

SAFETY DATA SHEET according to Regulation (EC) No. 1907/2006

BREFO I 249

Version 2.0

Print Date 25.11.2017

Revision date / valid from 05.11.2015

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

Trade name : BREFO I 249

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

Use of the Substance/Mixture : Defoamer

Uses advised against : At this moment we have not identified any uses advised against

1.3. Details of the supplier of the safety data sheet

Company : Brenntag GmbH
Messeallee 11
DE 45131 Essen

Telephone : +49 (0)201 6496-0
Telefax : +49 (0)201 6496-2039
E-mail address : InfoSDB@brenntag.de
Responsible/issuing person : Umwelt / Sicherheit

1.4. Emergency telephone numberEmergency telephone number : Emergency telephone number : +49 (0)201-6496-0
Available 24h/7d**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****Classification according to Regulation (EC) No 1272/2008**

The product is not classified as dangerous according to Regulation (EC) No. 1272/2008.

Most important adverse effects

Human Health : See section 11 for toxicological information.

Physical and chemical hazards : See section 9 for physicochemical information.

Potential environmental : See section 12 for environmental information.

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effects

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008

The product is not labeled as dangerous according to Regulation (EC) No. 1272/2008.

Additional Labelling:

EUH210 Safety data sheet available on request.

2.3. Other hazards

For Results of PBT and vPvB assessment see section 12.5.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical nature : Dispersion of organic solids in hydrocarbons.

Hazardous components	Amount [%]	Classification (REGULATION (EC) No 1272/2008)	
		Hazard class / Hazard category	Hazard statements
Distillates (petroleum), hydrotreated light paraffinic			
Index-No. : 649-468-00-3	< 20	Asp. Tox.1	H304
CAS-No. : 64742-55-8			
EC-No. : 265-158-7			
White mineral oil (petroleum)			
CAS-No. : 8042-47-5	< 20	Asp. Tox.1	H304
EC-No. : 232-455-8			
Registration : 01-2119487078-27-xxxx			
Distillates (petroleum), hydrotreated light naphthenic			
Index-No. : 649-466-00-2	< 20	Asp. Tox.1	H304
CAS-No. : 64742-53-6			
EC-No. : 265-156-6			
Distillates (petroleum), hydrotreated heavy paraffinic			
Index-No. : 649-467-00-8	< 20	Asp. Tox.1	H304
CAS-No. : 64742-54-7			
EC-No. : 265-157-1			
Registration : 01-2119484627-25-xxxx			
Hydrocarbons, C15-C19, n-alkanes, isoalkanes, <2% aromatics			
EC-No. : 940-730-5	< 20	Asp. Tox.1	H304

For the full text of the H-Statements mentioned in this Section, see Section 16.

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

General advice	: Move out of dangerous area. Take off all contaminated clothing immediately.
If inhaled	: Remove to fresh air. Consult a physician after significant exposure. If unconscious place in recovery position and seek medical advice.
In case of skin contact	: Wash off immediately with soap and plenty of water. Wash off with warm water. If skin irritation persists, call a physician.
In case of eye contact	: In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
If swallowed	: Rinse mouth. Do NOT induce vomiting. Call a physician immediately.

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

Symptoms	: See Section 11 for more detailed information on health effects and symptoms.
Effects	: See Section 11 for more detailed information on health effects and symptoms.

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

Treatment	: Treatment according to the doctor's diagnosis of the patient.
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SECTION 5: Firefighting measures
5.1. Extinguishing media

Suitable extinguishing media	: Alcohol-resistant foam, Water spray jet, Carbon dioxide (CO ₂)
Unsuitable extinguishing media	: High volume water jet

5.2. Special hazards arising from the substance or mixture

Specific hazards during firefighting	: Combustible liquid. In case of fire hazardous decomposition products may be produced such as: Carbon oxides, Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
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5.3. Advice for firefighters

Special protective equipment for firefighters	: In the event of fire, wear self-contained breathing apparatus. Wear appropriate body protection (full protective suit)
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Further advice : Cool closed containers exposed to fire with water spray. Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

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

Personal precautions : Use personal protective equipment. Provide adequate ventilation. Keep away from sources of ignition - No smoking. Avoid contact with skin and eyes. Danger of slipping if spilled

6.2. Environmental precautions

Environmental precautions : Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration. If the product contaminates rivers and lakes or drains inform respective authorities. If material reaches soil inform authorities responsible for such cases.

6.3. Methods and materials for containment and cleaning up

Methods and materials for containment and cleaning up : Ensure adequate ventilation. Large spills should be collected mechanically (remove by pumping) for disposal. Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders). Keep in suitable, closed containers for disposal. Treat recovered material as described in the section "Disposal considerations".

