SAFETY DATA SHEET

(REACH regulation (EC) n° 1907/2006 - n° 2015/830)

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

1.1. Product identifier

Product name : PROSOLV'2B

Product code : 30741

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

1.3. Details of the supplier of the safety data sheet

Registered company name : IPC S.A.S..

Address : 10, Quai Commandant Malbert - CS 71821.29218.BREST Cedex 2.France.

Telephone : +33 (0)2 98 43 45 44. Fax : +33 (0)2 98 44 22 53.

ipc@ipc-sa.com

http://www.ipc-sa.com

1.4. Emergency telephone number : +33 (0)2.98.43.45.44.

Association/Organisation : .

SECTION 2 : HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

In compliance with EC regulation No. 1272/2008 and its amendments.

Flammable liquid, Category 2 (Flam. Liq. 2, H225).

Eye irritation, Category 2 (Eye Irrit. 2, H319).

May produce an allergic reaction (EUH208).

GHS02

This mixture does not present an environmental hazard. No known or foreseeable environmental damage under standard conditions of use.

2.2. Label elements

Detergent mixture (see section 15).

In compliance with EC regulation No. 1272/2008 and its amendments.

Hazard pictograms :

GHS07



Signal Word : DANGER Additional labeling : **EUH208** Contains (R)-P-MENTHA-1,8-DIENE. May produce an allergic reaction. Hazard statements : H225 Highly flammable liquid and vapour. H319 Causes serious eye irritation. Precautionary statements - Prevention : P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P264 Wash hands thoroughly after handling. P280 Wear protective eye protection. Precautionary statements - Response : P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 If eye irritation persists: Get medical advice/attention.

Precautionary statements - Disposal :

P501

Dispose of contents/container refering to the regulation in force.

2.3. Other hazards

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC) >= 0.1% published by the European CHemicals Agency (ECHA) under article 57 of REACH: http://echa.europa.eu/fr/candidate-list-table The mixture fulfils neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC 1907/2006.

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS 3.2. Mixtures

Composition ·

(EC) 1272/2008	Note	%
GHS07, GHS02	[1]	50 <= x % < 100
Dgr		
Flam. Liq. 2, H225		
Eye Irrit. 2, H319		
GHS07, GHS02	[1]	2.5 <= x % < 10
Dgr		
Flam. Liq. 2, H225		
Eye Irrit. 2, H319		
STOT SE 3, H336		
GHS07, GHS09, GHS08, GHS02	[1]	0 <= x % < 2.5
Dgr		
Flam. Liq. 3, H226		
Asp. Tox. 1, H304		
Skin Irrit. 2, H315		
Skin Sens. 1, H317		
Aquatic Acute 1, H400		
M Acute = 1		
Aquatic Chronic 1, H410		
M Chronic $= 1$		
	GHS07, GHS02 Dgr Flam. Liq. 2, H225 Eye Irrit. 2, H319 GHS07, GHS02 Dgr Flam. Liq. 2, H225 Eye Irrit. 2, H319 GHS07, GHS02 Dgr Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 GHS07, GHS09, GHS08, GHS02 Dgr Flam. Liq. 3, H226 Asp. Tox. 1, H304 Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Acute 1, H400 M Acute = 1 Aquatic Chronic 1, H410	GHS07, GHS02 [1] Dgr Flam. Liq. 2, H225 Eye Irrit. 2, H319 [1] GHS07, GHS02 [1] Dgr Flam. Liq. 2, H225 Eye Irrit. 2, H319 [1] GHS07, GHS02 [1] Dgr Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 GHS07, GHS09, GHS08, GHS02 [1] Dgr Flam. Liq. 3, H226 Asp. Tox. 1, H304 Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Acute 1, H400 M Acute = 1 Aquatic Chronic 1, H410

(Full text of H-phrases: see section 16)

Information on ingredients :

[1] Substance for which maximum workplace exposure limits are available.

SECTION 4 : FIRST AID MEASURES

As a general rule, in case of doubt or if symptoms persist, always call a doctor.

NEVER induce swallowing by an unconscious person.

