SAFETY DATA SHEET



CITRUS PRO

CLEANING SYSTEMS LIMITED

Catalogue number: **FT995** Version No: **3.1** Issue Date: **15/12/2021**

SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

Product Identifier

Product name	CITRUS PRO
Product code	FT995
Pack sizes	5L & 15L
Proper shipping name	FLAMMABLE LIQUID, N.O.S.

Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses Solvent spotter

Details of the manufacturer/importer

Registered company name	CLEANING SYSTEMS LIMITED
Address	331A East Tamaki Road, East Tamaki, Auckland, 2013, NZ
Telephone	+64 9579 4114, 0800 100 117
Website	www.cleaningsystems.co.nz
Email	sales@cleaningsystems.co.nz

Emergency telephone number

Association / Organisation	National Poisons Centre	Poisons Infor
Emergency telephone numbers	0800-764-766 (0800 POISON)	13 11 26
Other emergency telephone numbers	Not Available	02 4966 5516

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

HAZARDOUS CHEMICAL. DANGEROUS GOODS. According to the criteria of New Zealand HSNO Hazardous Substances (Hazard Classification) Notice 2020 and New Zealand NZS5433

Hazard Classification	Aspiration Hazard Category 1, Flammable Liquid Category 3, SkinCorrosion/Irritation Category 2, Skin Sensitizer Category 1, Serious Eye Irritation Category 2, Hazardous to the aquatic environment long-term (Chronic) Category 2
	Classification drawn from HCIS, ECHA C&L Inventory and HSNO CCID.

Label elements

Hazard pictograms









SIGNAL WORD

DANGER

Hazard statement(s)

H226	Flammable liquid and vapour
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H411	Toxic to aquatic life with long lasting effects

Product Code: FT995 CITRUS PRO Issue Date: 15/12/2021 Version No: 3.1

Precautionary statement(s) Prevention

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280	Wear protective gloves and eye protection.
P261	Avoid breathing mist or vapours.
P264	Wash hands thoroughly after handling.
P273	Avoid release to the environment.
P241	Use explosion-proof and intrinsically safe electrical equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment

Precautionary statement(s) Response

P301+P310+P331	IF SWALLOWED: Immediately call a POISON CENTER or doctor. Do NOT induce vomiting.
P302+P352+P363+P333+P313	IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation or rash occurs; get medical advice / attention.
P305+P351+P338+P363+P313	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: get medical advice / attention.
P304+P312+P340	IF INHALED: Call a POISON CENTER or doctor if you feel unwell. Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P333+P313	If skin irritation or rash occurs, Get medical advice/attention
P370+P378	In case of fire, use alcohol resistant foam or normal protein foam for extinction.
P391	Collect spillage.

Precautionary statement(s) Storage

P403+P405+P235+P233	Store locked up, in a well-ventilated place. Keep cool
P4U3+P4U3+P233+P233	Store locked up, in a well-ventilated place. Reep cool

Precautionary statement(s) Disposal

P501 Dispose of contents/container in accordance with local government regulations

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures.

Mixtures

CAS No	%[weight]	Name
5989-27-5	<10	d-limonene
64742-48-9.	10-<30	naphtha petroleum, isoparaffin, hydrotreated
111-76-2	10-<30	ethylene glycol monobutyl ether
Trade secret	<10	Proprietary surfactant

SECTION 4 FIRST AID MEASURES

Description of first aid measures

Eye Contact	If this product comes in contact with the eyes: Wash out immediately with fresh running water for at least 15 minutes. Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. Seek medical advice; if pain persists or recurs seek medical attention. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	If skin or hair contact occurs: Immediately remove all contaminated clothing, including footwear. Flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation.
Inhalation	If fumes or combustion products are inhaled remove from contaminated area. Lay patient down. Keep warm and rested. Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures. Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary. Transport to hospital, or doctor.
Ingestion	Immediately seek medical advice. If swallowed do NOT induce vomiting. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. Observe the patient carefully. Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious. Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink. Avoid giving milk or oils. Avoid giving alcohol.

Indication of any immediate medical attention and special treatment needed.

Any material aspirated during vomiting may produce lung injury. Therefore emesis should not be induced mechanically or pharmacologically. Mechanical means should be used if it is considered necessary to evacuate the stomach contents; these include gastric lavage after endotracheal intubation. If spontaneous vomiting has occurred after ingestion, the patient should be monitored for difficult breathing, as adverse effects of aspiration into the lungs may be delayed up to 48 hours.

