

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Other

Other

Other

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SDS Ref.: 050327400

Date of issue: 28/02/2019 Version: 1.0

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture

Name : PROMOSOLV DR2
Product code : 050327400

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

1.2.1. Relevant identified uses

Use of the substance/mixture : Cleaning solvent

#### 1.2.2. Uses advised against

No additional information available

#### 1.3. Details of the supplier of the safety data sheet

Supplier

INVENTEC PERFORMANCE CHEMICALS SA

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1.4. Emergency telephone number

Emergency number : +33 (0) 1 72 11 00 03

# Country Organisation/Company Address Emergency number Comment United Kingdom National Poisons Information Service (Birmingham Centre) City Hospital Dudley Road B18 7QH Birmingham 0344 892 0111

## **SECTION 2: Hazards identification**

## 2.1. Classification of the substance or mixture

#### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Eye Irrit. 2 H319

Full text of hazard classes and H-statements : see section 16

Adverse physicochemical, human health and environmental effects

Causes serious eye irritation.

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#### 2.2. Label elements

#### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



011007

Signal word (CLP) : Warning

Hazard statements (CLP) : H319 - Causes serious eye irritation.

Precautionary statements (CLP) : P280 - Wear protective gloves, protective clothing, eye protection, face protection.

P337+P313 - If eye irritation persists: Get medical advice/attention. P501 - Dispose of contents, container to State or local regulations.

EUH-statements : EUH018 - In use may form flammable/explosive vapour-air mixture.

#### 2.3. Other hazards

No additional information available

## **SECTION 3: Composition/information on ingredients**

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
2-methylpropan-1-ol; iso-butanol	(CAS-No.) 78-83-1 (EC-No.) 201-148-0 (EC Index-No.) 603-108-00-1 (REACH-no) 01-2119484609-23	1 - 5	Flam. Liq. 3, H226 STOT SE 3, H335 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H336

Full text of H-statements: see section 16

## **SECTION 4: First aid measures**

## 4.1. Description of first aid measures

First-aid measures after inhalation : Assure fresh air breathing. Seek medical attention if ill effect develops.

First-aid measures after skin contact : Gently wash with plenty of soap and water.

First-aid measures after eye contact : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing. If irritation persists, consult an eye specialist.

First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects after eye contact : Eye irritation.

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

Treat symptomatically.

## **SECTION 5: Firefighting measures**

#### 5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

Unsuitable extinguishing media : Strong water jet.

#### 5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : On thermal decomposition (pyrolysis): Toxic and corrosive fumes are released. For further

information, refer to section 10: "Stability and Reactivity".

#### 5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained

breathing apparatus. Complete protective clothing.

#### **SECTION 6: Accidental release measures**

## 6.1. Personal precautions, protective equipment and emergency procedures

General measures : Avoid contact with skin and eyes.

#### 6.1.1. For non-emergency personnel

Emergency procedures : Evacuate area. Evacuate the danger area.

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#### 6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment.

#### 6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters.

#### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material. Collect spillage. Transfer the product into a

spare container: suitably labelled. This material and its container must be disposed of in a

safe way, and as per local legislation.

Other information : Dispose of materials or solid residues at an authorized site.

#### 6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For disposal of solid materials or residues refer to section 13: "Disposal considerations".

#### **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

Precautions for safe handling : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

smoking. Ensure good ventilation of the work station.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the

product.

## 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool. Keep container tightly closed. Keep away from

heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Incompatible materials : Strong acids. Strong bases. Strong oxidizing agents.

Storage temperature : < 50 °C

Packaging materials : Recommended materials: Uncoated steels. Unsuitable materials: Plastic materials.

#### 7.3. Specific end use(s)

No additional information available

## **SECTION 8: Exposure controls/personal protection**

8.1. Control parameters				
2-methylpropan-1-ol; iso-butanol (78-83-1)				
Austria	MAK (mg/m³)	150 mg/m³		
Austria	MAK (ppm)	50 ppm		
Austria	MAK Short time value (mg/m³)	600 mg/m³		
Austria	MAK Short time value (ppm)	200 ppm		
Belgium	Limit value (mg/m³)	154 mg/m³		
Belgium	Limit value (ppm)	50 ppm		
Czech Republic	Expoziční limity (PEL) (mg/m³)	300 mg/m³		
Czech Republic	Expoziční limity (PEL) (ppm)	100 ppm		
Czech Republic	Expoziční limity (NPK-P) (mg/m³)	600 mg/m³		
Czech Republic	Expoziční limity (NPK-P) (ppm)	200 ppm		
Denmark	Grænseværdie (langvarig) (mg/m³)	150 mg/m³		
Denmark	Grænseværdie (langvarig) (ppm)	50 ppm		
Denmark	Anmærkninger (DK)	LH		
Estonia	OEL TWA (mg/m³)	150 mg/m³		
Estonia	OEL TWA (ppm)	50 ppm		
Finland	HTP-arvo (8h) (mg/m³)	150 mg/m³		
Finland	HTP-arvo (8h) (ppm)	50 ppm		
Finland	HTP-arvo (15 min)	230 mg/m³		
Finland	HTP-arvo (15 min) (ppm)	75 ppm		
France	VME (mg/m³)	150 mg/m³		
France	VME (ppm)	50 ppm		
Germany	TRGS 900 Occupational exposure limit value (mg/m³)	310 mg/m³		
Germany	TRGS 900 Occupational exposure limit value (ppm)	100 ppm		

