

SAFETY DATA SHEET

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER 1.1 Product identifier **Product name** CRC BRAKLEEN BULK LIQUID (POST AUGUST 2022) Synonyms 5090, 5091, 5092 1.2 Uses and uses advised against BRAKE CLEANER • INDUSTRIAL CLEANING AGENT • INDUSTRIAL DEGREASER Uses 1.3 Details of the supplier of the product **CRC INDUSTRIES (AUST) PTY LIMITED** Supplier name Address 9 Gladstone Road, Castle Hill, NSW, 2154, AUSTRALIA (02) 9849 6700 Telephone (02) 9680 4914 Fax info.au@crcind.com Email Website http://www.crcindustries.com.au 1.4 Emergency telephone numbers

Emergency

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

13 11 26 (PIC)

CLASSIFIED AS HAZARDOUS ACCORDING TO SAFE WORK AUSTRALIA CRITERIA

Physical Hazards

Flammable Liquids: Category 2

Health Hazards

Aspiration Hazard: Category 1 Skin Corrosion/Irritation: Category 2 Specific Target Organ Toxicity (Single Exposure): Category 3 (Narcotic Effects) Carcinogenicity: Category 2

Environmental Hazards

Aquatic Toxicity (Acute): Category 1 Aquatic Toxicity (Chronic): Category 1

2.2 GHS Label elements

Signal word DANGER

Pictograms





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Hazard statements H225 H304 H315 H336 H351 H400 H410	Highly flammable liquid and vapour. May be fatal if swallowed and enters airways. Causes skin irritation. May cause drowsiness or dizziness. Suspected of causing cancer. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.
Prevention statements P201 P202 P210 P233 P240 P241 P243 P261 P264 P271 P273 P280	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground and bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Take action to prevent static discharges. Avoid breathing dust/fume/gas/mist/vapours/spray. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
Response statements P301 + P310 P303 + P361 + P353 P304 + P340 P308 + P313 P321 P331 P362 + P364 P370 + P378 P391	IF SWALLOWED: Immediately call a POISON CENTRE or doctor/physician. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF exposed or concerned: Get medical advice/ attention. Specific treatment is advised - see first aid instructions. Do NOT induce vomiting. Take off contaminated clothing and wash it before reuse. In case of fire: Use appropriate media to extinguish. Collect spillage.
Storage statements P403 + P233 + P235 P405 Disposal statements P501	Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up. Dispose of contents/container in accordance with relevant regulations.

2.3 Other hazards

No information provided.

3. COMPOSITION/ INFORMATION ON INGREDIENTS

3.1 Substances / Mixtures

Ingredient	CAS Number	EC Number	Content
N-HEPTANE	142-82-5	205-562-2	30 to 60%
TETRACHLOROETHYLENE (PERCHLOROETHYLENE)	127-18-4	204-825-9	30 to 60%

4. FIRST AID MEASURES

4.1 Description of first aid measures

Eye	If in eyes, hold eyelids apart and flush continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre, a doctor, or for at least 15 minutes.
Inhalation	If inhaled, remove from contaminated area. To protect rescuer, use a Type A (Organic vapour) respirator or an Air-line respirator (in poorly ventilated areas). Apply artificial respiration if not breathing.
Skin	If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. Continue flushing with water until advised to stop by a Poisons Information Centre or a doctor.
Ingestion	For advice, contact a Poisons Information Centre on 13 11 26 (Australia Wide) or a doctor (at once). If swallowed, do not induce vomiting.
First aid facilities	Eye wash facilities and safety shower are recommended.

ChemAlert.

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4.2 Most important symptoms and effects, both acute and delayed

See Section 11 for more detailed information on health effects and symptoms.

4.3 Immediate medical attention and special treatment needed

Treat symptomatically.

5. FIRE FIGHTING MEASURES

5.1 Extinguishing media

Dry agent, carbon dioxide or foam. Prevent contamination of drains and waterways.

5.2 Special hazards arising from the substance or mixture

Highly flammable. May evolve toxic gases (carbon oxides, hydrogen chloride, chlorides, phosgene, hydrocarbons) when heated to decomposition. Vapour may form explosive mixtures with air. Eliminate all ignition sources including cigarettes, open flames, spark producing switches/tools, pilot lights, heaters, naked lights, mobile phones, etc when handling. Earth containers when dispensing fluids.

5.3 Advice for firefighters

Evacuate area and contact emergency services. Toxic gases may be evolved in a fire situation. Remain upwind and notify those downwind of hazard. Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire. Use waterfog to cool intact containers and nearby storage areas.

5.4 Hazchem code

•3YE

- •3 Alcohol Resistant Foam is the preferred firefighting medium but, if it is not available, normal foam can be used.
- Y Risk of violent reaction or explosion. Wear full fire kit and breathing apparatus. Contain spill and run-off.
- E Evacuation of people in and around the immediate vicinity of the incident should be considered.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Wear Personal Protective Equipment (PPE) as detailed in section 8 of the SDS. Clear area of all unprotected personnel. Ventilate area where possible. Contact emergency services where appropriate.

6.2 Environmental precautions

Prevent product from entering drains and waterways.

