.

Eyes: If in eyes, hold eyelids apart and flush the eye continuously with running water for at least 15 minutes. If eye irritation persists, seek medical attention immediately. Show this sheet to the doctor.

Ingestion:	If swallowed, do NOT induce vomiting. Rinse mouth with water. Give a glass of water to drink. Never give anything by mouth to an unconscious or convulsing person. If vomiting occurs give further water. If symptoms develop seek medical attention. Show this sheet to the doctor.
Medical attention and special treatment:	Treat symptomatically. Ethylene Glycol poisoning may initially produce behaviour changes, drowsiness, vomiting, diarrhoea, thirst, and convulsions. It can cause central nervous system depression and metabolic acidosis. Consider the following management actions; gastric decontamination, correction of metabolic acidosis with bicarbonate, inhibition of ethylene glycol metabolism by giving ethanol (100 mg/dL or higher) or fomepizole as antidotes and haemodialysis to remove ethylene glycol and its major metabolite glycolic acid.
Poisons Information:	For advice contact a Poisons Information Centre (*Australia 131126)(New Zealand* 0800 764766) or a doctor (at once).

SECTION 5: FIRE FIGHTING MEASURES

Suitable Extinguishing Media:	For large fires use water fog, fine water spray or foam. Do not use water jets. For small fires use foam, dry chemical, carbon dioxide or water spray.
Hazards from combustion products:	This product is a COMBUSTIBLE LIQUID. A complex mixture of airborne solids, liquids and gases including carbon monoxide, carbon dioxide and other organic compounds will be evolved when this material undergoes combustion or thermal or oxidative degradation.
Special protective equipment and precautions for fire fighters:	Heating can cause expansion or decomposition leading to violent rupture of containers. If safe to do so, remove containers from path of fire. Keep containers cool with water spray. Fire fighters should wear full protective clothing including a self-contained breathing apparatus if risk of exposure to vapour or products of combustion.
Hazchem Code:	None applicable.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions:	Slippery when spilt. Avoid contact with skin and eyes. Personal protective equipment: - Appropriate gloves. - Eye/face protection (safety glasses with side shields or splash proof goggles). - Suitable protective clothing. For further information, refer to section 8 "Exposure Controls / Personal Protection". Turn leaking containers leak-side up to prevent the escape of liquid.
Environmental Precautions:	Contain – prevent run off into drains and waterways. If large quantities of this material enter the waterways contact the Environment Protection Authority, or your local Waste Management Authority. Dispose of waste according to Federal, EPA, state and local regulations.
Methods for Cleaning Up:	<u>Recovery:</u> Absorb the product onto suitable, non-combustible porous material. Sweep up or vacuum up the product. Collect up the product and place it in a spare container, suitably labelled. Keep the recovered product for subsequent disposal. <u>Cleaning/Decontamination:</u> Wash contaminated area with large amounts of water. Recover the cleaning water for subsequent disposal. <u>Disposal:</u>

Dispose of all contaminated materials in accordance with local regulations. (Refer to section 13 "Disposal Considerations").

Further Information: Warning: Material can create slippery conditions.

Dangerous Goods - Initial Emergency Response Guide (IERG) (SAA/SNZ HB76) None applicable.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling: Avoid skin and eye contact and breathing in vapour. Pregnant women should not work with this product. Use with adequate ventilation. Always wash hands thoroughly after handling. Wash contaminated clothing and other protective equipment before storage or re-use. For further information refer to section 8 “Exposure Controls/Personal Protection”. Do not dispose of material in sewers or waterways.

Conditions for safe storage: Keep all containers tightly closed when not in use – check regularly for leaks. Store in a cool, dry, well-ventilated place out of direct sunlight. Store away from incompatible materials such as strong oxidising agents and foodstuffs – described in Section 10.

Further Information about Storage Conditions: Classified as a C2 (COMBUSTIBLE LIQUID) for the purpose of storage and handling, in accordance with the requirements of AS 1940:2017. Refer to State Regulations for storage and transport requirements.
This material is a Scheduled Poison S5 and must be stored, maintained, and used in accordance with the relevant regulations.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Standards: No value has been assigned for this specific material by the National Occupational Health and Safety Commission or Safe Work Australia. However, over-exposure to any chemical may result in enhancement of pre-existing adverse medical conditions and/or allergic reactions.

Exposure Limit: In the absence of occupational exposure standards for this product, it is recommended that the following be adopted.

	TWA		STEL		Notices
	ppm	mg/m^3	ppm	mg/m^3	
Ethylene glycol (vapour)	20	52	40	104	Skin
Ethylene glycol (particulate)	-	10	-	-	Skin

As published by Safe Work Australia.

Skin Absorption Notice – adsorption through the skin may be significant source of exposure. The exposure standard is invalidated if such contact should occur.

Ethylene glycol vapour and mist: Workplace Exposure Standard - Ceiling 50 ppm, 127 mg/m^3. A concentration that should not be exceeded during any part of the working day.
As published by the New Zealand Occupational Safety and Health Service (OSH).

