

## FRAGOL THERM F-12

Version number: 2.0  
Replaces version of: 2018-02-19 (1)

Revision: 2019-01-22

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

Trade name	<b>FRAGOL THERM F-12</b>
Identification of the substance	<b>Hydrocarbons, C11-C13, isoalkanes, &lt;2% aromatics</b>
Registration number (REACH)	01-2119456810-40-xxxx
EC number	920-901-0
CAS number	246538-78-3

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

Relevant identified uses	Heat transfer fluid Industrial use
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**1.3 Details of the supplier of the safety data sheet**

FRAGOL AG  
Solinger Straße 16  
D-45481 Mülheim  
Germany

Telephone: +49 (0)208-300 02-50  
+49 (0)208-300 02-33  
e-mail: htf@fragol.de  
Website: www.fragol.de

e-mail (competent person) htf@fragol.de

**1.4 Emergency telephone number**

Emergency information service +49 (0)208-300 02-50  
This number is only available during the following office hours: Mon-Fri 09:00 - 17:00

Poison centre		
Country	Name	Telephone
United Kingdom	National Poisons Information Service (NPIS) (medical professionals only)	0344-8920111
United Kingdom	NHS (general public)	non-emergency: 111 or a doctor; emergency: 999

**SECTION 2: Hazards identification****2.1 Classification of the substance or mixture**

Classification according to Regulation (EC) No 1272/2008 (CLP)

Section	Hazard class	Category	Hazard class and category	Hazard statement
3.10	aspiration hazard	1	Asp. Tox. 1	H304

Code	Supplemental hazard information
EUH066	repeated exposure may cause skin dryness or cracking

For full text of abbreviations: see SECTION 16.

**2.2 Label elements**

## FRAGOL THERM F-12

Version number: 2.0  
Replaces version of: 2018-02-19 (1)

Revision: 2019-01-22

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

- signal word danger

- pictograms

GHS08



- hazard statements

H304 May be fatal if swallowed and enters airways.

- precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.

P331 Do NOT induce vomiting.

P370+P378 In case of fire: Use carbon dioxide, powder extinguisher, water spray or alcohol resistant foam to extinguish.

P403+P235 Store in a well-ventilated place. Keep cool.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- supplemental hazard information

EUH066 Repeated exposure may cause skin dryness or cracking.

### 2.3 Other hazards

This material is combustible, but will not ignite readily. The material can accumulate static charges, which can cause inflammation. The material can release vapors that can quickly form flammable mixtures. The accumulation of fumes can fizzle or explode when ignited. Repeated exposure may cause skin dryness or cracking. May cause respiratory tract irritation when present in a form of oil mist or vapors at high temperatures. May cause irritation to the eyes, nose, throat and lungs.

#### Results of PBT and vPvB assessment

According to the results of its assessment, this substance is not a PBT or a vPvB. According to the results of its assessment, this substance is not a PBT or a vPvB.

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Name of substance	Hydrocarbons, C11-C13, isoalkanes, <2% aromatics
Identifiers	
REACH Reg. No	01-2119456810-40-xxxx
CAS No	246538-78-3
EC No	920-901-0
Purity	100 %

#### Remarks

All the percentages given are percentages by weight unless stated otherwise. Each entry in the EC No. Column beginning with the number "9" is, until publication of the official registration number, a provisional number for the substance given by ECHA.

## FRAGOL THERM F-12

Version number: 2.0  
Replaces version of: 2018-02-19 (1)

Revision: 2019-01-22

**SECTION 4: First aid measures****4.1 Description of first aid measures**

## General notes

Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

## Following inhalation

Provide fresh air. If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. In all cases of doubt, or when symptoms persist, seek medical advice.

## Following skin contact

Wash with plenty of soap and water. In all cases of doubt, or when symptoms persist, seek medical advice.

## Following eye contact

Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart. In all cases of doubt, or when symptoms persist, seek medical advice.

## Following ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting. Call a POISON CENTER or doctor if you feel unwell.

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

Symptoms and effects are not known to date.

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

For specialist advice physicians should contact the poison centre.

**SECTION 5: Firefighting measures****5.1 Extinguishing media**

## Suitable extinguishing media

Dry extinguishing powder; Carbon dioxide (CO<sub>2</sub>)

## Unsuitable extinguishing media

Water jet.