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2-methylpropan-1-ol; iso-butanol (78-83-1)			
Germany	TRGS 910 Acceptable concentration notes		
Greece	OEL TWA (mg/m³)	300 mg/m³	
Greece	OEL TWA (ppm)	100 ppm	
Greece	OEL STEL (mg/m³)	300 mg/m³	
Greece	OEL STEL (ppm)	100 ppm	
Ireland	OEL (8 hours ref) (mg/m³)	150 mg/m³	
Ireland	OEL (8 hours ref) (ppm)	50 ppm	
Ireland	OEL (15 min ref) (mg/m3)	225 mg/m³	
Ireland	OEL (15 min ref) (ppm)	75 ppm	
Lithuania	IPRV (mg/m³)	10 mg/m³	
Poland	NDS (mg/m³)	100 mg/m³	
Poland	NDSCh (mg/m³)	200 mg/m³	
Portugal	OEL TWA (ppm)	50 ppm	
Slovenia	OEL TWA (mg/m³)	310 mg/m³	
Slovenia	OEL TWA (ppm)	100 ppm	
Slovenia	OEL STEL (mg/m³)	310 mg/m³	
Slovenia	OEL STEL (ppm)	100 ppm	
Spain	VLA-ED (mg/m³)	154 mg/m³	
Spain	VLA-ED (ppm)	50 ppm	
Sweden	nivågränsvärde (NVG) (mg/m³)	150 mg/m³	
Sweden	nivågränsvärde (NVG) (ppm)	50 ppm	
Sweden	kortidsvärde (KTV) (mg/m³)	250 mg/m³	
Sweden	kortidsvärde (KTV) (ppm)	75 ppm	
United Kingdom	WEL TWA (mg/m³)	154 mg/m³	
United Kingdom	WEL TWA (ppm)	50 ppm	
United Kingdom	WEL STEL (mg/m³)	231 mg/m³	
United Kingdom	WEL STEL (ppm)	75 ppm	
Norway	Grenseverdier (AN) (mg/m³)	75 mg/m³	
Norway	Grenseverdier (AN) (ppm)	25 ppm	
Norway	Merknader (NO)	нт	
Switzerland	MAK (mg/m³)	150 mg/m³	
Switzerland	MAK (ppm)	50 ppm	
Switzerland	KZGW (mg/m³)	150 mg/m³	
Switzerland	KZGW (ppm)	50 ppm	
USA - ACGIH	ACGIH TWA (ppm)	50 ppm	
USA - ACGIH	Remark (ACGIH)	Skin & eye irr	
8.2 Exposure control			

## 8.2. Exposure controls

## Appropriate engineering controls:

Ensure good ventilation of the work station.

Hand protection:	
Chemically resistant protective gloves. Nitrile rubber gloves	
Eye protection:	
Safety glasses with side shields	

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#### Skin and body protection:

Wear suitable protective clothing. Safety foot-wear

#### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment. If the occupational exposure limit is exceeded: Gas mask with filter type AX

#### **Environmental exposure controls:**

Avoid release to the environment

## **SECTION 9: Physical and chemical properties**

## 9.1. Information on basic physical and chemical properties

Physical state : Liquid Colour : Colourless. Odour : slightly ethereal. Odour threshold : No data available рΗ : Not applicable Relative evaporation rate (butylacetate=1) : No data available Melting point : Not applicable : No data available Freezing point

 $\begin{array}{lll} \mbox{Boiling point} & : 57 \ \mbox{°C} \\ \mbox{Flash point} & : \mbox{None} \\ \mbox{Auto-ignition temperature} & : 405 \ \mbox{°C} \end{array}$ 

Decomposition temperature : No data available Flammability (solid, gas) : Non flammable Vapour pressure : 27,6 kPa (25°C) Relative vapour density at 20 °C : No data available

Relative density : 1,5

Solubility : Poorly soluble in water.

Log Pow : No data available

Viscosity, kinematic : No data available

Viscosity, dynamic : 0,75 mPa·s (25°C)

Explosive properties : Not explosive material according to EC criteria.

Oxidising properties : Non oxidizing material according to EC criteria.

Explosive limits : No data available

## 9.2. Other information

No additional information available

## **SECTION 10: Stability and reactivity**

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

#### 10.2. Chemical stability

Stable under normal conditions.

