



# A NEW FORCE IN CHEMICAL MANUFACTURING

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## SAFETY DATA SHEET

ISSUED AUGUST, 2022 (VALID 5 YEARS FROM DATE OF ISSUE)

### Kleanium™ Deflux-It G2 Flux Remover

#### 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:** Solvent spray.  
**Product Name:** Kleanium™ Deflux-It G2 Flux Remover  
**Product Use:** Solvent spray.  
**Creation Date:** August, 2022  
**Poisons Information Centre:** Phone 13 1126 from anywhere in Australia

#### Section 2 - Hazards Identification

##### Statement of Hazardous Nature

**SUSMP Classification:** None allocated.

**ADG Classification:** Class 2.1: Flammable gases.

**UN Number:** 1950, AEROSOLS



##### GHS Signal word: DANGER

Flammable aerosols Category 1

Skin Corrosion /Irritation Category 2

Skin Sensitisation Category 1

Serious eye damage/eye irritation Category 2/2A

Specific Target Organ Toxicity - Single Exposure Category 3

Hazardous to aquatic environment Short term/Chronic Category 2

##### HAZARD STATEMENT:

H222: Extremely flammable aerosol

H229: Pressurised container: May burst if heated.

H315: Causes skin irritation.

H317: May cause an allergic skin reaction.

H319: Causes serious eye irritation.

H336: May cause drowsiness or dizziness.

H411: Toxic to aquatic life with long lasting effects.

##### PREVENTION

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

P211: Do not spray on an open flame or other ignition source.

P241: Use explosion-proof electrical equipment.

P251: Do not pierce or burn, even after use.

P260: Do not breathe fumes, mists, vapours or spray.

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

P264: Wash contacted areas thoroughly after handling.

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Phone: 1300 738 250 (business hours)

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

P272: Contaminated work clothing should not be allowed out of the workplace.

P280: Wear protective gloves, protective clothing and eye or face protection.

#### RESPONSE

P362: Take off contaminated clothing and wash before reuse.

P363: Wash contaminated clothing before reuse.

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

P302+P352: IF ON SKIN: Wash with plenty of soap and water.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P333+P313: If skin irritation or rash occurs: Get medical advice.

P337+P313: If eye irritation persists: Get medical advice or attention.

P372: Explosion risk in case of fire.

P381: Eliminate all ignition sources if safe to do so.

P370+P378: In case of fire: Use carbon dioxide, dry chemical, foam, to extinguish.

#### STORAGE

P402: Store in a dry place.

P410+P412: Store below 30°C, protect from direct sunlight and do not expose to temperatures exceeding 50°C.

#### 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).

#### Statement of Hazardous Nature (New Zealand)

Aerosols (Flammable) Group Standard 2020 – HSR002515

**DG Classification:** Classified as a Dangerous Good for transport in accordance with the Land Transport Rule Dangerous Goods 2005 and NZS 5433:2007.

### Emergency Overview

**Physical Description & Colour:** Liquid aerosol spray, no data regarding colour.

**Odour:** Characteristic odour.

**Major Health Hazards:** may cause an allergic skin reaction, causes skin irritation, causes serious eye irritation, may cause drowsiness or dizziness.

### Section 3 - Composition/Information on Ingredients

Ingredients	CAS No	Conc, %	TWA (mg/m <sup>3</sup> )	STEL (mg/m <sup>3</sup> )
Heptane and isomers	-	15-50	not set	not set
Pentane, 2-methyl-	107-83-5	<10	not set	not set
Propylene glycol monomethyl ether	107-98-2	20-30	369	553
Isopropanol	67-63-0	20-30	983	1230
D-limonene	5989-27-5	3-5	not set	not set
Carbon dioxide	124-38-9	<5	9000	54000

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:** Symptoms are likely due to lack of oxygen in bloodstream. If available, and victim is breathing, administer oxygen. If not breathing, apply mouth to mouth resuscitation. In any event, if victim is unconscious or shows any unusual symptoms, seek urgent medical attention.

**Skin Contact:** Quickly and gently blot away excess liquid. Seek urgent medical attention. Flush contaminated area with lukewarm, gently flowing water for at least 60 minutes, by the clock. DO NOT INTERRUPT FLUSHING. If

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necessary, keep emergency vehicle waiting (show paramedics this SDS and take their advice). Under running water, remove contaminated clothing, shoes and leather goods (e.g. watchbands, belts).

**Eye Contact:** Quickly and gently wipe or blot material from eyes. Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for 15 minutes or until the product is removed, while holding the eyelid(s) open. Take care not to rinse contaminated water into the unaffected eye or onto the face. Obtain medical attention immediately. Take special care if exposed person is wearing contact lenses.

**Ingestion:** If product is swallowed or gets in mouth, do NOT induce vomiting. Wash mouth with water and give some water to drink. If symptoms develop, or if in doubt contact a Poisons Information Centre or a doctor.

