REVISION DATE: NOVEMBER 2010

MATERIAL SAFETY DATA SHEET FLUXCLENE

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

PRODUCT NAME FLUXCLENE

PRODUCT NO. FLU01L [EFLU01L]

SUPPLIER H K WENTWORTH PTY LIMITED

P.O. BOX 339

BROOKVALE, NSW 2100

AUSTRALIA TEL: 02 9938 1566 FAX: 02 9938 1467 GENERAL MANAGER

EMERGENCY TELEPHONE Tel: 029938 1566 between 8.30am and 5.00pm EST

PROPER SHIPPING NAME FLAMMABLE LIQUID, N.O.S.

2 HAZARDS IDENTIFICATION

RISK PHRA

D44	
R11	Highly flammable.

R43 May cause sensitisation by skin contact.

R36/38 Irritating to eyes and skin.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the

aquatic environment.

R67 Vapours may cause drowsiness and dizziness.
R65 Harmful: may cause lung damage if swallowed.

SAFETY PHRASES

S9 Keep container in a well-ventilated place.

S16 Keep away from sources of ignition - No smoking.

S51 Use only in well-ventilated areas. S24/25 Avoid contact with skin and eyes.

S62 If swallowed, do not induce vomiting: seek medical advice immediately and

show this container or label.

HAZARD ID 2

The above phrases are the risks associated with the product

ENVIRONMENT

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point. Use appropriate containment to avoid environmental contamination. Avoid release to the environment. Refer to special instructions/safety data sheets. Dispose of waste and residues in accordance with local authority requirements.

STATEMENT OF HAZARDOUS NATURE

HAZARDOUS SUBSTANCE (According to criteria of NOHSC). DANGEROUS GOODS (According to ADG Code).

DG CLASS

Class 3: Flammable liquids.

PACKING GROUP II
UN NO. 1993
HAZCHEM CODE 3YE

3 COMPOSITION/INFORMATION ON INGREDIENTS

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Name	EC No.	CAS-No.	Content	Classification (NOHSC: 2011)
CYCLOHEXANE	203-806-2	110-82-7	30-60%	F;R11 Xn;R65 Xi;R38 R67 N;R50/53
PROPAN-2-OL	200-661-7	67-63-0	10-30%	F;R11 Xi;R36 R67
1-METHOXY-2-PROPANOL	203-539-1	107-98-2	10-30%	R10 R67
HEXANE MIXTURE OF ISOMERS (MAX 5% n-HEXANE (203-777-6))	-	-	5-10%	F;R11 Xn;R65 Xi;R38 R67 N;R51/53
HEPTANE	205-563-8	142-82-5	1-5%	F;R11 Xn;R65 Xi;R38 R67 N;R50/53
d-LIMONENE	227-813-5	5989-27-5	1-5%	R10 R43 Xi;R38 N;R50/53
HEXANE-norm	203-777-6	110-54-3	< 1%	F;R11 Repr. Cat. 3;R62 Xn;R48/20,R65 Xi;R38 R67 N;R51/53

The Full Text for all R-Phrases are Displayed in Section 16

COMPOSITION COMMENTS

Ingredients not listed are classified as non-hazardous or at a concentration below reportable levels Ingredients are registered on AICS

4 FIRST-AID MEASURES

NOTES TO THE PHYSICIAN

Treat symptomatically

INHALATION

Move the exposed person to fresh air at once. Keep the affected person warm and at rest. Get prompt medical attention.

INGESTION

DO NOT INDUCE VOMITING! Rinse mouth thoroughly. Provide rest, warmth and fresh air. Get medical attention immediately!

SKIN CONTACT

Remove affected person from source of contamination. Wash the skin immediately with soap and water. Get medical attention if irritation persists after washing.

EYE CONTACT

Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Contact physician if irritation persists.

5 FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA

Fire can be extinguished using: Foam. Dry chemicals, sand, dolomite etc.

SPECIAL FIRE FIGHTING PROCEDURES

Avoid breathing fire vapours. Cool containers exposed to flames with water until well after the fire is out. Keep run-off water out of sewers and water sources. Dike for water control.