4.1. Description of first aid measures

In the event of exposure by inhalation :

In the event of an allergic reaction, seek medical attention.

In the event of splashes or contact with eyes :

Wash thoroughly with fresh, clean water for 15 minutes holding the eyelids open.

If there is any redness, pain or visual impairment, consult an ophthalmologist.

In the event of splashes or contact with skin :

In the event of an allergic reaction, seek medical attention.

In the event of swallowing :

In the event of swallowing, if the quantity is small (no more than one mouthful), rinse the mouth with water and consult a doctor.

Keep the person exposed at rest. Do not force vomiting.

Seek medical attention, showing the label.

If swallowed accidentally, call a doctor to ascertain whether observation and hospital care will be necessary. Show the label.

4.2. Most important symptoms and effects, both acute and delayed

No data available.

4.3. Indication of any immediate medical attention and special treatment needed

No data available.

SECTION 5 : FIREFIGHTING MEASURES

Flammable.

Chemical powders, carbon dioxide and other extinguishing gas are suitable for small fires.

5.1. Extinguishing media

Keep packages near the fire cool, to prevent pressurised containers from bursting.

Suitable methods of extinction

In the event of a fire, use :

- sprayed water or water mist

- water with AFFF (Aqueous Film Forming Foam) additive

- halon

- foam

- multipurpose ABC powder
- BC powder
- carbon dioxide (CO2)

Prevent the effluent of fire-fighting measures from entering drains or waterways.

Unsuitable methods of extinction

In the event of a fire, do not use :

- water jet

5.2. Special hazards arising from the substance or mixture

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.

Do not breathe in smoke.

In the event of a fire, the following may be formed :

- carbon monoxide (CO)
- carbon dioxide (CO2)

5.3. Advice for firefighters

Fire-fighting personnel are to be equipped with autonomous insulating breathing apparatus.

SECTION 6 : ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Consult the safety measures listed under headings 7 and 8.

For non first aid worker

Because of the organic solvents contained in the mixture, eliminate sources of ignition and ventilate the area. Avoid any contact with the skin and eyes.

For first aid worker

First aid workers will be equipped with suitable personal protective equipment (See section 8).

6.2. Environmental precautions

Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, diatomaceous earth in drums for waste disposal.

Prevent any material from entering drains or waterways.

6.3. Methods and material for containment and cleaning up

Clean preferably with a detergent, do not use solvents.

6.4. Reference to other sections

No data available.

SECTION 7 : HANDLING AND STORAGE

Requirements relating to storage premises apply to all facilities where the mixture is handled.

7.1. Precautions for safe handling

Always wash hands after handling.

Remove and wash contaminated clothing before re-using.

Ensure that there is adequate ventilation, especially in confined areas.

Fire prevention :

Handle in well-ventilated areas.

Vapours are heavier than air. They can spread along the ground and form mixtures that are explosive with air.

Prevent the formation of flammable or explosive concentrations in air and avoid vapor concentrations higher than the occupational exposure limits.

Prevent the accumulation of electrostatic charges with connections to earth.

The mixture can become electrostatically charged : always earth during decanting operations. Wear antistatic shoes and clothing and floors should be electrically conductive.

Use the mixture in premises free of naked flames or other sources of ignition and ensure that electrical equipment is suitably protected.

Keep packages tightly closed and away from sources of heat, sparks and naked flames.

Do not use tools which may produce sparks. Do not smoke.

Prevent access by unauthorised personnel.

Recommended equipment and procedures :

For personal protection, see section 8.

Observe precautions stated on label and also industrial safety regulations.

Avoid eye contact with this mixture.

Packages which have been opened must be reclosed carefully and stored in an upright position.

Prohibited equipment and procedures :

No smoking, eating or drinking in areas where the mixture is used.

7.2. Conditions for safe storage, including any incompatibilities

No data available.

Storage

Keep the container tightly closed in a dry, well-ventilated place.

Keep away from all sources of ignition - do not smoke.

Keep well away from all sources of ignition, heat and direct sunlight.

Avoid accumulation of electrostatic charges.

