



300G AEROSOL
(INCLUDES ACCU-JET LID)
PART NO: CT-R1-300

DEOX R1™ LIGHT FILM LUBRICANT - "Our customers tell us that R1 is their NUMBER ONE go-to multi-purpose lubricant for the general maintenance of machinery, tools, and commercial/industrial equipment. This is how we know we got it right first time." - Sales Manager, Chemtools Pty Ltd

FOR THE PROFESSIONAL TRADESPERSON ... **NOT THE DOMESTIC WEEKEND WARRIOR!**



Loosens rusted parts, stops squeaks, dissolves grease, and reduces wear and friction

Formulated with **high quality superior ingredients** and refined oils for guaranteed *first time every time* lubrication

Cleans most metal surfaces, **displacing water and repelling moisture to prevent corrosion**, leaving a light film for ongoing surface protection

- ✓ **FARMING**
- ✓ **INDUSTRIAL**
- ✓ **RAILWAY**
- ✓ **DEFENSE**
- ✓ **MARINE**
- ✓ **AUTOMOTIVE**
- ✓ **MINING**
- ✓ **AVIATION**
- ✓ **CONSTRUCTION**
- ✓ **AEROSPACE**

OTHER AVAILABLE SIZES

1L BOTTLE (Not shown)
PART NO: CT-R1-1L
5L BOTTLE
PART NO: CT-R1-5L
20L DRUM
PART NO: CT-R1-20L





A NEW FORCE IN CHEMICAL MANUFACTURING

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SAFETY DATA SHEET

ISSUED DECEMBER, 2017 (VALID 5 YEARS FROM DATE OF ISSUE)

DEOX R1 Light Film Lubricant

Section 1 - Identification of The Material and Supplier

Chemtools Pty Ltd
Unit 2/14-16 Lee Holm Road
St Marys NSW 2760

Phone: 1300 738 250 (business hours)
Fax: 02 9623 3670
www.chemtools.com.au

Chemical nature: Hydrocarbon blend
Product Name: DEOX R1 Light Film Lubricant
Product Code: CT-R1
Product Use: Solvent/anticorrosion treatment
Creation Date: August, 2017
Poisons Information Centre: Phone 13 1126 from anywhere in Australia

Section 2 - Hazards Identification

Statement of Hazardous Nature

This product is classified as: Xn, Harmful. Hazardous according to the criteria of SWA.

Not a Dangerous Good according to Australian Dangerous Goods (ADG) Code, IATA or IMDG/IMSBC criteria.

SUSMP Classification: S5

ADG Classification: None allocated. Not a Dangerous Good according to Australian Dangerous Goods (ADG) Code, IATA or IMDG/IMSBC criteria.

UN Number: None allocated



GHS Signal word: DANGER

Flammable liquids Category 4

Aspiration Hazard Category 1

HAZARD STATEMENT:

H227: Combustible liquid.

AUH066: Repeated exposure may cause skin dryness or cracking.

H304: May be fatal if swallowed and enters airways.

PREVENTION

P210: Keep away from heat, sparks, open flames and hot surfaces. - No smoking.

P261: Avoid breathing fumes, mists, vapours or spray.

P262: Do not get in eyes, on skin, or on clothing.

P264: Wash contacted areas thoroughly after handling.

P271: Use only outdoors or in a well ventilated area.

P281: Use personal protective equipment as required.

RESPONSE

P301+P310: IF SWALLOWED: Immediately call a POISON CENTRE or doctor.

P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353: IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water.

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Issued by: Chemtools Pty Ltd

Phone: 1300 738 250 (business hours)

Poisons Information Centre: 13 1126 from anywhere in Australia, (0800 764 766 in New Zealand)

P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P308+P313: If exposed or concerned: Get medical advice.

P370+P378: In case of fire, use carbon dioxide, dry chemical, foam.

STORAGE

P404: Store in a closed container.

P403+P235: Store in a well-ventilated place. Keep cool.

DISPOSAL

P501: If they can not be recycled, dispose of contents to an approved waste disposal plant and containers to landfill (see Section 13 of this SDS).