HAZCHEM CODE 3YE

6 ACCIDENTAL RELEASE MEASURES

SPILL CLEAN UP METHODS

Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Clean-up personnel should use respiratory and/or liquid contact protection. Absorb in vermiculite, dry sand or earth and place into containers.

7 HANDLING AND STORAGE

USAGE PRECAUTIONS

Avoid spilling, skin and eye contact. Keep away from heat, sparks and open flame. Ventilate well, avoid breathing vapours. Use approved respirator if air contamination is above accepted level. Use explosion proof electric equipment.

STORAGE PRECAUTIONS

Flammable/combustible - Keep away from oxidisers, heat and flames. Store in tightly closed original container in a dry, cool and well-ventilated place. Keep in original container.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

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Name	Std	TWA - 8 hrs		STEL - 15 min		Notes
1-METHOXY-2-PROPANOL	ES- TWA	100 ppm	369 mg/m3	150 ppm	553 mg/m3	
CYCLOHEXANE		300 ppm	1030 mg/m3			
HEPTANE		400 ppm	1640 mg/m3	500 ppm	2050 mg/m3	
PROPAN-2-OL	ES- TWA	400 ppm	983 mg/m3	500 ppm	1230 mg/m3	

INGREDIENT COMMENTS

Australian exposure limits are: LT= ES-TWA and ST= ES STEL

PROTECTIVE EQUIPMENT





ENGINEERING MEASURES

Provide adequate ventilation. Observe Occupational Exposure Limits and minimise the risk of inhalation of vapours.

RESPIRATORY EQUIPMENT

In case of inadequate ventilation and work of brief duration, use suitable respiratory equipment.

HAND PROTECTION

Use suitable protective gloves if risk of skin contact. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material.

EYE PROTECTION

Wear approved chemical safety goggles where eye exposure is reasonably probable.

OTHER PROTECTION

Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact.

HYGIENE MEASURES

DO NOT SMOKE IN WORK AREA! Wash at the end of each work shift and before eating, smoking and using the toilet.

Wash promptly with soap & water if skin becomes contaminated. Promptly remove any clothing that becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke.

9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE Liquid Clear

COLOUR Colourless

ODOUR Organic solvents.

SOLUBILITYInsoluble in water Soluble in: Acetone Miscible with: Alcohol Chloroform Ether.BOILING POINT (°C)>80 (>176 F)RELATIVE DENSITY0.78 @ 20 °cFLASH POINT (°C)0 (32 F) CC (Closed cup).AUTO IGNITION TEMPERATURE (° >200 (>392 F)

C)

FLAMMABILITY LIMIT - LOWER(%) 0.7 FLAMMABILITY LIMIT - UPPER(%) 8.3

10 STABILITY AND REACTIVITY

STABILITY

Stable under normal temperature conditions.

CONDITIONS TO AVOID

Avoid heat. Avoid contact with oxidisers or reducing agents.

HAZARDOUS DECOMPOSITION PRODUCTS

Fire creates: Toxic gases/vapours/fumes of: Carbon monoxide (CO). Carbon dioxide (CO2).

11 TOXICOLOGICAL INFORMATION

INHALATION

Vapours may cause headache, fatigue, dizziness and nausea. High concentrations of vapours may irritate respiratory system and lead to headache, fatigue, nausea and vomiting.

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INGESTION

Harmful: may cause lung damage if swallowed.

SKIN CONTACT

Irritating to skin. May cause sensitisation by skin contact. Product has a defatting effect on skin. Prolonged contact may cause dryness of the skin.

EYE CONTACT

Irritating to eyes.

ROUTE OF ENTRY

Inhalation: Skin absorption.

