

PRODUCT: HyChill EcoFlush

Other Names: HyChill UFS, CPS ProFlush
CPS Automotive Flush

Uses: Industrial solvent: cleaning
and degreasing

Pack Sizes: 5L, 20L, 200L

UN No.	1268
Dangerous Goods Class	3
Subsidiary Risk	None
Pack Group	II
Hazchem	3YE
Poison Schedule	5

Hazardous Nature:	This product is classified as hazardous under GHS for Australia criteria
Hazardous Classification:	Flammable liquids: 2; Acute Toxicity - Oral: 3; Skin Corrosion/Irritation: 2; Specific Target Organ Toxicity (Repeated Exposure): 2, Chronic Hazard to the Aquatic Environment: 2
Hazardous Statement:	Highly Flammable liquid and vapour
Exposure Standards:	TWA: 600 mg/ m ³ (159 ppm); STEL: Not specified

Physical Characteristics (Typical)**Section 9 of SDS**

Appearance	Clear, colourless liquid
Boiling Point/ Range (°C):	75 - 115
Flash Point (°C):	-15
Specific Gravity/ Density (g/ml @ 15°C):	0.72
Chemical Stability:	Stable at room temperature and pressure

Product Ingredients**Section 3 of SDS**

Naptha, Petroleum Spirit, hydrotreated light	64742-49-0	100
Contains: Heptane & Isomers	various	32 - 36
Cyclohexane	110-82-7	25 - 27
n-hexane	110-54-3	~ 8.0
Light Flushing Oil		< 10

For further ingredients information, please refer to the full SDS.

GHS Pictograms**Section 2 of SDS**

For further Risk and Safety information, please refer to the full SDS.

DEFINITIONS

Dangerous Goods	Products that are classified as Dangerous for Storage and Transport: these products are allocated a UN No., with accompanying Class, Pack Group, and Sub. Risk, if required. Products that do not have a specific description under the code, but have low flash points, or such, must be classified under their most significant risk, eg. Flammable Goods N.O.S. (Not otherwise specified), UN 1993
Poisonous Substance	Products that are classified under the poisons schedule are a poisonous substance. The proportion of the poison in the product will determine its numerical classification.
Hazardous Substance	Products are considered to be Hazardous if they pose an intrinsic risk to human or environmental health, such as mutagens (able to change DNA), teratogens (able to result in birth defects), carcinogens (able to generate cell abnormalities), etc. Materials are not hazardous substances if they pose risks such as potential for misuse, like flammability, or explosions when heated and ignited.

SUMMARY INFORMATION ONLY

1. IDENTIFICATION

Product Name:	HyChill UFS (EcoFlush)
Other Names:	CPS ProFlush, CPS Automotive Flush, Petroleum spirit
Chemical Family:	Petroleum Distillates/Additive
Molecular formula:	N.A.
Recommended Use:	Industrial solvent: cleaning and degreasing
Supplier:	HyChill Australia Pty. Ltd.
ABN:	97 089 527 962
Street Address:	85a Canterbury Rd, Kilsyth, Victoria, 3137
Telephone:	(03) 9728 5055
Fax:	(03) 9761 8799
Emergency phone:	CHEMCALL: 1800 127 406

2. HAZARDS IDENTIFICATION

Hazardous Nature

This product is classified as hazardous under GHS for Australia criteria

Hazardous Classification

Flammable Liquids: 2; Flammable liquids: 2; Acute Toxicity - Oral: 3; Skin Corrosion/Irritation: 2; Specific Target Organ Toxicity (Repeated Exposure): 2, Chronic Hazard to the Aquatic Environment: 2

Hazardous Statement

Highly Flammable liquid and vapour

GHS Pictograms



Hazard Statements

H225: Highly flammable liquid and vapour

H304: May be fatal if swallowed and enters airways

H305: May be harmful if swallowed and enters airways

H315: Causes skin irritation

H336: May cause drowsiness or dizziness

H360: May damage fertility or unborn child

H373: May cause damage to organs through prolonged or repeated exposure

H411: Toxic to aquatic life with long-lasting effects

Precautionary Statements

P102: Keep out of reach of children

P103: Read label before use

P201: Obtain special instruction before use

P202: Do not handle until all safety precautions have been read and understood

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

P233: Keep container tightly closed

P240: Ground/bond container and receiving equipment

P241: Use explosion-proof electrical, ventilating, lighting and all other electrical equipment

P242: Use only non-sparking tools

P243: Take precautionary measures against static discharge

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P260: Do not breathe dust/fumes/gas/mist/vapours/spray

