

MATERIAL SAFETY DATA SHEET

ISOCLENE

1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME	ISOCLENE		
PRODUCT NO.	AISO250, 01L		
PRODUCT USE	Cleaning Product		
SUPPLIER	MANUFACTURER	AF INTERNATIONAL. A division of HK WENTWORTH LTD	
	7101 South Adams Street	KINGSBURY PARK.	
	Suite 8	MIDLAND ROAD,	
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		+44 (0) 1283 550177	
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EMERGENCY TELEPHONE	(415) 895 1316 Monday to Friday between 8.30 a.m. and 5 p.m.		
IDENTIFICATION No.	1219		

2 HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

HIGHLY FLAMMABLE! Colored liquid Slight odor of alcohol Stable under normal temperature conditions. Avoid heat, flames and other sources of ignition. Irritating to eyes. Vapors may cause drowsiness and dizziness. Move the exposed person to fresh air at once. Keep the affected person warm and at rest. Get prompt medical attention. Keep away from sources of ignition - No smoking. Use only in well-ventilated areas. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label. Keep out of the reach of children

POTENTIAL HEALTH EFFECTS

INHALATION

May cause irritation to the respiratory system.

INGESTION

May cause stomach pain or vomiting.

SKIN CONTACT

Prolonged contact may cause dryness of the skin. Acts as a defatting agent on skin. May cause cracking of skin, and eczema.

EYE CONTACT

Irritating to eyes.

ROUTE OF ENTRY

Skin absorption. Ingestion. Skin and/or eye contact.

TARGET ORGANS

Central nervous system. Eyes. Respiratory system, lungs. Skin.

MEDICAL SYMPTOMS

Irritation of eyes and mucous membranes. Dilated pupils. Rhinitis (inflammation of the nasal mucous membranes). Upper respiratory irritation. General respiratory distress, unproductive cough. Skin irritation. Central nervous system depression. Drowsiness, dizziness, disorientation, vertigo.

3 COMPOSITION/INFORMATION ON INGREDIENTS

Name	EC No.	CAS-No.	Weight
PROPAN-2-OL	200-661-7	67-63-0	80-100%

4 FIRST-AID MEASURES

ISOCLENE

NOTES TO THE PHYSICIAN

Treat symptomatically

INHALATION

Move the exposed person to fresh air at once. Get medical attention if any discomfort continues.

INGESTION

DO NOT INDUCE VOMITING! Rinse mouth thoroughly. Get medical attention.

SKIN CONTACT

Promptly wash contaminated skin with soap or mild detergent and water. Promptly remove clothing if soaked through and wash as above. 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. Get medical attention if any discomfort continues.

5 FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA

Use: Alcohol resistant foam. Powder. Dry chemicals, sand, dolomite etc.

SPECIAL FIRE FIGHTING PROCEDURES

Move container from fire area if it can be done without risk. Use water to keep fire exposed containers cool and disperse vapors.

AUTO IGNITION TEMPERATURE 425 (797 F)
(°C)

FLAMMABILITY LIMIT - LOWER(%) 2.50

FLAMMABILITY LIMIT - UPPER(%) 12.70

FLASH POINT (°C) 12 (53.6 F) OC (Open cup).

6 ACCIDENTAL RELEASE MEASURES

SPILL CLEAN UP METHODS

Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Wear necessary protective equipment. Absorb in vermiculite, dry sand or earth and place into containers.

7 HANDLING AND STORAGE

HANDLING

Keep away from heat, sparks and open flame. Avoid spilling, skin and eye contact.

STORAGE

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

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

COMPONENT	STD	TWA (8-hrs)		STEL (15 min)		Notes
PROPAN-2-OL	ACGIH	200 ppm		400 ppm		A4
PROPAN-2-OL	PEL	400 ppm	980 mg/m3			
COMPONENT						IDLH
PROPAN-2-OL						2000

ACGIH = American Conference of Governmental Industrial Hygienists.

PEL = Permissible Exposure Limit (Occupational and Safety Health Administration)

A4 = Not Classified as a Human Carcinogen

PROTECTIVE EQUIPMENT



ENGINEERING MEASURES

All handling to take place in well-ventilated area.

ISOCLENE

RESPIRATORY EQUIPMENT

No specific recommendation made, but respiratory protection must be used if the general level exceeds the Recommended Occupational Exposure Limit

HAND PROTECTION

Use protective gloves. 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, tight fitting safety glasses where splashing is probable.