6.3 Methods of cleaning up

Contain spillage, then cover / absorb spill with non-combustible absorbent material (vermiculite, sand, or similar), collect and place in suitable containers for disposal. Eliminate all sources of ignition.

6.4 Reference to other sections

See Sections 8 and 13 for exposure controls and disposal.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Before use carefully read the product label. Use of safe work practices are recommended to avoid eye or skin contact and inhalation. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well ventilated area, removed from incompatible substances, heat or ignition sources and foodstuffs. Ensure containers are adequately labelled, protected from physical damage and sealed when not in use. Check regularly for leaks or spills. Large storage areas should be bunded and have appropriate ventilation systems.

7.3 Specific end uses

No information provided.



8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Exposure standards

Ingredient	Reference	TWA		STEL	
ingredient	Keleience		mg/m³	ppm	mg/m³
Perchloroethylene	SWA [AUS]	50	340	150	1020
Perchloroethylene	SWA [Proposed]	20	138	40	275
n-Heptane	SWA [AUS]	400	1640	500	2050

Biological limits

Determinant	Sampling Time	BEI
Tetrachloroethylene in end-exhaled air	Prior to shift	3 ppm
Tetrachloroethylene in blood	Prior to shift	0.5 mg/L
	Tetrachloroethylene in end-exhaled air	Tetrachloroethylene in end-exhaled air Prior to shift

Reference: ACGIH Biological Exposure Indices

8.2 Exposure controls

Engineering controls Avoid inhalation. Use in well ventilated areas. Where an inhalation risk exists, mechanical extraction ventilation is recommended. Flammable/explosive vapours may accumulate in poorly ventilated areas. Vapours are heavier than air and may travel some distance to an ignition source and flash back. Maintain vapour levels below the recommended exposure standard.

PPE

Eye / Face Wear splash-proof goggles.

Hands Wear PVA or viton® gloves.

Body Wear coveralls. If spraying, wear impervious coveralls.

Respiratory Where an inhalation risk exists, wear a Type A (Organic vapour) respirator. If spraying, wear a Full-face Type A-Class P1 (Organic gases/vapours and Particulate) respirator or an Air-line respirator.



9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	CLEAR LIQUID
Odour	MILD SOLVENT ODOUR
Flammability	HIGHLY FLAMMABLE
Flash point	-18°C
Boiling point	NOT AVAILABLE
Melting point	NOT AVAILABLE
Evaporation rate	NOT AVAILABLE
рН	NOT AVAILABLE
Vapour density	NOT AVAILABLE
Relative density	NOT AVAILABLE
Solubility (water)	INSOLUBLE
Vapour pressure	NOT AVAILABLE
Upper explosion limit	NOT AVAILABLE
Lower explosion limit	NOT AVAILABLE
Partition coefficient	NOT AVAILABLE
Autoignition temperature	NOT AVAILABLE
Decomposition temperature	NOT AVAILABLE
Viscosity	NOT AVAILABLE
Explosive properties	NOT AVAILABLE
Oxidising properties	NOT AVAILABLE
Odour threshold	NOT AVAILABLE



10. STABILITY AND REACTIVITY

10.1 Reactivity

Carefully review all information provided in sections 10.2 to 10.6.

10.2 Chemical stability

Stable under recommended conditions of storage.

10.3 Possibility of hazardous reactions

Polymerization is not expected to occur.

10.4 Conditions to avoid

Avoid heat, sparks, open flames and other ignition sources.

10.5 Incompatible materials

Incompatible with oxidising agents (e.g. hypochlorites), acids (e.g. nitric acid), alkalis (e.g. sodium hydroxide), metals, heat and ignition sources.

10.6 Hazardous decomposition products

May evolve toxic gases (carbon oxides, hydrogen chloride, chlorides, phosgene, hydrocarbons) when heated to decomposition.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

Based on available data, the classification criteria are not met.

Information available for the ingredients:

Ingredient		Oral LD50	Dermal LD50	Inhalation LC50
N-HEPTANE				103 g/m³/4 hours (rat)
TETRACHLOROETHYLENE (PERCHLOROETHYLENE)		3005 mg/kg (rat)	5000 mg/kg (rabbit)	28 mg/L/6hrs (rat)
Skin	Contact may result in irritation, redness, pain and rash.			
Eye	Contact may result in irritation, lacrimation, pain and redness.			
Sensitisation	Not classified as causing skin or respiratory sensitisation.			
Mutagenicity	Not classified as a mutagen.			
Carcinogenicity	Tetrachloroethylene is classified as probably carcinogenic to humans (IARC Group 2A).			
Reproductive	Not classified as a reproductive toxin.			
STOT - single exposure	Over exposure may result in irritation of the nose and throat with coughing, as well as central nervous system (CNS) effects including headache, drowsiness and dizziness.			
STOT - repeated exposure	There is some animal evidence that shows repeated exposure to this family of chemicals may result in damage to the heart, including cardiac arrhythmias.			
Aspiration	Aspiration into the lungs may result in chemical pneumonitis and pulmonary oedema.			

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

12.2 Persistence and degradability

No information provided.