The floor must be impermeable and form a collecting basin so that, in the event of an accidental spillage, the liquid cannot spread beyond this area.

Packaging

Always keep in packaging made of an identical material to the original.

7.3. Specific end use(s)

No data available.

SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limits :

- ACGIH TLV (American Conference of Governmental Industrial Hygienists, Threshold Limit Values, 2010) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
64-17-5		1000 ppm		A3	
67-63-0	200 ppm	400 ppm		A4; BEI	
- Germany - AC	W (BAuA - TRO	GS 900, 29/01/20	018):		
CAS	VME :	VME :	Excess	Notes	
64-17-5		500 ppm		2(II)	
		960 mg/m^3			

SAFETY DATA SHEET (REGULATION (EC) n° 1907/2006 - REACH) IPC S.A.S.

TMP No : 84 84

PROSOLV'2B

67-63-0		200 ppm		2(II)	
		500 mg/m ³			
5989-27-5		5 ppm		4(II)	
		28 mg/m ³			
- France (INRS - ED	984 :2016) :				
CAS	VME-ppm :	VME-mg/m3:	VLE-ppm :	VLE-mg/m3:	Notes :
64-17-5	1000	1900	5000	9500	-
67-63-0	-	-	400	980	-

- UK / WEL (Workplace exposure limits, EH40/2005, 2011) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
64-17-5	1000 ppm	- ppm			
	1920 mg/m ³	- mg/m ³			
67-63-0	400 ppm	500 ppm			
	999 mg/m ³	1250 mg/m ³			

Derived no effect level (DNEL) or derived minimum effect level (DMEL):

PROPAN-2-OL (CAS: 67-63-0) **Final use:** Exposure method: Potential health effects: DNEL :

Exposure method: Potential health effects: DNEL :

Final use:

Exposure method: Potential health effects: DNEL :

Exposure method: Potential health effects: DNEL :

Exposure method: Potential health effects: DNEL :

Predicted no effect concentration (PNEC):

PROPAN-2-OL (CAS: 67-63-0) Environmental compartment: PNEC :

Workers. Dermal contact. Long term systemic effects. 888 mg/kg body weight/day

Inhalation. Long term systemic effects. 500 mg of substance/m3

Consumers. Ingestion. Long term systemic effects. 26 mg/kg body weight/day

Dermal contact. Long term systemic effects. 319 mg/kg body weight/day

Inhalation. Long term systemic effects. 89 mg of substance/m3

Soil. 28 mg/kg

Fresh water. 140.9 mg/l

Sea water. 140.9 mg/l

Intermittent waste water. 140.9 mg/l

Fresh water sediment. 552 mg/kg

2251 mg/l

Waste water treatment plant.

Environmental compartment: PNEC :

8.2. Exposure controls

Personal protection measures, such as personal protective equipment

Pictogram(s) indicating the obligation of wearing personal protective equipment (PPE) :



Use personal protective equipment that is clean and has been properly maintained.

Store personal protective equipment in a clean place, away from the work area.

Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.

- Eye / face protection

Avoid contact with eyes.

Use eye protectors designed to protect against liquid splashes

Before handling, wear safety goggles with protective sides accordance with standard EN166.

In the event of high danger, protect the face with a face shield.

Prescription glasses are not considered as protection.

Individuals wearing contact lenses should wear prescription glasses during work where they may be exposed to irritant vapours.

Provide eyewash stations in facilities where the product is handled constantly.

- Hand protection

Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN374.

Gloves must be selected according to the application and duration of use at the workstation.

Protective gloves need to be selected according to their suitability for the workstation in question : other chemical products that may be handled, necessary physical protections (cutting, pricking, heat protection), level of dexterity required.

Type of gloves recommended :

- Nitrile rubber (butadiene-acrylonitrile copolymer rubber (NBR))

Recommended properties :

- Impervious gloves in accordance with standard EN374

- Body protection

Work clothing worn by personnel shall be laundered regularly.

After contact with the product, all parts of the body that have been soiled must be washed.

SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

General information :	
Physical state :	Fluid liquid.
Important health, safety and environmental information	
pH :	Not relevant.
Boiling point/boiling range :	>35°C
Flash Point Interval :	$FP < 23^{\circ}C$
Vapour pressure (50°C) :	Not relevant.
Density :	0.865
Water solubility :	Dilutable.
Melting point/melting range :	Not specified.
Self-ignition temperature :	Not specified.
Decomposition point/decomposition range :	Not specified.

9.2. Other information

VOC (g/l) :

647

SECTION 10 : STABILITY AND REACTIVITY

10.1. Reactivity

No data available.

10.2. Chemical stability

This mixture is stable under the recommended handling and storage conditions in section 7.

10.3. Possibility of hazardous reactions

When exposed to high temperatures, the mixture can release hazardous decomposition products, such as carbon monoxide and dioxide, fumes and nitrogen oxide.

10.4. Conditions to avoid

Any apparatus likely to produce a flame or to have a metallic surface at high temperature (burners, electric arcs, furnaces etc.) must not be allowed on the premises.

Avoid :

- accumulation of electrostatic charges.

- heating
- heat
- flames and hot surfaces
- frost

10.5. Incompatible materials

10.6. Hazardous decomposition products

The thermal decomposition may release/form :

- carbon monoxide (CO)
- carbon dioxide (CO2)

SECTION 11 : TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

May have reversible effects on the eyes, such as eye irritation which is totally reversible by the end of observation at 21 days. Splashes in the eyes may cause irritation and reversible damage

LD50 = 5840 mg/kg

LD50 = 13900 mg/kg Species : Rabbit

Species : Rat

11.1.1. Substances

Acute toxicity :

PROPAN-2-OL (CAS: 67-63-0) Oral route :

Dermal route :

Inhalation route (Dusts/mist) :

OECD Guideline 402 (Acute Dermal Toxicity) LC50 > 25 mg/l

OECD Guideline 401 (Acute Oral Toxicity)

Species : Rat OECD Guideline 403 (Acute Inhalation Toxicity)

Respiratory or skin sensitisation :

PROPAN-2-OL (CAS: 67-63-0) Local lymph node stimulation test :

Non-Sensitiser. Species : Guinea pig OECD Guideline 406 (Skin Sensitisation)

Germ cell mutagenicity :

PROPAN-2-OL (CAS: 67-63-0) Mutagenesis (in vivo) :

Mutagenesis (in vitro) :

Negative. Species : Mouse OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)

Negative. Species : Bacteria OECD Guideline 471 (Bacterial Reverse Mutation Assay)

Carcinogenicity :

PROPAN-2-OL (CAS: 67-63-0) Carcinogenicity Test :

Negative. No carcinogenic effect. Species : Mouse OECD Guideline 451 (Carcinogenicity Studies)

Reproductive toxicant :

PROPAN-2-OL (CAS: 67-63-0) No toxic effect for reproduction

11.1.2. Mixture

Respiratory or skin sensitisation :

Contains at least one sensitising substance. May cause an allergic reaction.

SECTION 12 : ECOLOGICAL INFORMATION

12.1. Toxicity

12.1.1. Substances (R)-P-MENTHA-1,8-DIENE (CAS: 5989-27-5) Fish toxicity :

Crustacean toxicity :

Algae toxicity :

PROPAN-2-OL (CAS: 67-63-0) Fish toxicity :

Crustacean toxicity :

Algae toxicity :

LC50 < 1 mg/l Duration of exposure : 96 h

EC50 < 1 mg/l Duration of exposure : 48 h

ECr50 < 1 mg/l Duration of exposure : 72 h

LC50 = 9640 mg/l Species : Pimephales promelas Duration of exposure : 96 h OECD Guideline 203 (Fish, Acute Toxicity Test)

EC50 = 9714 mg/l Species : Daphnia magna Duration of exposure : 24 h OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)