## Section 5 - Fire Fighting Measures

**Fire and Explosion Hazards:** Extremely flammable aerosol. Pressurised container: may burst if heated. The major hazard in fires is usually inhalation of heated and toxic or oxygen deficient (or both), fire gases. There is a significant risk of an explosion from this product if commercial quantities are involved in a fire. Firefighters should evacuate the area and take appropriate precautions.

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. Water fog or fine spray is the preferred medium for large fires. Try to contain spills, minimise spillage entering drains or water courses.

**Fire Fighting:** If a significant quantity of this product is involved in a fire, call the fire brigade. There is a danger of a violent reaction or explosion if significant quantities of this product are involved in a fire. Recommended personal protective equipment is full fire kit and breathing apparatus.

## Section 6 - Accidental Release Measures

**Accidental release:** In the event of a major spill, prevent spillage from entering drains or water courses. Evacuate the spill area and deny entry to unnecessary and unprotected personnel. Immediately call the Fire Brigade. Wear full protective chemically resistant clothing including eye/face protection, gauntlets and self contained breathing apparatus. See below under Personal Protection regarding Australian Standards relating to personal protective equipment. Suitable materials for protective clothing include Viton, Nitrile, butyl rubber, PE/EVAL and Responder. 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. Take suitable precautions e.g. use of non-sparking equipment to avoid creating sparks or flames which may ignite the spilled material. Leaking gases may form an explosion hazard. Any equipment capable of building an electrostatic charge should be electrically grounded. 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:** Store in a cool (below 30°C), well ventilated area. Protect from direct sunlight. Make sure that surrounding electrical devices and switches are suitable. Check containers and valves periodically for leaks. If you keep more than 25kg of flammable gases, you are probably required to license the premises or notify your Dangerous Goods authority. If you have any doubts, we suggest you contact your Dangerous Goods authority in order to clarify your obligations. 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 <sup>3</sup> )	STEL (mg/m <sup>3</sup> )
Propylene glycol monomethyl ether	369	553

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Isopropanol	983	1230
Carbon dioxide	9000	54000

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 in a well ventilated area. If natural ventilation is inadequate, use of a fan is suggested.

**Eye Protection:** Protective glasses or goggles must be worn when this product is being used. Failure to protect your eyes may lead to severe harm to them or to general health. Emergency eye wash facilities must also be available in an area close to where this product is being used.

**Skin Protection:** Prevent skin contact by wearing impervious gloves, clothes and, preferably, apron. Make sure that all skin areas are covered. See below for suitable material types.

**Protective Material Types:** We suggest that protective clothing be made from the following materials: Viton, nitrile, butyl rubber, PE/EVAL, Responder.

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

Eyebaths or eyewash stations should, if practical, be provided near to where this product is being handled commercially.

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### Section 9 - Physical and Chemical Properties:

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<b>Physical Description &amp; colour:</b>	Liquid aerosol spray, no data regarding colour.
<b>Odour:</b>	Characteristic odour.
<b>Boiling Point:</b>	Not available.
<b>Flash point:</b>	Not available
<b>Upper Flammability Limit:</b>	Not available
<b>Lower Flammability Limit:</b>	Not available
<b>Autoignition temperature:</b>	No data.
<b>Flammability Class:</b>	Flammable aerosols category 1 (GHS) - extremely flammable aerosol.
<b>Freezing/Melting Point:</b>	No specific data. Liquid at normal temperatures.
<b>Volatiles:</b>	No data.
<b>Vapour Pressure:</b>	No data.
<b>Vapour Density:</b>	No data.
<b>Specific Gravity:</b>	No data.
<b>Water Solubility:</b>	Expected to be insoluble.
<b>pH:</b>	No data.
<b>Volatility:</b>	No data.
<b>Odour Threshold:</b>	No data.
<b>Evaporation Rate:</b>	No data.
<b>Coeff Oil/water Distribution:</b>	No data
<b>Autoignition temp:</b>	No data.
<b>article Characteristics:</b>	Not applicable for liquids.

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### Section 10 - Stability and Reactivity

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**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:** Store below 30°C, protect from direct sunlight and do not expose to temperatures exceeding 50°C. Containers should be kept dry. Keep away from sources of sparks or ignition. Any electrical equipment in the area of this product should be flame proofed.

**Incompatibilities:** oxidising 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.

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### Section 11 - Toxicological Information

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**Local Effects:**

**Target Organs:** This product may affect lungs, eyes, skin. Ingredients in this product have an established TWA, so exposure by inhalation should be avoided.