Emergency Overview

Physical Description & Colour: Clear, pale straw-coloured liquid

Odour: Solvent odour.

Major Health Hazards: if aspirated, may cause lung damage, repeated exposure may cause skin dryness or cracking.

Section 3 - Composition/Information on Ingredients

Ingredients	CAS No	Conc, %	TWA (mg/m ³)	STEL (mg/m ³)
Naphtha hydrotreated	64742-48-9	>60	not set	not set
Petroleum hydrocarbons	68334-30-5	<10	not set	not set
Mineral oil	8012-95-1	<10	5	not set

This is a commercial product whose exact ratio of components may vary slightly. Minor quantities of other non hazardous ingredients are also possible.

The SWA TWA exposure value is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week. The STEL (Short Term Exposure Limit) is an exposure value that may be equalled (but should not be exceeded) for no longer than 15 minutes and should not be repeated more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. The term "peak" is used when the TWA limit, because of the rapid action of the substance, should never be exceeded, even briefly.

Section 4 - First Aid Measures**General Information:**

You should call The Poisons Information Centre if you feel that you may have been poisoned, burned or irritated by this product. The number is 13 1126 from anywhere in Australia (0800 764 766 in New Zealand) and is available at all times. Have this SDS with you when you call.

Inhalation: First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

Skin Contact: Gently blot away excess liquid. Wash gently and thoroughly with water (use non-abrasive soap if necessary) for 5 minutes or until chemical is removed.

Eye Contact: Quickly and gently blot material from eyes. No effects expected. If irritation does occur, flush contaminated eye(s) with lukewarm, gently flowing water for 5 minutes or until the product is removed. Obtain medical advice if irritation becomes painful or lasts more than a few minutes. Take special care if exposed person is wearing contact lenses.

Ingestion: If swallowed, do NOT induce vomiting. Wash mouth with water and contact a Poisons Information Centre, or call a doctor.

Section 5 - Fire Fighting Measures

Fire and Explosion Hazards: The major hazard in fires is usually inhalation of heated and toxic or oxygen deficient (or both), fire gases. There is no risk of an explosion from this product under normal circumstances if it is involved in a fire. Violent steam generation or eruption may occur upon application of direct water stream on hot liquids.

Fire decomposition products from this product may be toxic if inhaled. Take appropriate protective measures.

Extinguishing Media: In case of fire, use carbon dioxide, dry chemical or foam.

Fire Fighting: When fighting fires involving significant quantities of this product, wear a splash suit complete with self contained breathing apparatus.

Flash point: 61-66°C

Upper Flammability Limit: 6.0%

Lower Flammability Limit: 0.7%

Autoignition temperature: 235-315°C

Flammability Class: Flammable Category 4 (GHS), C1 combustible (AS 1940)

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Section 6 - Accidental Release Measures

Accidental release: In the event of a major spill, prevent spillage from entering drains or water courses. As a minimum, wear overalls, goggles and gloves. Suitable materials for protective clothing include rubber. Eye/face protective equipment should comprise, as a minimum, protective glasses and, preferably, goggles. If there is a significant chance that vapours or mists are likely to build up in the cleanup area, we recommend that you use a respirator. Usually, no respirator is necessary when using this product. However, if you have any doubts consult the Australian Standard mentioned below (section 8).

Stop leak if safe to do so, and contain spill. Absorb onto sand, vermiculite or other suitable absorbent material. If spill is too large or if absorbent material is not available, try to create a dike to stop material spreading or going into drains or waterways. Sweep up and shovel or collect recoverable product into labelled containers for recycling or salvage, and dispose of promptly. Recycle containers wherever possible after careful cleaning. After spills, wash area preventing runoff from entering drains. If a significant quantity of material enters drains, advise emergency services. This material may be suitable for approved landfill. Ensure legality of disposal by consulting regulations prior to disposal. Thoroughly launder protective clothing before storage or re-use. Advise laundry of nature of contamination when sending contaminated clothing to laundry.