## 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

## 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

#### 10.5. Incompatible materials

Strong acids. Strong bases. Strong oxidizing agents.

## 10.6. Hazardous decomposition products

On thermal decomposition (pyrolysis), releases: Carbon oxides (CO, CO2), Hydrofluoric Acid. During handling at high temperatures: Perfluoroisobutylene. The PFIB formation rate is approximately 1000 times less than the rate of formation of the principal products of decomposition. There is no danger to health due to exposure to PFIB under foreseeable conditions of use.

#### **SECTION 11: Toxicological information**

#### 11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

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2-methylpropan-1-ol; iso-butanol (78-83-1)	
LD50 oral rat	2830 - 3350 mg/kg
LC50 inhalation rat (Vapours - mg/l/4h)	8000 mg/l/4h
Skin corrosion/irritation	: Not classified
	pH: Not applicable
Serious eye damage/irritation	: Causes serious eye irritation.
	pH: Not applicable
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified

	<b>SECTION 12</b>	2: Ecological	information
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: The product is not considered harmful to aquatic organisms nor to cause long-term Ecology - general

adverse effects in the environment.

Acute aquatic toxicity : Not classified

Chronic aquatic toxicity	: Not classified	
2-methylpropan-1-ol; iso-butanol (78-83-1)		
LC50 fish 1	1430 mg/l (pimephales promelas)	
EC50 Daphnia 1	1100 mg/l (daphnia magna)	
EC50 72h algae (1)	1799 mg/l	
12.2. Persistence and degradability		
2-methylpropan-1-ol; iso-butanol (78-83-1)		
Persistence and degradability	Readily biodegradable.	
12.3. Bioaccumulative potential		

12.3.	Bload	cumu	iative	potentiai

## 2-methylpropan-1-ol; iso-butanol (78-83-1)

Log Pow 0,79 Bioaccumulative potential Not potentially bioaccumulable.

#### 12.4. Mobility in soil

## 2-methylpropan-1-ol; iso-butanol (78-83-1)

≈ 69,7 mN/m Surface tension

## 12.5. Results of PBT and vPvB assessment

#### Component

2-methylpropan-1-ol; iso-butanol (78-83-1) This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

## 12.6. Other adverse effects

No additional information available

## **SECTION 13: Disposal considerations**

## 13.1. Waste treatment methods

Regional legislation (waste) : SWITZERLAND: OTD/OMoD ordinance : code 070104.

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

Dispose in a safe manner in accordance with local/national regulations.

Product/Packaging disposal recommendations

: Empty the packaging completely prior to disposal.

Additional information : Flammable vapours may accumulate in the container.

## **SECTION 14: Transport information**

In accordance with ADR / IATA / IMDG

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IMDG	IATA			
Not regulated	Not regulated			
14.2. UN proper shipping name				
Not regulated	Not regulated			
14.3. Transport hazard class(es)				
Not regulated	Not regulated			
14.4. Packing group				
Not regulated	Not regulated			
14.5. Environmental hazards				
Not regulated	Not regulated			
No supplementary information available				
	Not regulated g name Not regulated slass(es) Not regulated Not regulated ards Not regulated			

#### 14.6. Special precautions for user

#### **Overland transport**

Not regulated

#### Transport by sea

Not regulated

#### Air transport

Not regulated

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

Not applicable

## **SECTION 15: Regulatory information**

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

## 15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to REGULATION (EU) No 649/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 concerning the export and import of hazardous chemicals.

Substance(s) are not subject to Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC.

#### 15.1.2. National regulations

France

Occupational diseases : RG 32 - Affections professionnelles provoquées par le fluor, l'acide fluorhydrique et ses

sels minéraux

RG 84 - Affections engendrées par les solvants organiques liquides à usage professionnel

Germany

Reference to AwSV : Water hazard class (WGK) 1, Slightly hazardous to water (Classification according to

AwSV, Annex 1)

12th Ordinance Implementing the Federal

Immission Control Act - 12.BImSchV

: Is not subject of the 12. BlmSchV (Hazardous Incident Ordinance)

Netherlands

SZW-lijst van kankerverwekkende stoffen : None of the components are listed

SZW-lijst van mutagene stoffen

NIET-limitatieve lijst van voor de voortplanting

giftige stoffen – Borstvoeding

: None of the components are listed

: None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid

: None of the components are listed

NIET limitations liint near near de mandales

: None of the components are listed

NIET-limitatieve lijst van voor de voortplanting

giftige stoffen - Ontwikkeling

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#### Denmark

**Danish National Regulations** 

: Pregnant/breastfeeding women working with the product must not be in direct contact with the product

## 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

## **SECTION 16: Other information**

Full text of H- and EUH-statements:	
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Narcosis
H226	Flammable liquid and vapour.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
EUH018	In use may form flammable/explosive vapour-air mixture.

#### SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product