**5.2 Special hazards arising from the substance or mixture**

## Hazardous combustion products

During fire hazardous fumes/smoke could be produced.

**5.3 Advice for firefighters**

In case of fire and/or explosion do not breathe fumes. Co-ordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

## Special protective equipment for firefighters

Self-contained breathing apparatus (EN 133). Standard protective clothing for firefighters.

## FRAGOL THERM F-12

Version number: 2.0  
Replaces version of: 2018-02-19 (1)

Revision: 2019-01-22

**SECTION 6: Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures**

For non-emergency personnel

Remove persons to safety. Ventilate affected area.

For emergency responders

Wear breathing apparatus if exposed to vapours/dust/spray/gases. Use personal protective equipment as required.

**6.2 Environmental precautions**

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it.

**6.3 Methods and material for containment and cleaning up**

Advices on how to contain a spill

Covering of drains.

Advices on how to clean up a spill

Wipe up with absorbent material (e.g. cloth, fleece).

Appropriate containment techniques

Use of adsorbent materials.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

**6.4 Reference to other sections**

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

**SECTION 7: Handling and storage****7.1 Precautions for safe handling**

Recommendations

- measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation. Use only in well-ventilated areas.

Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

**7.2 Conditions for safe storage, including any incompatibilities**

Managing of associated risks

- incompatible substances or mixtures

Keep away from alkalis, oxidising substances, acids.

Control of effects

Protect against external exposure, such as

High temperatures. UV-radiation/sunlight.

Consideration of other advice

Store in a well-ventilated place. Keep container tightly closed.

**7.3 Specific end use(s)**

There is no additional information.

## FRAGOL THERM F-12

Version number: 2.0  
Replaces version of: 2018-02-19 (1)

Revision: 2019-01-22

**SECTION 8: Exposure controls/personal protection****8.1 Control parameters****National limit values**

No information available.

**Relevant DNELs/DMELs/PNECs and other threshold levels**

No data available.

**8.2 Exposure controls**

## Appropriate engineering controls

General ventilation.

## Individual protection measures (personal protective equipment)

## Eye/face protection



Use safety goggles with side protection (EN 166).

## Skin protection

Protective clothing (EN 340 & EN ISO 13688).

## - hand protection



Wear suitable gloves. Check leak-tightness/impermeability prior to use. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. Chemical protection gloves are suitable, which are tested according to EN 374. The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

## - type of material

Nitrile rubber

## - material thickness

Use gloves with a minimum material thickness:  $\geq 0,38$  mm.

## - breakthrough times of the glove material

Use gloves with a minimum breakthrough times of the glove material: >480 minutes (permeation: level 6).

## - other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

## Respiratory protection

In case of inadequate ventilation wear respiratory protection. Type: A (against organic gases and vapours with a boiling point of  $> 65$  °C, colour code: Brown).

## Environmental exposure controls

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

## FRAGOL THERM F-12

Version number: 2.0  
Replaces version of: 2018-02-19 (1)

Revision: 2019-01-22

**SECTION 9: Physical and chemical properties****9.1 Information on basic physical and chemical properties****Appearance**

Physical state	liquid
Colour	colourless
Odour	characteristic

**Other safety parameters**

pH (value)	not determined
Melting point/freezing point	not determined
Initial boiling point and boiling range	194 °C at 1.013 mbar
Flash point	62 °C (ASTM D 93)
Evaporation rate	not determined
Flammability (solid, gas)	not relevant, (fluid)

**Explosive limits**

- lower explosion limit (LEL)	0.6 vol%
- upper explosion limit (UEL)	7 vol%

Vapour pressure	0.04 kPa at 20 °C
Density	763 kg/m <sup>3</sup> at 20 °C
Vapour density	this information is not available
Relative density	5.7 (air = 1) 0.76 (water = 1)
Solubility(ies)	not determined

**Partition coefficient**

- n-octanol/water (log KOW)	>4
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Auto-ignition temperature	222 °C (ASTM E 659)
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**Viscosity**

- kinematic viscosity	1.18 mm <sup>2</sup> /s at 40 °C
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## FRAGOL THERM F-12

Version number: 2.0  
Replaces version of: 2018-02-19 (1)

Revision: 2019-01-22

Explosive properties	none
Oxidising properties	none

**9.2 Other information**

There is no additional information.