Section 7 - Handling and Storage

Handling: Keep exposure to this product to a minimum, and minimise the quantities kept in work areas. Check Section 8 of this SDS for details of personal protective measures, and make sure that those measures are followed. The measures detailed below under "Storage" should be followed during handling in order to minimise risks to persons using the product in the workplace. Also, avoid contact or contamination of product with incompatible materials listed in Section 10.

Storage: Note that this product is GHS Flammable Class 4 and therefore, for Storage, meets the definition of Dangerous Goods. If you store large quantities (tonnes) of such products, we suggest that you consult your state's Dangerous Goods authority in order to clarify your obligations regarding their storage. Store packages of this product in a cool place. Make sure that containers of this product are kept tightly closed. Make sure that the product does not come into contact with substances listed under "Incompatibilities" in Section 10. Some liquid preparations settle or separate on standing and may require stirring before use. Check packaging - there may be further storage instructions on the label.

Section 8 - Exposure Controls and Personal Protection

The following Australian Standards will provide general advice regarding safety clothing and equipment:

Respiratory equipment: **AS/NZS 1715**, Protective Gloves: **AS 2161**, Occupational Protective Clothing: AS/NZS 4501 set 2008, Industrial Eye Protection: **AS1336** and **AS/NZS 1337**, Occupational Protective Footwear: **AS/NZS2210**.

SWA Exposure Limits	TWA (mg/m ³)	STEL (mg/m ³)
Mineral oil	5	not set

No special equipment is usually needed when occasionally handling small quantities. The following instructions are for bulk handling or where regular exposure in an occupational setting occurs without proper containment systems.

Ventilation: This product should only be used where there is ventilation that is adequate to keep exposure below the TWA levels. If necessary, use a fan.

Eye Protection: Eye protection such as protective glasses or goggles is recommended when this product is being used.

Skin Protection: You should avoid contact even with mild skin irritants. Therefore you should wear suitable impervious elbow-length gloves and facial protection when handling this product for lengthy periods. See below for suitable material types.

Protective Material Types: We suggest that protective clothing be made from the following materials: rubber, neoprene, butyl rubber.

Respirator: Usually, no respirator is necessary when using this product. However, if you have any doubts consult the Australian Standard mentioned above.

Safety deluge showers should, if practical, be provided near to where this product is being handled commercially.

Section 9 - Physical and Chemical Properties:

Physical Description & colour:	Clear, pale straw-coloured liquid
Odour:	Solvent odour.
Boiling Point:	180-215°C at 100kPa
Freezing/Melting Point:	No specific data. Liquid at normal temperatures.
Volatiles:	No specific data. Expected to be low at 100°C.
Vapour Pressure:	No data.
Vapour Density:	No data.

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Specific Gravity:	0.75-0.85 at 15°C
Water Solubility:	Insoluble.
pH:	No data.
Volatility:	No data.
Odour Threshold:	No data.
Evaporation Rate:	No data.
Coeff Oil/water Distribution:	No data
Autoignition temp:	235-315°C

Section 10 - Stability and Reactivity

Reactivity: This product is unlikely to react or decompose under normal storage conditions. However, if you have any doubts, contact the supplier for advice on shelf life properties.

Conditions to Avoid: This product should be kept in a cool place, preferably below 30°C. Keep containers tightly closed.

Incompatibilities: strong oxidising agents, strong reducing agents.

Fire Decomposition: Combustion forms carbon dioxide, and if incomplete, carbon monoxide and possibly smoke. Water is also formed. Carbon monoxide poisoning produces headache, weakness, nausea, dizziness, confusion, dimness of vision, disturbance of judgment, and unconsciousness followed by coma and death.

Polymerisation: This product will not undergo polymerisation reactions.

Section 11 - Toxicological Information

Toxicity: A summary of white spirit type hydrocarbons can be found at <http://www.inchem.org/documents/ehc/ehc/ehc187.htm>

Ingestion of white spirit has been reported to produce gastrointestinal irritation with pain, vomiting and diarrhoea. Lesions of the mucous membranes in the oesophagus and the gastrointestinal tract followed the oral exposure.

Owing to its low viscosity and low surface tension, white spirit poses a risk of aspiration into the lungs following oral exposure. A few mL of solvent aspirated into the lungs are able to produce serious bronchopneumonia and 10-30mL may be fatal.