Treat symptomatically

Product Code: FT995 Issue Date: 15/12/2021 Version No: 3.1

SECTION 5 FIREFIGHTING MEASURES

Extinguishing media

Extinguishing media

Foam.

Dry chemical powder.
BCF (where regulations permit).

Carbon dioxide.

Water spray or fog - Large fires only.

Special hazards arising from the substrate or mixture.

Fire incompatibilities

Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result

Advice for firefighters

Fire Fighting	Alert Fire Brigade and tell them location and nature of hazard. May be violently or explosively reactive. Wear breathing apparatus plus protective gloves in the event of a fire. Prevent, by any means available, spillage from entering drains or water course. Consider evacuation (or protect in place). Fight fire from a safe distance, with adequate cover. If safe, switch off electrical equipment until vapour fire hazard removed. Use water delivered as a fine spray to control the fire and cool adjacent area. Avoid spraying water onto liquid pools. Do not approach containers suspected to be hot.
Fire/Explosion Hazard	Liquid and vapour are flammable. Moderate fire hazard when exposed to heat or flame. Vapour forms an explosive mixture with air. Moderate explosion hazard when exposed to heat or flame. Vapour may travel a considerable distance to source of ignition. Heating may cause expansion or decomposition leading to violent rupture of containers. On combustion, may emit toxic fumes of carbon monoxide (CO). Combustion products include: carbon monoxide (CO), carbon dioxide (CO2), other pyrolysis products typical of burning organic material Contains low boiling substance: Closed containers may rupture due to pressure buildup under fire conditions. WARNING: Long standing in contact with air and light may result in the formation of potentially explosive peroxides.
HAZCHEM	•3Y

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Minor Spills	Remove all ignition sources. NO SMOKING Clean up all spills immediately. Avoid breathing vapours and contact with skin and eyes. Wipe up spill using paper towel or equivalent and dispose of safely.
Major Spills	Immediately remove all possible sources of ignition. NO SMOKING. Wear breathing apparatus plus protective gloves. Prevent, by any means available, spillage from entering drains or water course. Absorb on sand, dirt, vermiculite or similar absorbent material. Place into labeled drums and dispose of according to local government regulations. Immediately notify emergency services (Police or Fire Brigade) if the spill is too large for you to safely and effectively handle. CARE: Absorbent materials wetted with occluded oil must be moistened with water as they may auto-oxidize, become self-heating and ignite.
PPE	Personal Protective Equipment advice is contained in Section 8 of the SDS

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Precautions for safe hand	ling
Safe handling	Containers, even those that have been emptied, may contain explosive vapours. Do NOT cut, drill, grind, weld or perform similar operations on or near containers. Contains low boiling substance: Storage in sealed containers may result in pressure buildup causing violent rupture of containers not rated appropriately. Check for bulging containers. Vent periodically Always release caps or seals slowly to ensure slow dissipation of vapours DO NOT allow clothing wet with material to stay in contact with skin
Other information	Store in original containers in approved flammable liquid storage area. Store away from incompatible materials in a cool, dry, well-ventilated area. DO NOT store in pits, depressions, basements or areas where vapours may be trapped. No smoking, naked lights, heat or ignition sources. Storage areas should be clearly identified, well illuminated, clear of obstruction and accessible only to trained and authorised personnel - adequate security must be provided so that unauthorised personnel do not have access. Store according to applicable regulations for flammable materials for storage tanks, containers, piping, buildings, rooms, cabinets, allowable quantities and minimum storage distances. Use non-sparking ventilation systems, approved explosion proof equipment and intrinsically safe electrical systems. Have appropriate extinguishing capability in storage area (e.g. portable fire extinguishers - dry chemical, foam or carbon dioxide) and flammable gas detectors. Keep adsorbents for leaks and spills readily available.

Protect containers against physical damage and check regularly for leaks.

Product Code: FT995 CITRUS PRO Issue Date: 15/12/2021 Version No: 3.1

Conditions for safe storage, including any incompatibilities.