Surface tension	24.1 mN/m (25 °C) (ECHA)
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**SECTION 10: Stability and reactivity****10.1 Reactivity**

This material is not reactive under normal ambient conditions.

**10.2 Chemical stability**

See below "Conditions to avoid".

**10.3 Possibility of hazardous reactions**

No known hazardous reactions.

**10.4 Conditions to avoid****10.5 Incompatible materials**

Oxidisers.

**10.6 Hazardous decomposition products**

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

**SECTION 11: Toxicological information****11.1 Information on toxicological effects****Classification according to GHS (1272/2008/EC, CLP)****Acute toxicity**

Shall not be classified as acutely toxic.

Acute toxicity			
Exposure route	Endpoint	Value	Species
oral	LD50	>15,000 mg/kg	rat
inhalation: vapour	LC50	>4,951 mg/m <sup>3</sup> /4h	rat
inhalation: dust/mist	LC50	>9,300 mg/m <sup>3</sup> /4h	rat
dermal	LD50	>5,000 mg/kg	rabbit

**Skin corrosion/irritation**

Shall not be classified as corrosive/irritant to skin.

**Serious eye damage/eye irritation**

Shall not be classified as seriously damaging to the eye or eye irritant.

**Respiratory or skin sensitisation**

Shall not be classified as a respiratory or skin sensitiser.

**Germ cell mutagenicity**

Shall not be classified as germ cell mutagenic.

## FRAGOL THERM F-12

Version number: 2.0  
Replaces version of: 2018-02-19 (1)

Revision: 2019-01-22

**Carcinogenicity**

Shall not be classified as carcinogenic.

**Reproductive toxicity**

Shall not be classified as a reproductive toxicant.

**Specific target organ toxicity - single exposure**

Shall not be classified as a specific target organ toxicant (single exposure).

**Specific target organ toxicity - repeated exposure**

Shall not be classified as a specific target organ toxicant (repeated exposure).

**Aspiration hazard**

May be fatal if swallowed and enters airways.

**Other information**

Vapor concentrations above recommended exposure limits are irritating to the eyes and the respiratory tract, can cause headaches and dizziness, have anesthetic effects, and may have other effects on the central nervous system. Prolonged and / or repeated skin contact with low viscosity materials may degrease the skin and possibly cause irritation and inflammation of the skin. If ingested or vomited, small amounts of fluid aspirated into the lungs may cause chemical pneumonitis or pulmonary edema.

**SECTION 12: Ecological information****12.1 Toxicity**

Shall not be classified as hazardous to the aquatic environment.

Aquatic toxicity (acute)			
Endpoint	Value	Species	Exposure time
LL50	>1,000 mg/l	fish	24 h
EL50	>1,000 mg/l	aquatic invertebrates	24 h

Aquatic toxicity (chronic)			
Endpoint	Value	Species	Exposure time
LL50	>1,000 mg/l	fish	24 h
EL50	>1,000 mg/l	aquatic invertebrates	24 h

**12.2 Persistence and degradability**

Process of degradability		
Process	Degradation rate	Time
oxygen depletion	7.3 %	4 d
carbon dioxide generation	0 %	3 d

**12.3 Bioaccumulative potential**

The substance fulfils the very bioaccumulative criterion.

n-octanol/water (log KOW)	>4
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**12.4 Mobility in soil**

Data are not available.



## FRAGOL THERM F-12

Version number: 2.0  
Replaces version of: 2018-02-19 (1)

Revision: 2019-01-22

**12.5 Results of PBT and vPvB assessment**

According to the results of its assessment, this substance is not a PBT or a vPvB.

**12.6 Other adverse effects**

Data are not available.

Endocrine disrupting potential

Not listed.

**SECTION 13: Disposal considerations****13.1 Waste treatment methods**

Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment.

Waste treatment of containers/packagings

Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

**Relevant provisions relating to waste**

List of wastes, Decision 2000/532/EC on the list of waste

For this product, no waste code number can be defined according to the European Waste List (EAK), as only the intended use by the consumer permits allocation. The waste code number shall be determined in accordance with the European waste list (Commission Decisions 200/532 / EC and 2001/118 / EC) in consultation with the waste disposal / manufacturer / authority

**Remarks**

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

**SECTION 14: Transport information**

<b>14.1 UN number</b>	Not subject to transport regulations
<b>14.2 UN proper shipping name</b>	not relevant
<b>14.3 Transport hazard class(es)</b>	none
<b>14.4 Packing group</b>	not relevant
<b>14.5 Environmental hazards</b>	non-environmentally hazardous acc. to the dangerous goods regulations
<b>14.6 Special precautions for user</b>	There is no additional information.
<b>14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code</b>	No data available.