ECr50 > 100 mg/l Species : Raphidocelis subcapitata Duration of exposure : 72 h

Version 5.1 (17/09/2018) - Page 9/11

PROSOLV'2B

12.1.2. Mixtures	
No aquatic toxicity data available for the mixture.	
12.2. Persistence and degradability	
12.2.1. Substances	
(R)-P-MENTHA-1,8-DIENE (CAS: 5989-27-5) Biodegradability :	no degradability data is available, the substance is considered as not degrading quickly.
PROPAN-2-OL (CAS: 67-63-0)	
Chemical oxygen demand :	DCO = 2.294 g/g
Five-day biochemical oxygen demand :	DBO5 = 1.171 g/g
Biodegradability :	Rapidly degradable. DBO5/DCO = 0.51
12.3. Bioaccumulative potential	
12.3.1. Substances	
PROPAN-2-OL (CAS: 67-63-0) Octanol/water partition coefficient :	log Koe = 0.05 OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method)
12.4. Mobility in soil	
No data available.	
12.5. Results of PBT and vPvB assessment	
No data available.	
12.6. Other adverse effects	
No data available.	
SECTION 13 : DISPOSAL CONSIDERATIONS	
Proper waste management of the mixture and/or its co	ontainer must be determined in accordance with Directive 2008/98/EC.
13.1. Waste treatment methods	
Do not pour into drains or waterways.	

Waste :

Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.

Recycle or dispose of waste in compliance with current legislation, preferably via a certified collector or company.

Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

Soiled packaging :

Empty container completely. Keep label(s) on container. Give to a certified disposal contractor.

SECTION 14 : TRANSPORT INFORMATION

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport (ADR 2017 - IMDG 2016 - ICAO/IATA 2017).

14.1. UN number

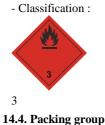
1987

14.2. UN proper shipping name

UN1987=ALCOHOLS, N.O.S.

(bioethanol, propan-2-ol)

14.3. Transport hazard class(es)



Π

14.5. Environmental hazards

14.6. Special precautions for user

ADR/RID	Class	Code	Pack gr.	Label	Ident.	LQ	Provis.	EQ	Cat.	Tunnel
	3	F1	II	3	33	1 L	274 601 640C	E2	2	D/E
					•		·			
IMDG	Class	2°Label	Pack gr.	LQ	EMS	Provis.	EQ			
	3	-	Π	1 L	F-E,S-D	274	E2			
IATA	Class	2°Label	Pack gr.	Passager	Passager	Cargo	Cargo	note	EQ	
	3	-	II	353	5 L	364	60 L	A3	E2	
								A180		
	3	-	II	Y341	1 L	-	-	A3	E2	
								A180		

For limited quantities, see part 2.7 of the OACI/IATA and chapter 3.4 of the ADR and IMDG.

For excepted quantities, see part 2.6 of the OACI/IATA and chapter 3.5 of the ADR and IMDG.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

No data available.

SECTION 15 : REGULATORY INFORMATION

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

- Classification and labelling information included in section 2:

The following regulations have been used:

- EU Regulation No. 1272/2008 amended by EU Regulation No. 2017/776 (ATP 10)
- Container information:

No data available.

- Particular provisions :

No data available.

- Labelling for detergents (EC Regulation No. 648/2004,907/2006) :

- less than 5 % : nonionic surfactants
- perfumes

- allergenic fragrances :

- (r)-p-mentha-1,8-diene
- citral

citronellol

15.2. Chemical safety assessment

No data available.

SECTION 16 : OTHER INFORMATION

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.

The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

The information in this safety data sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.

Wording of the phrases mentioned in section 3 :

H225	Highly flammable liquid and vapour.
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.
H336	May cause drowsiness or dizziness.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Abbreviations :

DNEL : Derived No-Effect Level

PNEC : Predicted No-Effect Concentration

ADR : European agreement concerning the international carriage of dangerous goods by Road.

IMDG : International Maritime Dangerous Goods.

IATA : International Air Transport Association.

ICAO : International Civil Aviation Organisation

RID : Regulations concerning the International carriage of Dangerous goods by rail.

WGK : Wassergefahrdungsklasse (Water Hazard Class).

GHS02 : Flame

GHS07 : Exclamation mark

PBT: Persistent, bioaccumulable and toxic.

vPvB : Very persistent, very bioaccumulable.

SVHC : Substances of very high concern.