

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

FRAGOLTHERM Q-32-N

Version number: 4.0 Replaces version of: 2019-07-16 (3) Revision: 2020-03-09

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

FOR THIS PRODUCT IT IS NOT LEGALLY REQUIRED TO PROVIDE AN SDS UNDER ARTICLE 31 OF THE REACH REGULATION, BECAUSE THE PRODUCT IS NOT CLASSIFIED AS HAZARDOUS. THIS DOCUMENT IS PREPARED AS A VOLUNTARY AND ADDITIONAL SERVICE TO PROVIDE GENERAL SAFETY INFORMATION

1.1 Product identifier

Trade name	FRAGOLTHERM Q-32-N
Identification of the substance	Distillates (petroleum), hydrotreated heavy paraffinic (IP 346 < 3%; > 20.5 mm2/s @ 40°C)
Registration number (REACH)	01-2119484627-25-xxxx
EC number	265-157-1
CAS number	64742-54-7
	an and allowed and a second standard standards

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

Relevant identified uses	Heat transfer fluid
Uses advised against	Do not use for private purposes (household)

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

e-mail (competent person)

1.4 Emergency telephone number

Emergency information service

htf@fragol.de

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

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

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

This substance does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.

Additional information

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

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP) Not required.

2.3 Other hazards

Special danger of slipping by leaking/spilling product.

Results of PBT and vPvB assessment

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



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

FRAGOLTHERM Q-32-N

Version number: 4.0 Replaces version of: 2019-07-16 (3) Revision: 2020-03-09

SECTION 3: Composition/information on ingredients		
3.1 Substances		
Name of substance	FRAGOLTHERM Q-32-N	
Identifiers		
REACH Reg. No	01-2119484627-25-xxxx	
CAS No	64742-54-7	
EC No	265-157-1	
Index No	649-467-00-8	
	Substances Name of substance Identifiers REACH Reg. No CAS No EC No	

Remarks

Harmonised classification (the classification of the substance corresponds to the entry in the list according to 1272/2008/EC, Annex VI). The classification as a carcinogen is not required. The substance contains less than 3 % DMSO extract.

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. In case of unconsciousness place person in the recovery position. Never give anything by mouth. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice.

Following inhalation

Provide fresh air. If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. In case of respiratory tract irritation, consult a physician.

Following skin contact

Take off contaminated clothing. After contact with skin, wash immediately with plenty of water and soap.

Following eye contact

Irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Following ingestion

Rinse mouth immediately and drink plenty of water. Do NOT induce vomiting.

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

Treat symptomatically. Observe aspiration hazard if vomiting occurs.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water spray, Alcohol resistant foam, Dry extinguishing powder, Carbon dioxide (CO2)

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, Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide (CO2)



Revision: 2020-03-09

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

FRAGOLTHERM Q-32-N

Version number: 4.0 Replaces version of: 2019-07-16 (3)

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.

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. Wear suitable protective clothing and gloves.

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

Advice on how to contain a spill

Covering of drains.

Advice on how to clean up a spill

Wipe up with absorbent material (e.g. cloth, fleece). Collect spillage. Absorbent material (e.g. sand, diatomaceous earth, acid binder, universal binder, sawdust, etc.).

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. Take precautionary measures against static discharge. In use, may form flammable/explosive vapour-air mixture.

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

- flammability hazards

Keep away from sources of ignition - No smoking. Take precautionary measures against static discharge.

- incompatible substances or mixtures

Observe hints for combined storage.



Revision: 2020-03-09

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

FRAGOLTHERM Q-32-N

Version number: 4.0 Replaces version of: 2019-07-16 (3)

Control of effects

Protect against external exposure, such as

Heat. High temperatures. UV-radiation/sunlight. Static discharges.

Consideration of other advice

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

- specific designs for storage rooms or vessels

- storage temperature

7.3 Specific end use(s)

There is no additional information.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

National limit values

No information available.

Relevant DNELs/DMELs/PNECs and other threshold levels

Relevant PNECs and other threshold levels				
Endpoint	Threshold level	Organism	Environmental compart- ment	Exposure time
PNEC	9.33 ^{mg} / _{kg}	aquatic organisms	water	short-term (single instance)

Recommended storage temperature: -5 - 40 °C

8.2 Exposure controls

Appropriate engineering controls

General ventilation.

Individual protection measures (personal protective equipment)

Eye/face protection

Use safety goggle with side protection (EN 166).

Skin protection

Protective clothing (EN 340 & EN ISO 13688).

- hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. 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.

- type of material

FKM: fluoro-elastomer. PVA: polyvinyl alcohol. Nitrile.

- 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-P2 (combined filters against particles and organic gases and vapours, colour code: Brown/White). Breathing apparatus only in case of aerosol or mist formation.