**Information for each of the UN Model Regulations****Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN)**

Not subject to ADR, RID and ADN.

**International Maritime Dangerous Goods Code (IMDG)**

Not subject to IMDG.

**International Civil Aviation Organization (ICAO-IATA/DGR)**

Not subject to ICAO-IATA.

## FRAGOL THERM F-12

Version number: 2.0  
Replaces version of: 2018-02-19 (1)

Revision: 2019-01-22

**SECTION 15: Regulatory information****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****Relevant provisions of the European Union (EU)****Restrictions according to REACH, Annex XVII**

Dangerous substances with restrictions (REACH, Annex XVII)					
Name of substance	Name acc. to inventory	CAS No	Type of registration	Restriction	No
FRAGOL THERM F-12	this product meets the criteria for classification in accordance with Regulation No 1272/2008/EC		1907/2006/EC annex XVII	R3	3

Legend

R3

- Shall not be used in:
  - ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ash-trays,
  - tricks and jokes,
  - games for one or more participants, or any article intended to be used as such, even with ornamental aspects,
- Articles not complying with paragraph 1 shall not be placed on the market.
- Shall not be placed on the market if they contain a colouring agent, unless required for fiscal reasons, or perfume, or both, if they:
  - can be used as fuel in decorative oil lamps for supply to the general public, and,
  - present an aspiration hazard and are labelled with R65 or H304,
- Decorative oil lamps for supply to the general public shall not be placed on the market unless they conform to the European Standard on Decorative oil lamps (EN 14059) adopted by the European Committee for Standardisation (CEN).
- Without prejudice to the implementation of other Community provisions relating to the classification, packaging and labelling of dangerous substances and mixtures, suppliers shall ensure, before the placing on the market, that the following requirements are met:
  - lamp oils, labelled with R65 or H304, intended for supply to the general public are visibly, legibly and indelibly marked as follows: 'Keep lamps filled with this liquid out of the reach of children'; and, by 1 December 2010, 'Just a sip of lamp oil - or even sucking the wick of lamps - may lead to life-threatening lung damage';
  - grill lighter fluids, labelled with R65 or H304, intended for supply to the general public are legibly and indelibly marked by 1 December 2010 as follows: 'Just a sip of grill lighter may lead to life threatening lung damage';
  - lamp oils and grill lighters, labelled with R65 or H304, intended for supply to the general public are packaged in black opaque containers not exceeding 1 litre by 1 December 2010.
- No later than 1 June 2014, the Commission shall request the European Chemicals Agency to prepare a dossier, in accordance with Article 69 of the present Regulation with a view to ban, if appropriate, grill lighter fluids and fuel for decorative lamps, labelled R65 or H304, intended for supply to the general public.
- Natural or legal persons placing on the market for the first time lamp oils and grill lighter fluids, labelled with R65 or H304, shall by 1 December 2011, and annually thereafter, provide data on alternatives to lamp oils and grill lighter fluids labelled R65 or H304 to the competent authority in the Member State concerned. Member States shall make those data available to the Commission.

**List of substances subject to authorisation (REACH, Annex XIV) / SVHC - candidate list**

Not listed.

**Regulation 166/2006/EC concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)**

Not listed.

**Directive 2000/60/EC establishing a framework for Community action in the field of water policy (WFD)**

Not listed.

**Regulation 98/2013/EU on the marketing and use of explosives precursors**

Not listed.

**15.2 Chemical Safety Assessment**

No Chemical Safety Assessment has been carried out for this substance by the supplier.