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## Classification of Hazardous Ingredients

Ingredient	Health Hazard Statement Codes
Pentane, 2-methyl- <ul style="list-style-type: none"> <li>• Flammable liquid – category 2</li> <li>• Aspiration hazard – category 1</li> <li>• Skin irritation – category 2</li> <li>• Specific target organ toxicity (single exposure) – category 3</li> <li>• Hazardous to the aquatic environment (chronic) – category 2</li> </ul>	H225, H304, H315, H336, H411
Propylene Glycol Monomethyl Ether <ul style="list-style-type: none"> <li>• Flammable liquid – category 3</li> <li>• Specific target organ toxicity (single exposure) – category 3</li> </ul>	H226, H336
Isopropanol <ul style="list-style-type: none"> <li>• Flammable liquid – category 2</li> <li>• Eye irritation – category 2A</li> <li>• Specific target organ toxicity (single exposure) – category 3</li> </ul>	H225, H319, H336
D-limonene <ul style="list-style-type: none"> <li>• Flammable liquid – category 3</li> <li>• Skin irritation – category 2</li> <li>• Skin sensitisation – category 1</li> <li>• Aspiration hazard – category 1</li> <li>• Hazardous to the aquatic environment (acute) – category 1</li> <li>• Hazardous to the aquatic environment (chronic) – category 1</li> </ul>	H226, H315, H317, H304, H410

**Limonene and its oxidation products are skin and respiratory irritants, and limonene-1,2-oxide (formed by aerial oxidation) is a known skin sensitizer. Most reported cases of irritation have involved long-term industrial exposure to the pure compound, e.g., during degreasing or the preparation of paints. However, a study of patients presenting dermatitis showed that 3% were sensitized to limonene.**

## Potential Health Effects

### Inhalation:

**Short Term Exposure:** High vapour pressures may cause drowsiness and dizziness. However product is unlikely to cause any discomfort or irritation. Intentional misuse by deliberately concentrating and inhaling contents of aerosol containers can be harmful or fatal.

**Long Term Exposure:** Vapours may cause drowsiness and dizziness.

### Skin Contact:

**Short Term Exposure:** Major health effect from this product is misuse of the aerosol function. If sprayed continuously on skin or in eyes, it can cause frostbite. D-limonene is a skin sensitizer. Repeated/prolonged exposure may result in sensitisation. Once sensitised, further exposure to D-limonene may result in allergic reactions which in some cases can be severe.

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

### Eye Contact:

**Short Term Exposure:** If sprayed directly in the eye, this product will irritate. If spraying is prolonged, it may cause damage through frostbite.

**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. This product, while believed to be not harmful, is likely to cause headache and gastric disturbance such as nausea and vomiting if ingested in significant quantities. 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:

**SWA:** No significant ingredient is classified as carcinogenic by SWA.

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

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**IARC:** Isopropanol is Class 3 - unclassifiable as to carcinogenicity to humans.

D-limonene is Class 3 - unclassifiable as to carcinogenicity to humans.

See the IARC website for further details. A web address has not been provided as addresses frequently change.

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## Section 12 - Ecological Information

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This product toxic to aquatic life with long lasting effects. This product is not readily biodegradable; it may accumulate in the soil or water and cause long term problems.

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## Section 13 - Disposal Considerations

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**Disposal:** Containers should be emptied as completely as practical before disposal. If possible, recycle product and containers either in-house or send to recycle company. If this is not practical, send to a commercial waste disposal site. Do not puncture or incinerate aerosol cans, even when empty.

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## Section 14 - Transport Information

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**Dangerous according to Australian Dangerous Goods (ADG) Code, IATA and IMDG/IMSBC criteria.**

**UN Number:** 1950, AEROSOLS

**Hazchem Code:** 2YE

**Special Provisions:** 63, 190, 277, 327, 344, 381

**Limited quantities:** ADG 7 specifies a Limited Quantity value of 1000mL for this class of product.

**Dangerous Goods Class:** Class 2.1: Flammable gases.

**Packing Group:** Not set

**Packing Instruction:** P207, LP200

Class 2.1 Flammable gases shall not be loaded in the same vehicle or packed in the same freight container with Classes 1 (Explosives), 3 (Flammable Liquids) (where both flammable liquids and flammable gases are in bulk), 4.1 (Flammable Solids), 4.2 (Spontaneously Combustible Substances), 4.3 (Dangerous When Wet Substances), 5.1 (Oxidising Agents), 5.2 (Organic Peroxides), and 7 (Radioactive Substances). They may however be loaded in the same vehicle or packed in the same freight container with Classes 2.2 (Non-flammable Non-Toxic gases), 3 (Flammable liquids except where both flammable liquids and flammable gases are in bulk), 6 (Toxic Substances), 8 (Corrosive Substances) 9 (Miscellaneous dangerous goods), Foodstuffs and foodstuff empties.

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## Section 15 - Regulatory Information

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### Australia:

**AICS/AIIC:** All of the significant ingredients in this formulation are compliant with AICIS regulations.

### New Zealand:

Aerosols (Flammable) Group Standard 2020 – HSR002515

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## Section 16 - Other Information

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

### Acronyms:

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

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Please read all labels carefully before using product.

**Australia:**

This SDS is prepared in accord with the SWA document "Preparation of Safety Data Sheets for Hazardous Chemicals - Code of Practice" (July 2020) and GHS Revision 7

**New Zealand**

HSNO Approved Code of Practice: Preparation of Safety Data Sheets. New Zealand Chemical Industry Council September 2006.

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