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

P264: Wash hands, face and all exposed skin thoroughly after handling

P271: Use only outdoors in a well ventilated area

P281: Use personal protective equipment as required

P403: Store in a well ventilated place

P405: Store in a secure/locked place

Response Precautionary Statements

P101: If medical advice is needed, have product container or label at hand

P301+P310: IF SWALLOWED: immediately call a POISON CENTER or doctor/physician

P310+P352: IF ON SKIN: Wash with plenty of soap and water

P303+P361+P353: IF ON SKIN: Wash with plenty of soap and water

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/attention

P362: Take off contaminated clothing and wash thoroughly before reuse

P370+378: In case of fire: Use sand, earth, carbon dioxide, dry chemical or foam to extinguish

Disposal Precautionary Statement

P501: Dispose of contents/container in accordance with local, regional and national regulation

Poisons Schedule 5

DANGEROUS GOOD CLASSIFICATION

Classified as Dangerous Goods by the criteria of the "Australian Code for the Transport of Dangerous Goods by Road & Rail" and the "New Zealand NZS5433: Transport of Dangerous Goods on Land"

Dangerous Goods Classification 3

3. COMPOSITION: Information on Ingredients

Chemical Entity	CAS No.	Proportion (%w/w)
n-hexane	110-54-3	10-30
Solvent naphtha, Petroleum, light aliphatic	64742-89-8	100
Toluene	108-88-3	<5
Other ingredients determined not to be hazardous	various	< 10

4. FIRST AID MEASURES

For advice, contact Poisons Information Centre (Phone Australia: 13 1126, New Zealand 0800 764 766) or a doctor.

Ingestion

Immediately rinse mouth with water. If swallowed, do NOT induce vomiting. Give a glass of water to drink. Never give anything by the mouth to an unconscious patient. If vomiting occurs give further water. Immediately call Poisons Centre or Doctor

Eye Contact

Flush eyes with large amounts of water until irritation subsides. Seek immediate medical attention.

Skin Contact

Flush area with large amounts of water and wash area with soap if available. Remove contaminated clothing, including shoes, and launder before reuse. Seek medical attention for skin irritations.

Inhalation

Using proper respiratory protection, immediately remove the affected victim from exposure. Administer artificial respiration if breathing is stopped. Keep at rest. Seek immediate medical attention.

First Aid facilities

Provide eye baths and safety showers.

Medical Attention

Treat according to symptoms.

5. FIRE FIGHTING MEASURES

Shut off product that may 'fuel' a fire if safe to do so. Allow trained personnel to attend a fire in progress, providing firefighters with this Material Safety Data Sheet. Prevent extinguishing media from escaping to drains and waterways.

Suitable extinguishing media

Dry chemical or foam

Hazards from combustion products

Carbon dioxide and carbon monoxide

Precautions for fire fighters and special protective equipment

Full protective clothing and self-contained breathing apparatus

Hazchem Code: 3YE

6. ACCIDENTAL RELEASE MEASURES**Emergency Procedures**

Prevent fluid from escaping to drains and waterways. Contain leaking packaging in a containment drum. Prevent vapours from building up in confined areas. Ensure that drain valves are closed at all times. Clean up and report spills immediately.

Methods and materials for containment**Major Land Spill**

- Eliminate sources of ignition.
- Warn occupants of downwind areas of possible fire and explosion hazard.
- Prevent liquid from entering sewers, watercourses, or low-lying areas.
- Keep the public away from the area.
- Shut off the source of the spill if possible and safe to do so.
- Advise authorities if substance has entered a watercourse or sewer or has contaminated soil or vegetation.
- Take measures to minimise the effect on the ground water.
- Contain the spilled liquid with sand or earth.
- Recover by pumping – use explosion proof pump or hand pump – or with a suitable absorbent material.
- Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations.
- See "First Aid Measures" and "Stability and Reactivity"

Major Water Spill

- Eliminate any sources of ignition.
- Warn occupants and shipping in downwind areas of possible fire and explosion hazard.
- Notify the port or relevant authority and keep the public away from the area.
- Shut off the source of the spill if possible and safe to do so.
- Confine the spill if possible.
- Remove the product from the surface by skimming or with suitable absorbent material.
- Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations.
- See "First Aid Measures" and "Stability and Reactivity".

7. HANDLING AND STORAGE

Handling

This product is flammable. Do not open near open flame, sources of heat or ignition. No smoking. Keep container closed. Handle containers with care. Open slowly to control possible pressure release. Material will accumulate static charge. Use grounding leads to avoid discharge (electrical spark).

Conditions for safe storage

Store in a cool, dry place away from direct sunlight. Do not pressurise, cut, heat or weld containers - residual vapours are flammable. This product is flammable and will fuel a fire in progress.