Prolonged dermal exposure to white spirit, e.g., resulting from wearing clothes that have been soaked or moistened by white spirit for hours, may produce irritation and dermatitis.

Single cases of acute toxicity to the kidney, liver and bone marrow have been reported following exposure to white spirit at high levels. However, owing to lack of details and the sporadic nature of the reportings, the relevance of these findings is unclear.

Inhalation of aliphatic hydrocarbon vapours seems to show little toxicity, but the vapours are CNS depressants and have a disinhibiting euphoric effect.

Potential Health Effects

Inhalation:

Short Term Exposure: Available data indicates that this product is not harmful. In addition product is unlikely to cause any discomfort or irritation.

Long Term Exposure: No data for health effects associated with long term inhalation.

Skin Contact:

Short Term Exposure: Available data indicates that this product is not harmful. It should present no hazards in normal use. However product may be irritating, but is unlikely to cause anything more than mild transient discomfort.

Long Term Exposure: Repeated exposure may cause skin dryness or cracking.

Eye Contact:

Short Term Exposure: This product may be irritating to eyes, but is unlikely to cause anything more than mild transient discomfort.

Long Term Exposure: No data for health effects associated with long term eye exposure.

Ingestion:

Short Term Exposure: Significant oral exposure is considered to be unlikely. Because of the low viscosity of this product, it may directly enter the lungs if swallowed, or if subsequently vomited. Once in the lungs, it is very difficult to remove and can cause severe injury or death. However, this product may be irritating to mucous membranes but is unlikely to cause anything more than transient discomfort.

Long Term Exposure: No data for health effects associated with long term ingestion.

Carcinogen Status:

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SWA: Naphtha Hydrotreated is classified by SWA as a Category 1b Carcinogen

Petroleum Hydrocarbons is classified by SWA as a Category 2 Carcinogen, likely to be carcinogenic to humans. See the SWA website for further details. A web address has not been provided as addresses frequently change.

NTP: No significant ingredient is classified as carcinogenic by NTP.

IARC: No significant ingredient is classified as carcinogenic by IARC.

Section 12 - Ecological Information

Insufficient data to be sure of status.

Biodegradation is expected to be the primary fate process for aliphatic hydrocarbons in soil and water. The rate and extent of biodegradation are dependent on the ambient temperature, the presence of a sufficient number of microorganisms capable of metabolizing the hydrocarbons and the concentration of white spirit in or on the soil or water.

Biodegradation of C₇ to C₁₂ hydrocarbons is expected to be significant under environmental conditions favourable to microbial oxidation. Naturally occurring hydrocarbon-degrading microorganisms have been isolated from polluted soil and, to a lesser extent, non-polluted soil.

The low water solubility and moderate vapour pressure of white spirit (Stoddard solvent) suggest that volatilization and subsequent photo-oxidation are important processes for abiotic degradation in the atmosphere.

The octanol/water partition coefficient (log P_{ow}) of white spirit (17% v/v aromatics) has been found to be 3.5 to 6.4. This indicates a moderate potential for bioaccumulation by organisms from water and a likelihood of partitioning to fat within organisms.

Section 13 - Disposal Considerations

Disposal: This product may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use. If it has been contaminated, it may be possible to reclaim the product by filtration, distillation or some other means. If neither of these options is suitable in-house, consider controlled incineration, or contact a specialist waste disposal company.

Section 14 - Transport Information

UN Number: This product is not classified as a Dangerous Good by ADG, IATA or IMDG/IMSBC criteria. No special transport conditions are necessary unless required by other regulations.

Section 15 - Regulatory Information

AICS: All of the significant ingredients in this formulation are compliant with NICNAS regulations.

Section 16 - Other Information

This SDS contains only safety-related information. For other data see product literature.