Suitable container	Packing as supplied by manufacturer. Plastic containers may only be used if approved for flammable liquid. Check that containers are clearly labelled and free from leaks.
Storage incompatibility	Reacts with strong oxidisers and may explode or combust. Is incompatible with strong acids , including acidic clays, peroxides, halogens, vinyl chloride and iodine pentafluoride

PACKAGE MATERIAL INCOMPATIBILITIES

Not Available

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

Source	Ingredient	Material name	TWA		STEL	Notes
EH40/2005 Workplace Exposure I	imits ethylene glycol monobutyl ether	2-Butoxyethanol	123 mg/m3 / 2	5 ppm	246 mg/m3 / 50 ppm	Sk
EMERGENCY LIMITS				·		
Ingredient	Material name			TEEL-1	TEEL-2	TEEL-3
d-limonene	Limonene, d-			20 ppm	20 ppm	160 ppm
naphtha petroleum, isoparaffin, hydrotreated	Naphtha, hydrotreated heavy; (Isopar H-rev 2)		171 ppm	171 ppm	570 ppm	
ethylene glycol monobutyl	2-Butoxyethanol		20 ppm	20 ppm	700 ppm	

Exposure controls

Appropriate engineering controls	Always maintain adequate ventilation. In most circumstances natural ventilation systems are adequate. If ventilation is not adequate, then the use of a local exhaust system is recommended
Personal protection	
Eye and face protection	Chemical goggles. Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59], [AS/NZS 1336 or national equivalent].
Skin protection	See Hand protection below
Hands/feet protection	Wear chemical protective gloves. Nitrile, PVA or Viton are recommended for this application.
Body protection	See Other protection below
Other protection	Not usually required.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Clear orange liquid		
Physical state	Liquid	Relative density (Water = 1)	0.94
Melting point / freezing point (°C)	Not Available	Partition coefficient n- octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature(°C)	Not Available
Initial boiling point and boiling range (°C))	Not Applicable	Surface Tension (dyn/cm or mN/m)	Not Available
Odour	Orange	Viscosity (cSt)	Not Available
pH (as supplied)	Not Available	Molecular weight (g/mol)	Not Available
Flash point (°C)	Not Available	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Not Available	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Available	Decomposition temperature	Not Available
Lower Explosive Limit(%)	Not Available	Volatile Component (%vol)	Not Available
Vapour pressure (kPa)	Not Available	Gas group	Not Available
Solubility in water (g/L)	Miscible	pH as a solution	Not Available
Vapour density (Air = 1)	Not Available	VOC g/L	Not Available

Issue Date: 15/12/2021 Product Code: FT995 Version No: 3.1

SECTION 10 STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical stability	Unstable in the presence of incompatible materials.Product is considered stable. Hazardous polymerisation will not occur.
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

SECTION 11 TOXICOLOGICAL INFORMATION

Information on toxicological effects

Inhaled	Inhalation of vapours or aerosols (mists, fumes), generated by the material during the course of normal handling, may be harmful. The material is not thought to produce respiratory irritation (as classified by EC Directives using animal models). Nevertheless inhalation of vapours, fumes or aerosols, especially for prolonged periods, may produce respiratory discomfort and occasionally, distress.
Ingestion	Swallowing of the liquid may cause aspiration into the lungs with the risk of chemical pneumonitis; serious consequences may result. (ICSC13733)Accidental ingestion of the material may be damaging to the health of the individual. Isoparaffinic hydrocarbons cause temporary lethargy, weakness, incoordination and diarrhoea.
Skin Contact	This material can cause inflammation of the skin on contact in some persons. The material may accentuate any pre-existing dermatitis condition Skin contact with the material may damage the health of the individual; systemic effects may result following absorption.
Eye	If applied to the eyes, this material causes severe eye irritation.
Chronic	Skin contact with the material is more likely to cause a sensitisation reaction in some persons compared to the general population.