Engineering Controls: Ensure ventilation is adequate to maintain air concentrations below Exposure Standards. If inhalation risk exists - use with local exhaust ventilation or while wearing organic vapour respirator. Vapour heavier than air – prevent concentration in hollow slumps. DO NOT enter confined spaces where vapour may have collected. Keep containers closed when not in use.

Personal Protective Equipment:

Respiratory protection: If inhalation risk exists wear a half face-piece filter respirator suitable for organic vapours/particulates meeting the requirements of AS/NZS 1715 and AS/NZS 1716.

Eye protection: Safety glasses or a face shield are recommended to prevent eye contact.

Skin/Body protection: Wear overalls, safety shoes, and impervious gloves (rubber/PVC gloves). Due to variations in glove constructions and local conditions, final assessment should be made by the user.

Workplace Hygiene Measures: Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this material:

- Do not store, use, and /or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored.
- Always wash hands and face before eating, drinking, smoking, applying cosmetics, or using the toilet.
- Wash contaminated clothing and other protective equipment before storage or re-use.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Pink liquid.
Odour:	Mild organic odour.
Odour threshold:	No data available.
pH:	8.2 at 20°C typ.
Melting point/freezing point:	-37°C (at 50 % vol) typ.
Initial boiling point and boiling range:	No data available.
Flash Point:	No data available.
Evaporation rate:	No data available.
Flammability (solid, gas):	No data available.
Upper/lower flammability:	No data available.
Vapour Pressure:	No data available.
Vapour density:	No data available.
Specific Gravity:	1.11 at 20°C typ.
Solubility in Water:	Complete.
Solubility in Organic Solvents:	No data available.
Partition coefficient: n-octanol/water:	No data available.
Auto-ignition temperature:	Not applicable.
Decomposition temperature:	No data available.
Viscosity:	No data available.
Oxidizing Properties:	No data available.

SECTION 10: STABILITY AND REACTIVITY

Chemical stability:	Stable under normal conditions of use.
Hazardous reactions:	No known hazardous reactions.
Conditions to avoid:	Excessive heat – will lead to accelerated oxidative degradation – sources of ignition.
Incompatible materials:	Avoid contact with strong oxidising agents.

Hazardous decomposition products:	Product does not decompose at ambient temperatures. A complex mixture of airborne solids, liquids and gases including carbon monoxide, carbon dioxide and other organic compounds will be evolved when this material undergoes combustion or thermal or oxidative degradation.

SECTION 11: TOXICOLOGICAL INFORMATION

No LD_{50} data available for the product. The toxicological information is based on data from a hazardous ingredient. No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms of effects that may arise if the product is mishandled and overexposure occurs are:

Ethylene Glycol:

Acute health effects:

Ingestion:	Harmful if swallowed. Initial symptoms following a large dose (>100mL) are those of alcohol intoxication progressing to vomiting, headache, stupor, convulsions and unconsciousness. Respiratory system involvement may occur 12-24 hours after ingestion. Symptoms may include hyperventilation and rapid shallow breathing. Death may occur from respiratory failure or pulmonary oedema.
Eye:	A mild eye irritant.
Skin:	Contact with skin will result in mild irritation. Will have a degreasing action on the skin. Repeated or prolonged skin contact may lead to irritant contact dermatitis. Can be absorbed through the skin. Effects can include those described for 'Ingestion'.
Inhaled:	May cause respiratory irritation. Breathing in vapours (from heating), mists or aerosols can result in headaches, dizziness, drowsiness and possible nausea.
Long term effects:	Available evidence from animal studies indicate that repeated or prolonged exposure to this material could result in effects on the central nervous system, liver and kidneys.

Toxicological data:

Oral:	LD_{50} : 4700 mg/kg (rat).
Skin:	Mild irritant (rabbit)
Eyes:	Mild irritant (rabbit)

Sodium-2-ethylcaproate:

Acute health effects:

Ingestion:	Swallowing can result in fetotoxic effects.
Eye:	May be an eye irritant.
Skin:	Contact with skin may result in irritation.
Inhaled:	Material may be an irritant to the mucous membranes of the respiratory tract (airways).
Long term effects:	Possible risk of harm to the unborn child. No evidence of mutagenic properties. Animal studies demonstrate that the main target organs of toxicity are the liver and the reproductive system. Dose-dependent liver effects ranging from metabolic disturbances to cytotoxicity have been observed in repeated dosing studies with rats and mice.

Toxicological data:

Oral:	LD50 : 3640 mg/kg (rat).
Dermal:	LD50 : >2000 mg/kg (rabbit).
Skin:	Slight irritant (rabbit). Not a skin sensitiser (guinea pig).
Eyes:	Slight irritant (rabbit).

SECTION 12: ECOLOGICAL INFORMATION

Complete ecological testing on this product has not been conducted. The information is based on information for representative substances.

Ecotoxicity: Avoid contaminating waterways, drains and sewers.

Persistence and degradability: The potential to bioaccumulate has not been determined, however the material is expected to be readily biodegradable according to the AS 4351 Part 2 test method.

Mobility: Not determined.

