

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

Product form : Substance  
Name : THERMASOLV IM1  
EC-No. : 422-270-2  
REACH registration No : 01-0000016878-53  
Product code : 050327800

**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 : Drying 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 SAS  
26 rue des coulons  
P.O. Box BP 27  
94363 BRY SUR MARNE  
France  
T +33 (0) 1 49 83 53 00 - F +33 (0) 1 48 81 24 40  
[ContactFDS@inventec.dehon.com](mailto:ContactFDS@inventec.dehon.com)

**Other**

FRIGOGAZ Climalife kft Hungary  
Villányi út 47  
1118 Budaörs  
Hungary  
T (36) 23 431 660 - F (36) 23 431 661  
[ContactFDS@inventec.dehon.com](mailto:ContactFDS@inventec.dehon.com)

**Other**

INVENTEC PERFORMANCE CHEMICALS ITALIA S.R.L.  
Via Pusterla, 8  
20013 Magenta - Milano  
Italia  
T (39) 02 48 40 12 06 - F (39) 02 48 46 13 41  
[ContactFDS@inventec.dehon.com](mailto:ContactFDS@inventec.dehon.com)

**Other**

INVENTEC PERFORMANCE CHEMICALS Switzerland  
Z.I. Petits Champs 15 Yverdon Sud  
CH-1400 Yverdon-les-Bains  
Switzerland  
T 41(0) 24 424 80 90 - F 41(0) 24 424 80 99  
[ContactFDS@inventec.dehon.com](mailto:ContactFDS@inventec.dehon.com)

**Other**

DKF Dehon Kälte-Fachvertriebs GmbH  
Robert - Bosch - Strasse 14  
40668 Meerbusch  
Germany  
T +49-2150-7073-0 - F + 49 (0)21 50 70 73 17  
[ContactFDS@inventec.dehon.com](mailto:ContactFDS@inventec.dehon.com)

**Other**

INVENTEC PERFORMANCE CHEMICALS ESPAÑA  
Poligono Industrial Sepes Calle Kepler 10  
46520 Sagunto  
Spain  
T (34) 962 66 36 32  
[ContactFDS@inventec.dehon.com](mailto:ContactFDS@inventec.dehon.com)

**Other**

INVENTEC Performance Chemicals Netherlands BV  
Van Konijnenburgweg 84  
4612 PL Bergen op zoom  
Netherlands  
T (31) 164 212 840 - F (31) 164 212 841  
[ContactFDS@inventec.dehon.com](mailto:ContactFDS@inventec.dehon.com)

**1.4. Emergency telephone number**

Emergency number : +33 (0) 1 72 11 00 03 - 24h/24 7j/7

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

# THERMASOLV IM1

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

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

Not classified

##### Adverse physicochemical, human health and environmental effects

No additional information available

#### 2.2. Label elements

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

EUH-statements : EUH210 - Safety data sheet available on request.

#### 2.3. Other hazards

Contains no PBT/vPvB substances  $\geq 0.1\%$  assessed in accordance with REACH Annex XIII

### SECTION 3: Composition/information on ingredients

#### 3.1. Substances

Substance type : Multi-constituent  
Name : THERMASOLV IM1  
EC-No. : 422-270-2

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Reaction mass of 1,1,2,3,3,3-hexafluoro-1-methoxy-2-(trifluoromethyl)propane and 1,1,2,2,3,3,4,4,4-nonafluoro-1-methoxybutane	CAS-No.: 163702-08-7 EC-No.: 422-270-2 REACH-no: 01-2119899252-29	100	Not classified

#### 3.2. Mixtures

Not applicable

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

First-aid measures after inhalation : Move the affected person away from the contaminated area and into the fresh air. If you feel unwell, seek medical advice.  
First-aid measures after skin contact : Wash with soapy water. If case of redness or irritation, call a doctor.  
First-aid measures after eye contact : Rinse immediately and thoroughly, pulling the eyelids well away from the eye (15 minutes minimum). Remove contact lenses, if present and easy to do. Continue rinsing. Consult an ophthalmologist if irritation persists.  
First-aid measures after ingestion : Rinse mouth out with water. If you feel unwell, seek medical advice.

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

No additional information available

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

Treat symptomatically.

# THERMASOLV IM1

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

### 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 heating or during combustion : Hydrogen fluoride, carbon oxides (CO and CO<sub>2</sub>).