Toxicological effects of ingredients

oxicological effects of ingr	ealents	
d-limonene	Acute toxicity	Oral LD50 (rat) 4400 mg/kg Dermal LD50 (rabbit) >5000 mg/kg
	Skin corrosion/irritation	Causes skin irritation
	Eye damage/irritation	Causes serious eye irritation
	Respiratory/skin sensitization	May cause an allergic skin reaction
	Germ cell mutagenicity	No data available
	Carcinogenicity	No data available
	Reproductive toxicity	No data available
	STOT (single exposure)	No data available
	STOT (repeated exposure)	No data available
	Aspiration toxicity	May be fatal if swallowed and enters airways
naphtha petroleum,	Acute toxicity	Oral LD50 (rat) >5000 mg/kg Dermal LD50 (rabbit) >5000 mg/kg Inhalation LC50 (rat) >5000 mg/m3 (8hr)
hydrotreated heavy	Skin corrosion/irritation	Mildly irritating to skin with prolonged exposure (Based on test data for structurally similar materials)
	Eye damage/irritation	May cause mild, short-lasting discomfort to eyes (Based on test data for structurally similar materials)
	Respiratory/skin sensitization	Not expected to be a respiratory or skin sensitiser. (Based on test data for structurally similar materials)
	Germ cell mutagenicity	Not expected to be a germ cell mutagen (Based on test data for structurally similar materials)
	Carcinogenicity	Not expected to cause cancer (Based on test data for structurally similar materials)
	Reproductive toxicity	Not expected to be a reproductive toxicant (Based on test data for structurally similar materials)
	STOT (single exposure)	Not expected to cause organ damage from a single exposure. Negligible hazard at ambient/normal handling temperature: Vapour/aerosol concentrations above recommended exposure levels are irritating to the eyes and respiratory tract, may cause headaches, dizziness, anesthesia, drowsiness, unconsciousness, and other central nervous system effects including death.
	STOT (repeated exposure)	Not expected to cause organ damage from prolonged or repeated exposure (Based on test data for structurally similar materials). Prolonged and/or repeated skin contact with low viscosity materials may defat the skin resulting in possible irritation and dermatitis
	Aspiration toxicity	May be fatal if swallowed and enters airways (Based on physicochemical properties of the material). Small amounts of liquid aspirated into the lungs during ingestion or from vomiting may cause chemical pneumonitis or pulmonary edema.
ethylene glycol monobutyl	Acute toxicity	Oral LD50 (guinea pig) 1414 mg/kg Dermal LD50 (guinea pig) >2000 mg/kg Inhalation LC0 >3.1 mg/l>641 ppm 1h
ether	Skin corrosion/irritation	Causes skin irritation.
	Eye damage/irritation	Causes serious eye irritation.
	Respiratory/skin sensitization	Not classified No study available.
	Germ cell mutagenicity	Not classified
	Carcinogenicity	Not classified
	Reproductive toxicity	Not classified
	STOT (single exposure)	High concentrations may cause central nervous system depression
	STOT (repeated exposure)	Based on repeated exposure toxicity values, not classified
	Aspiration toxicity	Based on physico-chemical values or lack of human evidence. Not classified
		· ·

Issue Date: 15/12/2021

Product Code: FT995 Version No: 3.1

proprietary surfactant	Acute toxicity	Oral LD50 (rat) 2546 mg/kg
	Skin corrosion/irritation	Causes skin irritation
	Eye damage/irritation	Causes serious eye irritation
	Respiratory/skin sensitization	Not a skin sensitizer based on components
	Germ cell mutagenicity	There is no data available
	Carcinogenicity	No components are listed as carcinogens by IARC, ACGIH, OSHA or NTP above the threshold of 0.1%
	Reproductive toxicity	There is no data available
	STOT (single exposure)	There is no data available
	STOT (repeated exposure)	There is no data available
	Aspiration toxicity	There is no data available

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

 $\label{prop:condition} \mbox{Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.}$

Do NOT allow product to come in contact with surface waters or to intertidal areas below the mean high watermark. Do not contaminate water when cleaning equipment or disposing of equipment wash-waters. DO NOT discharge into sewer or waterways.

Wastes resulting from use of the product must be disposed of on site or at approved waste sites

33.6	Endpoint	Test Duration (hr)	Species	Value
d-limonene	LC50	96	Fish	0/L.46mg
	EC50	48	Crustacea	0.307mg/L
	NOEC	504	Crustacea	0.05mg/
naphtha petroleum, heavy,	LC50	96	Fish	4.1mg/L
hydrotreated	EC50	48	Crustacea	4.5mg/L
	EC50	72	Algae or other aquatic plants	>1-mg/L
	NOEL	72	Algae or other aquatic plants	0.1mg/L
ethylene glycol monobutyl	LC50	96	Fish	1-250mg/L
ether	EC50	48	Crustacea	>1-mg/L
	EC50	96	Algae or other aquatic plants	>1-mg/L
	NOEC	24	Crustacea	>1-mg/L
proprietary surfactant	LC50	96	Rainbow trout	32.15 mg/L