Incompatible materials

Natural Rubber, Butyl Rubber, EPDM, Polystyrene

This material is a Scheduled Poison Schedule 5 (Caution) and must be stored, maintained and used in accordance with the relevant regulations

8. EXPOSURE CONTROLS: PERSONAL PROTECTION

National Occupational Exposure Limits

	TWA		STEL		NOTICES
	ppm	mg/m3	ppm	mg/m3	
Hexane (n-Hexane)	20	72	-	-	-
Toluene	50	191	150	574	Sk

As published by Safe Work Australia.

TWA - The time-weighted average airborne concentration over an eight-hour working day, for a five-day working week over an entire working life.

STEL (Short Term Exposure Limit) - the average airborne concentration over a 15 minute period which should not be exceeded at any time during a normal eight-hour workday.

'Sk' Notice - absorption through the skin may be a significant source of exposure. The exposure standard is invalidated if such contact should occur.

These Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept too as low a level as is workable. These exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

If the directions for use on the product label are followed, exposure of individuals using the product should not exceed the above standard. The standard was created for workers who are routinely, potentially exposed during product manufacture.

Biological Limit Values: As per the "National Model Regulations for the Control of Workplace Hazardous Substances (Safe Work Australia)" the ingredients in this material do not have a Biological Limit Allocated.

Engineering Measures: Ensure ventilation is adequate to maintain air concentrations below Exposure Standards. Use only in well ventilated areas. Use with local exhaust ventilation or while wearing appropriate respirator.

Personal Protection Equipment: SAFETY SHOES, OVERALLS, GLOVES, SAFETY GLASSES, RESPIRATOR

Wear safety shoes, overalls, gloves, safety glasses, respirator. Use with adequate ventilation. If inhalation risk exists wear organic vapour/particulate respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716. Available information suggests that gloves made from should be suitable for intermittent contact. However, due to variations in glove construction and local conditions, the user should make a final assessment. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

Hygiene measures: Keep away from food, drink and animal feeding stuffs. When using do not eat, drink or smoke. Wash hands prior to eating, drinking or smoking. Avoid contact with clothing. Avoid eye contact and skin

contact. Avoid inhalation of vapour, mist or aerosols. Ensure that eyewash stations and safety showers are close to the workstation location.

9. PHYSICAL AND CHEMICAL PROPERTIES

Property	Unit of measurement	Typical value
Appearance	-	Clear, colourless liquid
Boiling Point/ Range	°C	65 - 115
Flash Point	°C	< -20
Density @ 15°C	g/ml	0.685 - 0.720
Vapour Pressure @ 20°C	kPa	>15
Explosive Limits (LEL – UEL)	%	1.0 – 7.5
Vapour Density @ 20°C	kPa	Not available
Autoignition Temperature (ASTM E659)	°C	350
Viscosity @ 20°C	cSt	Not applicable
Percent Volatiles	%	100%
Solubility with Water	% w/w	< 0.10

The values listed are indicative of this product's physical and chemical properties. For a full product specification, please consult the Product Data Sheet.

10. STABILITY AND REACTIVITY

Chemical Stability

Stable under normal conditions of use

Conditions to avoid

Elevated temperatures, sources of heat and ignition, open flames.

Hazardous decomposition products

No decomposition products except on burning. See "Fire Fighting Measures".

Hazardous reactions

Oxidizing agents, mineral acids, halogenated organic compounds. Combination with MEK will result in potentiated (greatly increased) health effects similar to those in ingestion and inhalation

Hazardous Polymerisation

No known hazardous reactions

11. TOXICOLOGICAL INFORMATION

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

Acute Effects

Ingestion

Swallowing can result in nausea, vomiting and irritation of the gastrointestinal tract. May cause lung damage if swallowed. Small amounts of liquid aspirated into the respiratory system during ingestion or vomiting may cause bronchopneumonia or pulmonary oedema..

Eye Contact

This product is irritating to eyes, but will not permanently damage the eye tissue

Skin Contact

This product is irritating to the skin with prolonged exposure. It may result in dryness and cracking.

Inhalation

Material may be an irritant to mucous membranes and respiratory tract. Inhalation of vapour can

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result in headaches, dizziness and possible nausea. Inhalation of high concentrations can produce central nervous system depression, which can lead to loss of co-ordination, impaired judgement and if exposure is prolonged, unconsciousness.

Acute Toxicity

Inhalation: This material has been classified as non-hazardous. Acute toxicity estimate (based on ingredients): >20 mg/L.

Skin contact: This material has been classified as non-hazardous. Acute toxicity estimate (based on ingredients): >2,000 mg/Kg

Ingestion: This material has been classified as non-hazardous. Acute toxicity estimate (based on ingredients): >2,000 mg/Kg

Corrosion/Irritancy: Eye: this material has been classified as not corrosive or irritating to eyes. Skin: this material has been classified as a Category 2 Hazard (reversible effects to skin).