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

FRAGOLTHERM Q-32-N

Version number: 4.0 Replaces version of: 2019-07-16 (3)

Revision: 2020-03-09

Environmental exposure controls

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

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state	liquid
Colour	light yellow
Odour	characteristic
Other safety parameters	
pH (value)	not determined
Melting point/freezing point	not determined
Initial boiling point and boiling range	322.7 – 477.8 °C (ASTM D-2887)
Flash point	220 °C (ASTM D 92)
Evaporation rate	not determined
Flammability (solid, gas)	not relevant (fluid)
Explosive limits	not determined
Vapour pressure	not determined
Density	0.86 – 0.9 ^{kg} / _l at 20 °C (ASTM D 4052)
Vapour density	this information is not available
Solubility(ies)	
- water solubility	insoluble
Partition coefficient	
- n-octanol/water (log KOW)	this information is not available
Auto-ignition temperature	not determined
Viscosity	
- kinematic viscosity	4.5 – 5.5 cSt at 100 °C 31 cSt at 40 °C (ASTM D 445)
Explosive properties	none
Oxidising properties	none

9.2 Other information

There is no additional information.



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

FRAGOLTHERM Q-32-N

Version number: 4.0 Replaces version of: 2019-07-16 (3)

SECTION 10: Stability and reactivity

10.1 Reactivity

This material is not reactive under normal ambient conditions.

10.2 Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

10.3 Possibility of hazardous reactions

Vapours are heavier than air, spread along floors and form explosive mixtures with air.

10.4 Conditions to avoid

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

Physical stresses which might result in a hazardous situation and have to be avoided: Strong shocks

10.5 Incompatible materials

Oxidisers. Combustible materials.

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)

This substance does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.

Acute toxicity

Shall not be classified as acutely toxic.

Acute toxicity			
Exposure route	Endpoint	Value	Species
oral	LD50	>5,000 ^{mg} / _{kg}	rat
inhalation: dust/mist	LC50	2.18 ^{mg} / _l /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. OECD Guideline 405.

Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser. OECD Guideline 406.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

Carcinogenicity

Shall not be classified as carcinogenic. This product contains mineral oils which are considered highly refined and are not considered carcinogenic according to IARC. The IP-346 test has shown that all of the oils contained in this product contain less than 3% extractable substances.

Revision: 2020-03-09



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

FRAGOLTHERM Q-32-N

Version number: 4.0 Replaces version of: 2019-07-16 (3)

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

Shall not be classified as presenting an aspiration hazard.

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	>100 ^{mg} / _l	fish	96 h
EL50	>10,000 ^{mg} / _l	aquatic invertebrates	24 h

Aquatic toxicity (chronic)

Endpoint	Value	Species	Exposure time
LL50	>10,000 ^{mg} / _l	aquatic invertebrates	24 h
EL50	>10,000 ^{mg} / _l	aquatic invertebrates	24 h

12.2 Persistence and degradability

Poorly biodegradable. Hydrocarbons that enter the air quickly undergo photodegradation in the reaction with hydroxyl radicals under the influence of the sun's rays. Halftime is 1 day shorter.

Process of degradability		
Process	Degradation rate	Time
biotic/abiotic	31.13 %	28 d

12.3 Bioaccumulative potential

Not relevant: "UVCB substance".

12.4 Mobility in soil

Not relevant: "UVCB substance".

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.



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

FRAGOLTHERM Q-32-N

Version number: 4.0 Replaces version of: 2019-07-16 (3) Revision: 2020-03-09

Remarks

Very Low Volatility Product Hydrocarbons that are part of the product have little or no tendency to enter the atmosphere. Product is insoluble in water and lighter than water. This collects on the water surface and forms a layer that makes it difficult to change oxygen. Hydrocarbons with a higher particle weight can be subject to sedimentation in water. Product spreads in the soil in a restricted manner; this can get inside the soil and contaminate the groundwater.

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

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

Waste catalogue ordinance (Germany) According to the European Waste Catalog (EWC), waste code numbers are not productrelated but application-related. Waste code numbers should be issued by the consumer, if possible in consultation with the waste disposal authorities

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.

SEC	SECTION 14: Transport information		
14.1	UN number	not subject to transport regulations	
14.2	UN proper shipping name	not relevant	
14.3	Transport hazard class(es)	none	
14.4	Packing group	not assigned to a packing group	
14.5	Environmental hazards	non-environmentally hazardous acc. to the dangerous goods regu- lations	

14.6 Special precautions for user

There is no additional information.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code Not applicable.

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.



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

FRAGOLTHERM Q-32-N

Version number: 4.0 Replaces version of: 2019-07-16 (3)

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

Not listed.