Acronyms:

ADG Code	Australian Code for the Transport of Dangerous Goods by Road and Rail (7 th edition)
AICS	Australian Inventory of Chemical Substances
SWA	Safe Work Australia, formerly ASCC and NOHSC
CAS number	Chemical Abstracts Service Registry Number
Hazchem Code	Emergency action code of numbers and letters that provide information to emergency services especially firefighters
IARC	International Agency for Research on Cancer
NOS	Not otherwise specified
NTP	National Toxicology Program (USA)
SUSMP	Standard for the Uniform Scheduling of Medicines & Poisons
UN Number	United Nations Number

THIS SDS SUMMARISES OUR BEST KNOWLEDGE OF THE HEALTH AND SAFETY HAZARD INFORMATION OF THE PRODUCT AND HOW TO SAFELY HANDLE AND USE THE PRODUCT IN THE WORKPLACE. EACH USER MUST REVIEW THIS SDS IN THE CONTEXT OF HOW THE PRODUCT WILL BE HANDLED AND USED IN THE WORKPLACE.

IF CLARIFICATION OR FURTHER INFORMATION IS NEEDED TO ENSURE THAT AN APPROPRIATE RISK ASSESSMENT CAN BE MADE, THE USER SHOULD CONTACT THIS COMPANY SO WE CAN ATTEMPT TO OBTAIN ADDITIONAL INFORMATION FROM OUR SUPPLIERS. OUR RESPONSIBILITY FOR PRODUCTS SOLD IS SUBJECT TO OUR STANDARD TERMS AND CONDITIONS, A COPY OF WHICH IS SENT TO OUR CUSTOMERS AND IS ALSO AVAILABLE ON REQUEST.

Please read all labels carefully before using product.

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TECHNICAL DATA SHEET

MAY 2015

PRODUCT NAME

DEOX R1 Light Film Lubricant

PRODUCT RANGE

Part Number	Available Size
CT-R1-300	300g Aerosol (CO ²)
CT-R1-400	400g Aerosol (Hydrocarbon)
CT-R1-1L	1 Litre
CT-R1-5L	5 Litres
CT-R1-20L	20 Litres
CT-R1-200L	200 Litres

Refer to SDS for product safety guidelines

DEOX R1 Light Film Lubricant

Chemtools® DEOX R1 Light Film Lubricant is a mixture of refined mineral oil distillates which displaces water, repels moisture, cleans, penetrates, lubricates, and prevents corrosion.

This product is formulated for the professional tradesperson and is very effective for loosening rusted parts, stopping squeaks, dissolving grease, and reducing wear and friction. Use for general maintenance of machinery and equipment.

FEATURES AND BENEFITS:

- Pleasant smell
- Superior corrosion protection
- Cleans and protects most metal surfaces
- Excellent lubrication properties
- Great water displacement properties
- Australian Made

APPLICATIONS AND USES:

Thousands of applications and uses in the following industries:

- Farming
- Railway
- Automotive
- Mining
- Aviation
- Construction
- Industrial
- Defence
- Aerospace

PROPERTIES:

Flash Point	12°C
Boiling Point	82°C
Appearance	Clear Colourless Liquid
Odour	Paraffinic
Specific Gravity @ 20°C	0.787
Propellant	CT-R1-300: CO ² CT-R1-400: Hydrocarbon

STORAGE:

Store in a cool, dry place, in tightly closed original containers at a room temperature between 5°C and 40°C. Do not place in direct sunlight or near any heat source. Please do not return any used material to its original container.

PRECAUTIONS:

This product is capable of producing adverse health effects ranging from minor skin irritation to serious systemic effects. None of these materials should be used, stored, or transported until the handling precautions and recommendations as stated in the Safety Data Sheets (SDS) for this and all other products being used are understood by all persons who will work with the material.

WARRANTY:

All products purchased from or supplied by Chemtools® are subject to terms and conditions set out in the contract. Chemtools® warrants only that its products meet the specifications designated as such herein, or in other publications. All other information supplied by Chemtools® is considered accurate, but is furnished upon the express condition. The customer shall make its own assessment to determine the product's suitability for a particular purpose. Chemtools® makes no other warranty, either expressed or implied, including those regarding such other information, the data upon which the same is based, or the results to be obtained from the use thereof; that any product shall be merchantable or fit for any particular purpose; or that the use of such other information or products will not infringe any patent.