Sensitisation: Inhalation: this material has been classified as not a respiratory sensitiser. Skin: this material has been classified as not a skin sensitiser.

Aspiration hazard: This material has been classified as Aspiration Hazard – Category 1

Specific target organ toxicity (single exposure): This material has been classified as a Category 3 Hazard. Exposure via inhalation may result in depression of the central nervous system.

Chronic Toxicity

Mutagenicity: This material has been classified as non-hazardous.

Carcinogenicity: This material has been classified as non-hazardous.

Reproductive toxicity (including via lactation): This material has been classified as a Category 1A Hazard.

Specific target organ toxicity (repeat exposure): This material has been classified as a Category 2 Hazard.

12. ECOLOGICAL INFORMATION

Avoid contaminating waterways.

Acute aquatic hazard: This material has been classified as non-hazardous. Acute toxicity estimate (based on ingredients): >100 mg/L

Long-term aquatic hazard: This material has been classified as a Category Chronic 2 Hazard. Non-rapidly or rapidly degradable substance for which there are adequate chronic toxicity data available OR in the absence of chronic toxicity data, Acute toxicity estimate (based on ingredients): 1 - 10 mg/L, where the substance is not rapidly degradable and/or BCF $\geq$ 500 and/or log K_{ow} $\geq$ 4.

Ecotoxicity: No information available.

Persistence and degradability: No information available.

Bioaccumulative potential: No information available.

Mobility: No information available.

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Empty packaging should be taken for recycling, recovery or disposal through a suitably qualified or licensed contractor. Care should be taken to ensure compliance with national and local authorities. Packaging may still contain fumes and vapours that are flammable and harmful. Ensure that empty packaging is allowed to dry. See Section 8. Of this SDS for Exposure Controls and personal protection.

Special Precautions for Landfill or Incineration

This product is NOT suitable for disposal by either landfill or via municipal sewers, drains, natural streams or rivers. This product is ashless and can be burned directly in appropriate equipment.

14. TRANSPORT INFORMATION

Road and Rail Transport		Marine Transport		Air Transport	
UN No.	1268	UN No.	1268	UN No.	1268
Proper Shipping Name	Petroleum Distillates, N.O.S.	Proper Shipping Name	Petroleum Distillates, N.O.S.	Proper Shipping Name	Petroleum Distillates, N.O.S.
DG Class	3	DG Class	3	DG Class	3
Sub. Risk	None	Sub. Risk	None	Sub. Risk	None
Pack Group	II	Pack Group	II	Pack Group	II

Hazchem	3YE	Hazchem	3YE		3YE
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Dangerous Goods Segregation

This product is classed as Dangerous Goods Class 3, packing group II. Please consult the Australian Dangerous Goods Code for Transport by Road and Rail for information.

15. REGULATORY INFORMATION**This material is not subject to the following international agreements:**

Montreal Protocol (Ozone depleting substances)
The Stockholm Convention (Persistent Organic Pollutants)
The Rotterdam Convention (Prior Informed Consent)
International Convention for the Prevention of Pollution from Ships (MARPOL)

This material is subject to the following international agreements:

Basel Convention (Hazardous Waste)

- Wastes from the production, formulation and use of organic solvents

This material/constituent(s) is covered by the following requirements:

- The Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) established under the Therapeutic Goods Act (Commonwealth).
- All components of this product are listed on or exempt from the Australian Inventory of Chemical Substances (AICS).

16. OTHER INFORMATION

Reasons for Issue: Upgrade to GHS SDS; Amalgamated supplier changes in all sections. Include

Abbreviations:

AICS: Australian Inventory of Chemical Substances

CAS Number: Chemical Abstracts Number

IARC: International Agency for Research on Cancer

NOHSC: National Occupational Health and Safety Council

References:

- Supplier Safety Data Sheets
- <http://chem.sis.nlm.nih.gov/chemidplus> (November 15)
- <http://hsis.ascc.gov.au/SearchHS.aspx> (November 15)
- Ecotoxicology data: http://cfpub.epa.gov/ecotox/quick_query.htm (November 15)
- *Sax's Dangerous Properties of Industrial Materials*, Richard J. Lewis Snr., pub. Canada (2000)

The information sourced for the preparation of this document was correct and complete at the time of writing to the best of the writer's knowledge. The document represents the commitment to the company's responsibilities surrounding the supply of this product, undertaken in good faith. This document should be taken as a safety guide for the product and its recommended uses, but is in no way an absolute authority. Please consult the relevant legislation and regulations governing the use and storage of this type of product. For further information, please contact HyChill Australia Pty. Ltd.