#### 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. Ventilate spillage area.

##### 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 : Absorb remaining liquid with sand or inert absorbent and remove to safe place. 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 : Ensure good ventilation of the work station. Avoid inhalation of decomposition products. Avoid contact with eyes. Avoid prolonged and repeated contact with skin. Wear personal protective equipment. Contaminated work clothing should not be allowed out of the workplace.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash your hands immediately after handling this product, and once again before leaving the workplace.

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

Storage conditions : Store in dry, cool, well-ventilated area. Store : away from incompatible materials.

Incompatible materials : Acids. Strong bases. Oxidizing agents.

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

No additional information available

# THERMASOLV IM1

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

##### 8.1.1 National occupational exposure and biological limit values

No additional information available

##### 8.1.2. Recommended monitoring procedures

No additional information available

##### 8.1.3. Air contaminants formed

No additional information available

##### 8.1.4. DNEL and PNEC

No additional information available

##### 8.1.5. Control banding

No additional information available

#### 8.2. Exposure controls

##### 8.2.1. Appropriate engineering controls

###### Appropriate engineering controls:

Ensure good ventilation of the work station.

##### 8.2.2. Personal protection equipment

###### Personal protective equipment symbol(s):



##### 8.2.2.1. Eye and face protection

###### Eye protection:

Safety glasses with side shields

##### 8.2.2.2. Skin protection

###### Skin and body protection:

Wear suitable protective clothing. Safety foot-wear

###### Hand protection:

Protective gloves

##### 8.2.2.3. Respiratory protection

###### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment. In the event of thermal decomposition : Self-contained breathing apparatus

##### 8.2.2.4. Thermal hazards

No additional information available

##### 8.2.3. Environmental exposure controls

###### Environmental exposure controls:

Avoid release to the environment.

###### Other information:

Safety shower. Eye fountain.

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

Physical state : Liquid  
Colour : Colourless.

# THERMASOLV IM1

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

Odour	: slightly ethereal.
Odour threshold	: Not available
Melting point	: < -25 °C
Freezing point	: Not available
Boiling point	: 60.5 – 62 °C Atm. press.: 1024 mBar Decomposition: 'no'
Flammability	: Not applicable
Explosive properties	: Not explosive material according to EC criteria.
Oxidising properties	: Non oxidizing material according to EC criteria.
Explosive limits	: Not available
Lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: Not available
Auto-ignition temperature	: 405 °C
Decomposition temperature	: Not available
pH	: Not applicable.
Viscosity, kinematic	: 0.392 mm <sup>2</sup> /s
Viscosity, dynamic	: 0.6 mPa.s (23°C)
Solubility	: Poorly soluble in water. Water: < 12 mg/kg
Partition coefficient n-octanol/water (Log Kow)	: Not available
Partition coefficient n-octanol/water (Log Pow)	: 3.9
Vapour pressure	: 27.736 kPa Temp.: 25 °C
Vapour pressure at 50°C	: Not available
Density	: 1.5305 g/cm <sup>3</sup> Type: 'density' Temp.: 20 °C
Relative density	: 1.5305 Type: 'relative density'
Relative vapour density at 20°C	: 8.6
Particle characteristics	: Not applicable

## 9.2. Other information

### 9.2.1. Information with regard to physical hazard classes

No additional information available

### 9.2.2. Other safety characteristics

Relative evaporation rate (butylacetate=1)	: 49
VOC content	: 1500 g/l

## 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

No additional information available

### 10.5. Incompatible materials

Strong acids. Strong bases. Strong oxidizers.

### 10.6. Hazardous decomposition products

At high temperatures releases: Hydrogen fluoride, Perfluoroisobutylene, Toxic vapours are released (CO, CO<sub>2</sub>).

# THERMASOLV IM1

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

### SECTION 11: Toxicological information

#### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

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

#### THERMASOLV IM1

LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
---------------	--

#### Reaction mass of 1,1,2,3,3,3-hexafluoro-1-methoxy-2-(trifluoromethyl)propane and 1,1,2,2,3,3,4,4,4-nonafluoro-1-methoxybutane (163702-08-7)

LD50 oral rat	5000
LC50 Inhalation - Rat (Vapours)	> 1000 mg/l/4h

Skin corrosion/irritation	: Not classified pH: Not applicable.
Serious eye damage/irritation	: Not classified 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

#### THERMASOLV IM1

Viscosity, kinematic	0.392 mm <sup>2</sup> /s
----------------------	--------------------------