OTHER PROTECTION

Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapor 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. When using do not eat, drink or smoke.

9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	Liquid		
COLOR	Colorless		
ODOR	Characteristic		
BOILING POINT (°C)	82 (179.6 F)	RELATIVE DENSITY	0.785 @ 20 °c (68 F)
VAPOR DENSITY (air=1)	2.8	VAPOR PRESSURE	4.40 kPa @ 20 °c (68 F)
EVAPORATION RATE	2.93	VISCOSITY	n/a cSt @ 20 °c (68 F)
FLASH POINT (°C)	12 (53.6 F) OC (Open cup).		

10 STABILITY AND REACTIVITY

STABILITY

Stable under normal temperature conditions.

CONDITIONS TO AVOID

Avoid heat, flames and other sources of ignition.

MATERIALS TO AVOID

Strong oxidising substances.

11 TOXICOLOGICAL INFORMATION

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)

12 ECOLOGICAL INFORMATION

ECOTOXICITY

Not regarded as dangerous for the environment.

Name	PROPAN-2-OL
LC 50, 96 hrs, Fish mg/l	9600
EC 50, 48 hrs, Daphnia, mg/l	10000

13 DISPOSAL CONSIDERATIONS

DISPOSAL METHODS

Dispose of waste and residues in accordance with local authority requirements. Absorb in vermiculite or dry sand, dispose in licensed hazardous waste.

14 TRANSPORT INFORMATION



DOT PROPER SHIPPING NAME ISOPROPANOL OR ISOPROPYL ALCOHOL

ISOCLENE

TDG SHIPPING NAME	ISOPROPANOL OR ISOPROPYL ALCOHOL		
IDENTIFICATION No.	1219	TUNNEL RESTRICTION CODE	(D/E)
CEFIC TEC(R) NO.	30GF1-I+II	DOT HAZARD CLASS	3
DOT PACKING GROUP	II	U.S DOT HAZARD LABEL	Flammable Liquid
UN NO. SEA	1219	IMDG CLASS	3
IMDG PAGE NO.	3	IMDG PACK GR.	II
EMS	F-E, S-D	MFAG	See Guide
MARINE POLLUTANT	No.	UN NO. AIR	1219
AIR CLASS	3	AIR PACK GR.	II
TDG CLASS	3	TDG LABEL(S)	3
DOT PACKING GROUP	II		

15 REGULATORY INFORMATION

INVENTORIES

COMPONENT	CAN	US	EU	AUS	JAP	KOR	CHN	PHLP
PROPAN-2-OL	DSL	Yes	EINECS	Yes				

COMPONENT	TSCA 12(b) Export Notification
PROPAN-2-OL	No

US FEDERAL REGULATIONS

COMPONENT	SARA 302-TPQ	CERCLA-RQ	SARA 313
PROPAN-2-OL		Not Listed	1.0 %

CLEAN AIR ACT

COMPONENT	CAA Accidental Release Prevention
PROPAN-2-OL	Not Listed

US STATE REGULATIONS

COMPONENT	CAS	CA	FL	MA	MN	NJ	PA	RI
PROPAN-2-OL	67-63-0	Not Listed	Yes	Yes	Yes	Yes	Yes	Yes

SARA (311/312) HAZARD CATEGORIES

Fire

REGULATORY STATUS (US)

SECTION 313: This product contains toxic chemical subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR Part 372. TSCA: The ingredients of this product are on the TSCA Inventory.

WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM -WHMIS

LABEL(S) FOR SUPPLY



Flammable
Liquid.

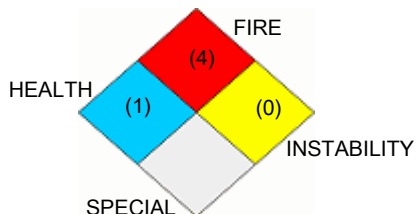
16 OTHER INFORMATION

HAZARDOUS MATERIAL INFORMATION SYSTEM (HMIS)

ISOCLENE

HEALTH	1
FLAMMABILITY	4
PHYSICAL	0
PERSONAL PROTECTION	B

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)



ISSUED BY

Pawel Zmarzly

REVISION DATE

FEBRUARY 2009

VERSION No.

0

SDS NO.

10636

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.