List of substances subject to authorisation (REACH, Annex XIV) / SVHC - candidate list Not listed.

15.2 Chemical Safety Assessment

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

SECTION 16: Other information

Indication of changes (revised safety data sheet)

Section	Former entry (text/value)	Actual entry (text/value)
1.1	Registration number (REACH): 01-2119488706-23-xxxx	Registration number (REACH): 01-2119484627-25-xxxx
1.1	EC number: 265-090-8	EC number: 265-157-1
1.1	CAS number: 64741-88-4	CAS number: 64742-54-7
3.1	REACH Reg. No: 01-2119488706-23-xxxx	REACH Reg. No: 01-2119484627-25-xxxx
3.1	CAS No: 64741-88-4	CAS No: 64742-54-7
3.1	EC No: 265-090-8	EC No: 265-157-1
3.1	Index No: 649-454-00-7	Index No: 649-467-00-8
3.1		Remarks: Harmonised classification (the classification of the sub- stance corresponds to the entry in the list according to 1272/2008/EC, Annex VI). The classification as a carci- nogen is not required. The substance contains less than 3 % DMSO extract.
4.1	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.	General notes: Do not leave affected person unattended. Remove victim out of the danger area. In case of unconsciousness place person in the recovery position. Never give anything by mouth. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek med- ical advice.
4.1	Following inhalation: Provide fresh air. If breathing is irregular or stopped, im- mediately seek medical assistance and start first aid ac- tions. In all cases of doubt, or when symptoms persist, seek medical advice.	Following inhalation: Provide fresh air. If breathing is irregular or stopped, im- mediately seek medical assistance and start first aid ac- tions. In case of respiratory tract irritation, consult a phys- ician.
4.1	Following eye contact: Remove contact lenses, if present and easy to do. Contin- ue 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 eye contact: Irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
11.1		Acute toxicity: change in the listing (table)

Revision: 2020-03-09



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

FRAGOLTHERM Q-32-N

Version number: 4.0 Replaces version of: 2019-07-16 (3)

Section	Former entry (text/value)	Actual entry (text/value)
12.1		Aquatic toxicity (acute): change in the listing (table)
12.2	Persistence and degradability: The substance is readily biodegradable.	Persistence and degradability: Poorly biodegradable. Hydrocarbons that enter the air quickly undergo photodegradation in the reaction with hy- droxyl radicals under the influence of the sun's rays. Half- time is 1 day shorter.
12.2		Process of degradability: change in the listing (table)
12.3	Bioaccumulative potential: No potential for bioaccumulation.	Bioaccumulative potential: Not relevant: "UVCB substance".
12.4	Mobility in soil: Data are not available.	Mobility in soil: Not relevant: "UVCB substance".
12.6		Remarks: Very Low Volatility Product Hydrocarbons that are part of the product have little or no tendency to enter the atmo- sphere. Product is insoluble in water and lighter than wa- ter. This collects on the water surface and forms a layer that makes it difficult to change oxygen. Hydrocarbons with a higher particle weight can be subject to sedimenta- tion in water. Product spreads in the soil in a restricted manner; this can get inside the soil and contaminate the groundwater.
13.1	List of wastes, Decision 2000/532/EC on the list of waste: According to the European Waste Catalog (EWC), waste code numbers are not product-related but application-re- lated. Waste code numbers should be issued by the con- sumer, if possible in consultation with the waste disposal authorities	List of wastes, Decision 2000/532/EC on the list of waste: Waste catalogue ordinance (Germany) According to the European Waste Catalog (EWC), waste code numbers are not product-related but application-related. Waste code numbers should be issued by the consumer, if pos- sible in consultation with the waste disposal authorities
16		Abbreviations and acronyms: change in the listing (table)

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	
EL50	Effective Loading 50 %: the EL50 corresponds to the loading rate required to produce a response in 50% of the test organisms	
ELINCS	European List of Notified Chemical Substances	
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations	
ΙΑΤΑ	International Air Transport Association	



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

FRAGOLTHERM Q-32-N

Version number: 4.0 Replaces version of: 2019-07-16 (3) Revision: 2020-03-09

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	
index No	The Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008	
LC50	Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethal- ity during a specified time interval	
LD50	Lethal Dose 50 %: the LD50 corresponds to the dose of a tested substance causing 50 % lethality during a spe- cified time interval	
LL50	Lethal Loading 50 %: the LL50 corresponds to the loading rate causing 50 % lethality	
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 concern- ing the International carriage of Dangerous goods by Rail)	
SVHC	Substance of Very High Concern	
UVCB	Substance of Unknown or Variable composition, Complex reaction products or Biological materials	
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).

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.