#### Reaction mass of 1,1,2,3,3,3-hexafluoro-1-methoxy-2-(trifluoromethyl)propane and 1,1,2,2,3,3,4,4,4-nonafluoro-1-methoxybutane (163702-08-7)

Viscosity, kinematic	0.392 mm <sup>2</sup> /s
----------------------	--------------------------

#### 11.2. Information on other hazards

No additional information available

### SECTION 12: Ecological information

#### 12.1. Toxicity

Ecology - general	: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Hazardous to the aquatic environment, short-term (acute)	: Not classified
Hazardous to the aquatic environment, long-term (chronic)	: Not classified

#### THERMASOLV IM1

EC50 - Crustacea [1]	> 10.8 mg/l Test organisms (species): Daphnia magna
EC50 - Crustacea [2]	> 10 mg/l Test organisms (species): Daphnia magna
EC50 96h - Algae [1]	> 9 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 96h - Algae [2]	> 8.9 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)

# THERMASOLV IM1

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

### Reaction mass of 1,1,2,3,3,3-hexafluoro-1-methoxy-2-(trifluoromethyl)propane and 1,1,2,2,3,3,4,4,4-nonafluoro-1-methoxybutane (163702-08-7)

LC50 - Fish [1]	> 7.9 mg/l
EC50 - Crustacea [1]	> 10 mg/l
EC50 96h - Algae [1]	> 8.9 mg/l

### 12.2. Persistence and degradability

No additional information available

### 12.3. Bioaccumulative potential

#### THERMASOLV IM1

Partition coefficient n-octanol/water (Log Pow)	3.9
---	-----

### Reaction mass of 1,1,2,3,3,3-hexafluoro-1-methoxy-2-(trifluoromethyl)propane and 1,1,2,2,3,3,4,4,4-nonafluoro-1-methoxybutane (163702-08-7)

Partition coefficient n-octanol/water (Log Pow)	3.54 (20°C)
---	-------------

### 12.4. Mobility in soil

No additional information available

### 12.5. Results of PBT and vPvB assessment

No additional information available

### 12.6. Endocrine disrupting properties

No additional information available

### 12.7. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations	: The user's attention is drawn to the possible existence of specific european, national or local regulations regarding disposal.
European List of Waste (LoW) code	: 07 01 03* - organic halogenated solvents, washing liquids and mother liquors 14 06 02* - other halogenated solvents and solvent mixtures

## SECTION 14: Transport information

In accordance with ADR / IMDG / IATA

ADR	IMDG	IATA
<b>14.1. UN number or ID number</b>		
Not regulated	Not regulated	Not regulated
<b>14.2. UN proper shipping name</b>		
Not regulated	Not regulated	Not regulated
<b>14.3. Transport hazard class(es)</b>		
Not regulated	Not regulated	Not regulated

# THERMASOLV IM1

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

ADR	IMDG	IATA
<b>14.4. Packing group</b>		
Not regulated	Not regulated	Not regulated
<b>14.5. Environmental hazards</b>		
Not regulated	Not regulated	Not regulated
No supplementary information available		

### 14.6. Special precautions for user

#### Overland transport

Not regulated

#### Transport by sea

Not regulated

#### Air transport

Not regulated

### 14.7. Maritime transport in bulk according to IMO instruments

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

##### REACH Annex XVII (Restriction List)

Not listed on REACH Annex XVII

##### REACH Annex XIV (Authorisation List)

Not listed on REACH Annex XIV (Authorisation List)

##### REACH Candidate List (SVHC)

Not listed on the REACH Candidate List

##### PIC Regulation (Prior Informed Consent)

Not listed on the PIC list (Regulation EU 649/2012)

##### POP Regulation (Persistent Organic Pollutants)

Not listed on the POP list (Regulation EU 2019/1021)

##### Ozone Regulation (1005/2009)

Not listed on the Ozone Depletion list (Regulation EU 1005/2009)

##### VOC Directive (2004/42)

VOC content : 1500 g/l

##### Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

##### Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

#### 15.1.2. National regulations

No additional information available



# THERMASOLV IM1

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

### 15.2. Chemical safety assessment

A chemical safety assessment has been carried out for the substance or the mixture by the supplier

### SECTION 16: Other information

#### Full text of H- and EUH-statements:

EUH210	Safety data sheet available on request.
--------	---

Safety Data Sheet (SDS), EU

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.