12.3 Bioaccumulative potential

No information provided.

12.4 Mobility in soil

No information provided.

12.5 Other adverse effects

Tetrachlorethylene is degraded fairly rapidly in the lower atmosphere (Half life \sim 5 months). It evaporates rapidly from open water systems but persists in ground water. It is toxic to aquatic organisms, however there is no potential for bioaccumulation.



13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste disposal For small amounts, absorb with sand, vermiculite or similar and dispose of to an approved landfill site. Contact the manufacturer/supplier for additional information if disposing of large quantities (if required). Prevent contamination of drains and waterways as aquatic life may be threatened and environmental damage may result.

Legislation Dispose of in accordance with relevant local legislation.

14. TRANSPORT INFORMATION

CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE



	LAND TRANSPORT (ADG)	SEA TRANSPORT (IMDG / IMO)	AIR TRANSPORT (IATA / ICAO)
14.1 UN Number	1993	1993	1993
14.2 Proper Shipping Name	FLAMMABLE LIQUID, N.O.S. (contains heptane)	FLAMMABLE LIQUID, N.O.S. (contains heptane)	FLAMMABLE LIQUID, N.O.S. (contains heptane)
14.3 Transport hazard class	3	3	3
14.4 Packing Group	II	I	II

14.5 Environmental hazards

Marine Pollutant.

14.6 Special precautions for user

Hazchem code	•3YE
GTEPG	3A1
EmS	F-E, S <u>-E</u>
Other information	The environmentally hazardous substance mark is not required when transported in packages of less than 5 kg/L (UN Model Regulations: Special Provision 375; IATA: Special Provision A197; IMDG: Special Provision 969) or less than 500 kg/L by Australian Road and Rail.

15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

- **Poison schedule** Classified as a Schedule 6 (S6) Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).
- **Classifications** Safe Work Australia criteria is based on the Globally Harmonised System (GHS) of Classification and Labelling of Chemicals (GHS Revision 7).

Inventory listings AUSTRALIA: AIIC (Australian Inventory of Industrial Chemicals) All components are listed on AIIC, or are exempt.

16. OTHER INFORMATION

Additional information WORK PRACTICES - SOLVENTS: Organic solvents may present both a health and flammability hazard. It is recommended that engineering controls should be adopted to reduce exposure where practicable (for example, if using indoors, ensure explosion proof extraction ventilation is available). Flammable or combustible liquids with explosive limits have the potential for ignition from static discharge. Refer to AS 1020 (The control of undesirable static electricity) and AS 1940 (The storage and handling of flammable and combustible liquids) for control procedures.



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RESPIRATORS: In general the use of respirators should be limited and engineering controls
employed to avoid exposure. If respiratory equipment must be worn ensure correct respirator
selection and training is undertaken. Remember that some respirators may be extremely
uncomfortable when used for long periods. The use of air powered or air supplied respirators should
be considered where prolonged or repeated use is necessary.

IARC GROUP 2A - PROBABLE HUMAN CARCINOGEN. This product contains an ingredient which has been classified by the International Agency for Research into Cancer (IARC) as a probable human carcinogen and whose use should be strictly monitored and controlled.

PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:

The recommendation for protective equipment contained within this report is provided as a guide only. Factors such as form of product, method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.

HEALTH EFFECTS FROM EXPOSURE:

It should be noted that the effects from exposure to this product will depend on several factors including: form of product; frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

Abbreviations	ACGIH CAS # CNS EC No. EMS GHS GTEPG IARC LC50 LD50 mg/m ³ OEL pH ppm STEL STOT-RE STOT-RE STOT-SE SUSMP SWA TLV	American Conference of Governmental Industrial Hygienists Chemical Abstract Service number - used to uniquely identify chemical compounds Central Nervous System EC No - European Community Number Emergency Schedules (Emergency Procedures for Ships Carrying Dangerous Goods) Globally Harmonized System Group Text Emergency Procedure Guide International Agency for Research on Cancer Lethal Concentration, 50% / Median Lethal Concentration Lethal Dose, 50% / Median Lethal Dose Milligrams per Cubic Metre Occupational Exposure Limit relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline). Parts Per Million Short-Term Exposure Limit Specific target organ toxicity (repeated exposure) Specific target organ toxicity (single exposure) Standard for the Uniform Scheduling of Medicines and Poisons Safe Work Australia Threshold Limit Value
Report status		Time Weighted Average nt has been compiled by RMT on behalf of the manufacturer, importer or supplier of the serves as their Safety Data Sheet ('SDS').
	It is based manufacturer the current st at the time o	on information concerning the product which has been provided to RMT by the , importer or supplier or obtained from third party sources and is believed to represent ate of knowledge as to the appropriate safety and handling precautions for the product f issue. Further clarification regarding any aspect of the product should be obtained the manufacturer, importer or supplier.
	not provide a no liability for	as taken all due care to include accurate and up-to-date information in this SDS, it does ny warranty as to accuracy or completeness. As far as lawfully possible, RMT accepts r any loss, injury or damage (including consequential loss) which may be suffered or ny person as a consequence of their reliance on the information contained in this SDS.
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