## FRAGOL THERM F-12

Version number: 2.0  
Replaces version of: 2018-02-19 (1)

Revision: 2019-01-22

## SECTION 16: Other information

## Indication of changes (revised safety data sheet)

Section	Former entry (text/value)	Actual entry (text/value)
1.1	Identification of the substance: Hydrocarbons, C11-C13, isoalkanes, <2% aromatics	Trade name: FRAGOL THERM F-12
1.1	Trade name: FRAGOL THERM F-12	Identification of the substance: Hydrocarbons, C11-C13, isoalkanes, <2% aromatics
1.1	CAS number: 90622-58-5	CAS number: 246538-78-3
1.4		Poison centre: change in the listing (table)
2.2		- precautionary statements: change in the listing (table)
3.1	CAS No: 90622-58-5	CAS No: 246538-78-3
4.1	Following inhalation: Provide fresh air. If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions.	Following inhalation: Provide fresh air. If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. In all cases of doubt, or when symptoms persist, seek medical advice.
4.1	Following skin contact: Wash with plenty of soap and water.	Following skin contact: Wash with plenty of soap and water. In all cases of doubt, or when symptoms persist, seek medical advice.
4.1	Following eye contact: Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart.	Following eye contact: Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart. In all cases of doubt, or when symptoms persist, seek medical advice.
5.1	Suitable extinguishing media: Dry extinguishing powder; Carbon dioxide (CO <sub>2</sub> ); Foam	Suitable extinguishing media: Dry extinguishing powder; Carbon dioxide (CO <sub>2</sub> )
7.2	- flammability hazards: Keep away from sources of ignition - No smoking. Take precautionary measures against static discharge.	
7.2	- incompatible substances or mixtures: Observe hints for combined storage. Keep away from alkalis, oxidising substances, acids.	- incompatible substances or mixtures: Keep away from alkalis, oxidising substances, acids.
8.2	Skin protection: Protective clothing (EN 340).	Skin protection: Protective clothing (EN 340 & EN ISO 13688).
8.2	Material thickness: ≥ 0,38 mm	Material thickness: Use gloves with a minimum material thickness: ≥ 0,38 mm.
8.2	Breakthrough times of the glove material: >480 minutes (permeation: level 6).	Breakthrough times of the glove material: Use gloves with a minimum breakthrough times of the glove material: >480 minutes (permeation: level 6).
9.1	Initial boiling point and boiling range: 197 °C at 1,013 mbar	Initial boiling point and boiling range: 194 °C at 1.013 mbar
9.1	Upper explosion limit (UEL): 6 vol%	Upper explosion limit (UEL): 7 vol%
9.2	Other information: Of no significance.	Other information: There is no additional information.
10.4	Conditions to avoid: Keep away from heat.	Conditions to avoid

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

## FRAGOL THERM F-12

Version number: 2.0  
Replaces version of: 2018-02-19 (1)

Revision: 2019-01-22

Section	Former entry (text/value)	Actual entry (text/value)
11.1		Acute toxicity: change in the listing (table)
12.1		Aquatic toxicity (acute): change in the listing (table)
12.2		Process of degradability: change in the listing (table)
12.3	Bioaccumulative potential	Bioaccumulative potential: The substance fulfils the very bioaccumulative criterion.
13.1		Relevant provisions relating to waste
13.1		List of wastes, Decision 2000/532/EC on the list of waste: For this product, no waste code number can be defined according to the European Waste List (EAK), as only the intended use by the consumer permits allocation. The waste code number shall be determined in accordance with the European waste list (Commission Decisions 200/532 / EC and 2001/118 / EC) in consultation with the waste disposal / manufacturer / authority
15.1	List of substances subject to authorisation (REACH, Annex XIV): Not listed. None of the ingredients are listed.	List of substances subject to authorisation (REACH, Annex XIV) / SVHC - candidate list: Not listed.
16		Abbreviations and acronyms: change in the listing (table)
16	Disclaimer: This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.	Disclaimer: This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product. FRAGOL cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.

## Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR	Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
DGR	Dangerous Goods Regulations (see IATA/DGR)
DMEL	Derived Minimal Effect Level
DNEL	Derived No-Effect Level
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union)
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association

# Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

## FRAGOL THERM F-12

Version number: 2.0  
Replaces version of: 2018-02-19 (1)

Revision: 2019-01-22

Abbr.	Descriptions of used abbreviations
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")
NLP	No-Longer Polymer
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
SVHC	Substance of Very High Concern
vPvB	Very Persistent and very Bioaccumulative

### Key literature references and sources for data

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU.

Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

### List of relevant phrases (code and full text as stated in chapter 2 and 3)

Code	Text
H304	May be fatal if swallowed and enters airways.

### Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product. FRAGOL cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.