6.4. Reference to other sections

See Section 1 for emergency contact information.
See Section 8 for information on personal protective equipment.
See Section 13 for waste treatment information.

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

Advice on safe handling : Provide sufficient air exchange and/or exhaust in work rooms. Danger of slipping if spilled

Hygiene measures : Take off all contaminated clothing immediately. Do not breathe gas/fumes/vapour/spray. Avoid contact with the skin and the eyes. Keep away from food, drink and animal feedingstuffs. Smoking, eating and drinking should be prohibited in the application area. Wash hands before breaks and at the end of workday.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Keep in an area equipped with solvent resistant flooring. Keep containers tightly closed in a dry, cool and well-ventilated place.

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Advice on protection against fire and explosion : Combustible liquid. Keep away from open flames, hot surfaces and sources of ignition. Do not smoke.

Further information on storage conditions : Keep away from heat. Protect from frost.

German storage class : 10 Combustible liquids

7.3. Specific end use(s)

Specific use(s) : No information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Other Occupational Exposure Limit Values

(Additional) Information : Contains no substances with occupational exposure limit values.

8.2. Exposure controls

Appropriate engineering controls

Ensure adequate ventilation.

Personal protective equipment

Respiratory protection

Advice : No personal respiratory protective equipment normally required. Required if vapours or aerosol are released.
Recommended Filter type:
Combination filter: A-P2

Hand protection

Advice : Solvent-resistant gloves
The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other.
To achieve a sufficient splashguard (min. break through time 10 min - 60 min) the following combination of gloves is recommended: combination of HPPE laminated film (glove thickness: 0.062 mm) and a two-layer glove consisting of nitrile rubber as coating material (glove thickness: 0.4 mm) and nylon as support material. Protective gloves should be replaced at first signs of wear.

Eye protection

Advice : Tightly fitting safety goggles

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Advice : Protective work clothing

Environmental exposure controls

General advice : Do not flush into surface water or sanitary sewer system.
Avoid subsoil penetration.
If the product contaminates rivers and lakes or drains inform respective authorities.
If material reaches soil inform authorities responsible for such cases.

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

Form	:	liquid viscous
Colour	:	no data available
Odour	:	no data available
Odour Threshold	:	no data available
pH	:	Not applicable
Freezing point	:	no data available
Boiling point/boiling range	:	no data available
Flash point	:	> 120 °C
Evaporation rate	:	no data available
Flammability (solid, gas)	:	Not applicable
Upper explosion limit	:	Not applicable
Lower explosion limit	:	Not applicable
Vapour pressure	:	no data available
Relative vapour density	:	no data available
Density	:	0,865 g/cm ³ (20 °C)
Water solubility	:	dispersible
Partition coefficient: n-octanol/water	:	no data available
Auto-ignition temperature	:	no data available

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Thermal decomposition	:	no data available
Viscosity, dynamic	:	200 mPa.s (20 °C)
Viscosity, kinematic	:	> 20,5 mm ² /s (40 °C)
Explosivity	:	Formation of explosive air/vapour mixtures is possible.
Oxidizing properties	:	none

9.2. Other information

No further information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Advice : No decomposition if stored and applied as directed.

10.2. Chemical stability

Advice : Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions : Formation of explosive air/vapour mixtures is possible.

10.4. Conditions to avoid

Conditions to avoid : Heat, flames and sparks. Extremes of temperature and direct sunlight.

Thermal decomposition : no data available

10.5. Incompatible materials

Materials to avoid : Strong oxidizing agents

10.6. Hazardous decomposition products

Hazardous decomposition products : Fire may cause evolution of: Carbon oxides

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Oral

For this mixture is no data available., Please find this information in

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the listing of the component/components below in the MSDS.

Inhalation

For this mixture is no data available.
Please find this information in the listing of the
component/components below in the MSDS.

Dermal

For this mixture is no data available.
Please find this information in the listing of the
component/components below in the MSDS.

Irritation**Skin**

Result : Based on available data, the classification criteria are not met.

Eyes

Result : Based on available data, the classification criteria are not met.

Sensitisation

Result : Based on available data, the classification criteria are not met.

CMR effects**CMR Properties**

Carcinogenicity : Contains no ingredient listed as a carcinogen

Mutagenicity : Contains no ingredient listed as a mutagen

Reproductive toxicity : Contains no ingredient listed as toxic to reproduction

Specific Target Organ Toxicity**Single exposure**

remark : The substance or mixture is not classified as specific target organ
toxicant, single exposure.

Repeated exposure

remark : The substance or mixture is not classified as specific target organ
toxicant, repeated exposure.