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
d-limonene	HIGH	HIGH
ethylene glycol monobutyl ether	LOW (Half-life = 56 days)	LOW (Half-life = 1.37 days)

Bio accumulative potential

Ingredient	Bioaccumulation
d-limonene	HIGH (LogKOW = 4.8275)
ethylene glycol monobutyl ether	LOW (BCF = 2.51)

Mobility in soil

Ingredient	Mobility
d-limonene	LOW (KOC = 1324)
ethylene glycol monobutyl ether	HIGH (KOC = 1)

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods

Product / packaging disposal	Containers may still present a chemical hazard/ danger when empty. Recycle containers whenever possible. Product residues and containers should be disposed of in accordance with local government regulations
------------------------------	--

SECTION 14 TRANSPORT INFORMATION

Labels Required



HAZCHEM

Product Code: FT995 Issue Date: 15/12/2021 Version No: 3.1

Land transport

UN number	1993		
Packing group			
UN proper shipping name	FLAMMABLE LIQUID, N.O.S.		
Environmental hazard	No relevant data		
Transport hazard class(es)	Class 3 Sub risk Not Applicable		
Special precautions for user	Special provisions 223 / 274 Limited Quantities 5L		
Health and Safety at Work (Hazardous Substance Regulations 2017	Must not be carried on a passenger service vehicle		

SECTION 15 REGULATORY INFORMATION

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

D-LIMONENE IS FOUND ON THE FOLLOWING REGULATORY LISTS

New Zealand Inventory of Chemicals (NZIoC)

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

Chemical Classification and Information Database (CCID

NAPHTHA PETROLEUM, HEAVY, HYDROTREATED IS FOUND ON THE FOLLOWING REGULATORY LISTS

New Zealand Inventory of Chemicals (NZIoC)

Chemical Footprint Project - Chemicals of High Concern List

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

ETHYLENE GLYCOL MONOBUTYL ETHER IS FOUND ON THE FOLLOWING REGULATORY LISTS

New Zealand Inventory of Chemicals (NZIoC)

Chemical Classification and Information Database (CCID)

Approved hazardous substances with controls

Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 5

International Agency for Research on Cancer (IARC) - Agents classified by AIRC monographs

NEW ZEALAND HSNO ACT 1996

Substance approval - Cleaning Products (Flammable) Group Standard | HSR002528 | October 2020

SECTION 16 OTHER INFORMATION

Revision Schedule

Revision Date	15/12/2021
Initial Date	07/07/2021

SDS Version Summary

Version	Issue Date	Sections Updated
1.1	07/07/2021	All sections originated
3.1	15/12/2021	Sections 1, 2, 8, 15.

Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources such as the ECHA C&L Chemical Inventory, HSNO (CCID) New Zealand, AICIS and HCIS Australia

DISCLAIMER: While the information in this Safety Data Sheet (SDS) is believed to be true and accurate based on the current level of knowledge available to us, the author makes no representations as to its accuracy or sufficiency. Conditions of use are beyond the control of CLEANING SYSTEMS LIMITED and therefore the users are responsible to verify this data under their own particular conditions of use, applications and regulations to determine whether the product is suitable for their particular purpose and they assume all risks of their use, handling, disposal, reliance upon, publication or use of the information contained herein. This information applies only to the product designated above and does not necessarily apply to its use in combination with other materials, products, chemical compounds, structures, or processes

Definitions and abbreviations

Permissible Concentration-Time Weighted Average Permissible Concentration-Short Term Exposure Limit International Agency for Research on Cancer PC-STEL: IARC:

ACGIH: American Conference of Government Industrial Hygienists

STEL: Short Term Exposure Limit

Temporary Emergency Exposure Limit TEEL:

IDI H Immediate Danger to Life or Health Concentrations

OSF: Odour Safety Factor NOAEL: No Observed Effects Leve TI V Threshold Limit Value Limit Of Detection LOD: OTV Odour Threshold Value BCF: Bio Concentration Factors Biological Exposure Index

This document is copyright. Apart from any fair dealing for the purposes of private study, research, review or criticism, as permitted under the Copyright Act, no part may be reproduced by any process without written permission from CLEANING SYSTEMS LIMITED.