Name HEPTANE

Toxic Dose 1 - LD 50222 mg/kg (ivn-mouse)Toxic Conc. - LC 50103 ppm/4h (inh-rat)NameCYCLOHEXANE

Toxic Dose 1 - LD 50 12705 mg/kg (oral rat)
Toxic Dose 2 - LD 50 813 mg/kg (oral-mouse)

Name PROPAN-2-OL

 Toxic Dose 1 - LD 50
 5045 mg/kg (oral rat)

 Toxic Dose 2 - LD 50
 3600 mg/kg (oral-mouse)

 Toxic Conc. - LC 50
 47-73 mg/l/4h (inh-rat)

 Name
 1-METHOXY-2-PROPANOL

Toxic Dose 1 - LD 50 5200 mg/kg (oral rat)
Toxic Dose 2 - LD 50 11700 mg/kg (oral-mouse)

Name d-LIMONENE

Toxic Dose 1 - LD 50 >5000 mg/kg (oral rat)

12 ECOLOGICAL INFORMATION

ECOTOXICITY

Dangerous for the environment if discharged into watercourses.

Name HEPTANE LC 50, 96 Hrs, FISH mg/l 4.924

Name CYCLOHEXANE

LC 50, 96 Hrs, FISH mg/l 42.3

Name PROPAN-2-OL

LC 50, 96 Hrs, FISH mg/l 9600 EC 50, 48 Hrs, DAPHNIA, mg/l 10000

Name 1-METHOXY-2-PROPANOL

LC 50, 96 Hrs, FISH mg/l 20800 EC 50, 48 Hrs, DAPHNIA, mg/l 23300

Name d-LIMONENE

EC 50, 48 Hrs, DAPHNIA, mg/l 12.3

Mobility

The product has poor water-solubility.

13 DISPOSAL CONSIDERATIONS

DISPOSAL METHODS

Dispose of waste and residues in accordance with local authority requirements.

14 TRANSPORT INFORMATION



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PROPER SHIPPING NAME FLAMMABLE LIQUID, N.O.S.

UDF Phrase 1 Class 3: Flammable liquid

Class 3: Flammable liquid

UN NO. ADG CLASS NO. 1993 3 DG CLASS **PACKING GROUP** Class 3: Flammable liquids. Ш **TUNNEL RESTRICTION CODE** ADG LABEL NO. 3 (D/E) HAZCHEM CODE UN NO. SEA 3YE 1993 **IMDG CLASS** IMDG PAGE NO. 3 3230 IMDG PACK GR. **EMS** П F-E, S-E UN NO. AIR **AIR CLASS** 1993 3

AIR PACK GR.

15 REGULATORY INFORMATION

LABELLING







Harmfu

Highly Flammable

Dangerous for the environment

CONTAINS CYCLOHEXANE

d-LIMONENE

RISK PHRASES

R11 Highly flammable.

R43 May cause sensitisation by skin contact.

R36/38 Irritating to eyes and skin.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the

aquatic environment.

R67 Vapours may cause drowsiness and dizziness.
R65 Harmful: may cause lung damage if swallowed.

SAFETY PHRASES

S9 Keep container in a well-ventilated place.

S16 Keep away from sources of ignition - No smoking.

S51 Use only in well-ventilated areas. S24/25 Avoid contact with skin and eyes.

S62 If swallowed, do not induce vomiting: seek medical advice immediately and

show this container or label.

POISONS SCHEDULE NUMBER NONE

NATIONAL REGULATIONS AND REFERENCES

National Model Regulations for the Control of Scheduled Carcinogenic Substances.

National Model Regulations for the Control of Workplace Hazardous Substances.

National Code of Practice for the Control of Workplace Hazardous Substances.

National Code of Practice for the Labelling of Workplace Substances.

National Code of Practice for the Preparation of Material Safety Data Sheets.

Approved Criteria for Classifying Hazardous Substances.

Australian Dangerous Goods Code. The Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP).

16 OTHER INFORMATION

ISSUED BY

Helen O'Reilly

REVISION DATE NOVEMBER 2010

REV. NO./REPL. SDS

GENERATED

SDS NO. 10368

REVISION DATE: NOVEMBER 2010

FLUXCLENE

RISK PHRASES IN FULL

R10 Flammable.

R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.

R65 Harmful: may cause lung damage if swallowed.

R11 Highly flammable.
R36 Irritating to eyes.
R38 Irritating to skin.

R43 May cause sensitisation by skin contact.

R62 Possible risk of impaired fertility.

R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R67 Vapours may cause drowsiness and dizziness.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic

environment.

DISCLAIMER

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.