Aquatic toxicity: Not determined.
Ethylene Glycol:
Crustacea EC_{50}: Daphnia magna, >100 mg/l, 45 hours
Fish LC_{50}: Fathead minnow, 72,860 mg/l, 96 hours

SECTION 13: DISPOSAL CONSIDERATIONS

Residues from product

Prohibition: Discharging waste into rivers and drains is forbidden.

Destruction/Disposal: Chemical additions, processing or otherwise altering this material may make the waste management information presented in this SDS incomplete, inaccurate or otherwise inappropriate. Dispose of in accordance with relevant national and local regulations, EPA requirements and safety regulations at an authorised site.

Contaminated packaging

Prohibition: Do not dispose of the product at a rubbish tip.

Decontamination/Cleaning: Any containers or equipment used should be decontaminated immediately after use. Completely empty the packaging prior to decontamination. Carefully drain and then steam clean.

Container Handling and Disposal: Recycle following cleaning or dispose of at an authorised site.

SECTION 14: TRANSPORT INFORMATION

UN Number: None allocated.

Proper Shipping Name: None allocated.

Dangerous Goods Class: None allocated.

Subsidiary Risk: None allocated.

Packing Group: None allocated.

HAZCHEM Code: None allocated.

Road and Rail Transport (Australia) Not classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code) for transport by road and rail.

Marine Transport: Not classified as Dangerous Goods according to the International Maritime Organization Rules (Maritime Dangerous Goods Code - IMDG Code) for transport by sea.
Marine pollutant: No

Air Transport: Not classified as Dangerous Goods according to the International Civil Aviation Organization (ICAO) and International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

SECTION 15: REGULATORY INFORMATION

SUSMP: Poisons Schedule Number S5 allocated.

Inventory Status: Australia (AICS): E
New Zealand (NZIoC): Y

Y = All ingredients are on the inventory.
E = All ingredients are on the inventory or exempt from listing.
P = One or more ingredients fall under the polymer exemption or are on the no longer polymer list. All other ingredients are on the inventory or exempt from listing.
N = Not determined or one or more ingredients are not on the inventory and are not exempt from listing.

NOTE: *The regulatory information given above only indicates the principal regulations specifically applicable to the product described in the Safety Data Sheet. The user's attention is drawn to the possible existence of additional provisions which complete these regulations. Refer to all applicable national, international and local regulations or provisions.*

SECTION 16: OTHER INFORMATION

ADG Code: Australian Code for the Transport of Dangerous Goods by Road and Rail.

AICS: Australian Inventory of Chemical Substances

AS: Standards issued by Standards Australia, GPO Box 476, Sydney NSW 2001, Australia

AS/NZS: Standards issued by Standards Australia, GPO Box 476, Sydney NSW 2001, Australia and Standards New Zealand, Private Bag 2439 Wellington 6140, New Zealand

CAS Number: Chemical Abstracts Service Registry Number

GHS: Globally Harmonized System of Classification and Labelling of Chemicals, a globally harmonized system for classification and labelling of chemicals proposed by the United Nations

HAZCHEM: An emergency action code of numbers and letters which gives information to emergency services.

IERG: Dangerous Goods Initial Emergency Response Guide (SAA/SNZ HB 76:2010)

IMDG: International Maritime Dangerous Goods Code for transport by sea.

LD The median lethal dose, LD_{50} (abbreviation for “lethal dose, 50%”), is the dose required to kill half the members of a tested population after a specified test duration.

NZIoC New Zealand Inventory of Chemicals.

Safe Work Australia: Safe Work Australia was formerly the Australian Safety and Compensation Council, which included the National Occupational Health and Safety Commission (NOHSC).

SDS: Safety Data Sheet.

STEL: Short term Exposure Limit – the average airborne concentration over a 15 minute period which should not be exceeded at any time over an entire working life.

SUSMP: Standard for the Uniform Scheduling of Medicines and Poisons.

TWA: Time-Weighted Average – the average airborne concentration over an eight-hour working day, for a five-day working week over an entire working life.

UN Number: United Nations Number.

WHS:	Model work health and safety legislation introduced by the Australian government which consists of an integrated package of a model Work Health and Safety (WHS) Act, supported by model Work Health and Safety (WHS) Regulations, model Codes of Practice and a National Compliance and Enforcement Policy.
Contact Point:	Chiron Coolants
Telephone:	+61 3 9768 2220
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Note:	Safety Data Sheets are updated frequently. Please ensure that you have a current copy.
Disclaimer:	This SDS should be used in conjunction with the Technical Data Sheet. It does not replace them. This SDS summarises at the date of issue our best knowledge of the health and safety hazard information of this product, and in particular how to safely handle and use this product in the workplace. Since Chiron Coolants Pty Ltd cannot anticipate or control the conditions under which the product may be used, each use must, prior to usage, review this SDS in the context of how the user intends to handle and use the product in the workplace. This SDS does not represent a guarantee for the properties of the product(s) described in terms of the legal warranty regulations. No liability whatsoever can be accepted with regard to the handling, processing or use of the product concerned which, in all cases, shall be in accordance with the appropriate regulations and/or legislation. If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this company.