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Other toxic properties

Repeated dose toxicity

There is no data available for this product.
Please find this information in the listing of the component/components below in the MSDS.

Aspiration hazard

Based on available data, the classification criteria are not met.

Further information

Other relevant toxicity information : Handle in accordance with good industrial hygiene and safety practice.

Experience with human exposure : Health injuries are not known or expected under normal use.

Component:	Distillates (petroleum), hydrotreated light paraffinic	CAS-No. 64742-55-8
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Acute toxicity

Oral

LD50 : > 5000 mg/kg (Rat)

Inhalation

no data available

Dermal

LD50 : > 3000 mg/kg (Rabbit)

Component:	White mineral oil (petroleum)	CAS-No. 8042-47-5
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Acute toxicity

Oral

LD50 : > 5000 mg/kg (Rat) (OECD Test Guideline 401)

Inhalation

LC50 : > 5 mg/l (Rat; 4 h; dust/mist) (OECD Test Guideline 403)

Dermal

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LD50 Dermal : > 5000 mg/kg (Rabbit) (OECD Test Guideline 402)

Component: Distillates (petroleum), hydrotreated light naphthenic CAS-No. 64742-53-6

Acute toxicity**Oral**

LD50 : > 5000 mg/kg (Rat)

Inhalation

LC50 : > 5 mg/l (Rat; 4 h)

Dermal

LD50 : > 5000 mg/kg (Rabbit)

Component: Distillates (petroleum), hydrotreated heavy paraffinic CAS-No. 64742-54-7

Acute toxicity**Oral**

LD50 : > 5000 mg/kg (Rat)

Inhalation

LC50 : > 5 mg/l (Rat; 4 h)

Dermal

LD50 : > 5000 mg/kg (Rabbit)

Component: Hydrocarbons, C15-C19, n-alkanes, isoalkanes, <2% aromatics

Acute toxicity**Oral**

LD50 : > 5000 mg/kg)

Inhalation

LC50 : Greater than near saturated vapour concentration.

Dermal

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|| LD50 : > 2000 mg/kg (Rabbit)

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

Component:	Distillates (petroleum), hydrotreated light paraffinic	CAS-No. 64742-55-8
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Acute toxicity**Fish**

|| no data available

Toxicity to daphnia and other aquatic invertebrates

|| no data available

algae

|| no data available

Component:	White mineral oil (petroleum)	CAS-No. 8042-47-5
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Acute toxicity**Fish**

|| LC50 : > 100 mg/l (Fish; 96 h)

|| NOEC : >= 100 mg/l (Fish; 96 h)

Toxicity to daphnia and other aquatic invertebrates

|| EC50 : > 100 mg/l (Daphnia (water flea); 48 h)

|| NOEC : >= >= 100 mg/l (Daphnia (water flea); 48 h)

algae

|| NOEC : >= 100 mg/l (algae; 72 h)

Component:	Distillates (petroleum), hydrotreated light naphthenic	CAS-No. 64742-53-6
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Acute toxicity**Fish**

|| EL50 : > 100 mg/l (Fish)

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Toxicity to daphnia and other aquatic invertebrates

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EL50 : > 100 mg/l (invertebrates)

algae

||

EL50 : > 100 mg/l (algae)

Bacteria

||

EL50 : > 100 mg/l (Bacteria)

Component:	Distillates (petroleum), hydrotreated heavy paraffinic	CAS-No. 64742-54-7
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Acute toxicity**Fish**

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LL/EL/IL50 : > 100 mg/l

Toxicity to daphnia and other aquatic invertebrates

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LL/EL/IL50 : > 100 mg/l

algae

||

LL/EL/IL50 : > 100 mg/l

Bacteria

||

LL/EL/IL50 : > 100 mg/l

Component:	Hydrocarbons, C15-C19, n-alkanes, isoalkanes, <2% aromatics
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Acute toxicity**Fish**

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LL/EL/IL50 : > 100 mg/l

Toxicity to daphnia and other aquatic invertebrates

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LL/EL/IL50 : > 100 mg/l

algae

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|| LL/EL/IL50 : > 100 mg/l

Bacteria

|| LL/EL/IL50 : > 100 mg/l

12.2. Persistence and degradability

Component:	Distillates (petroleum), hydrotreated light paraffinic	CAS-No. 64742-55-8
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Persistence and degradability
Persistence

|| Result : no data available

Biodegradability

|| Result : Not readily biodegradable.
estimated

Component:	White mineral oil (petroleum)	CAS-No. 8042-47-5
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Persistence and degradability
Persistence

|| Result : no data available

Biodegradability

|| Result : > 60 % (activated sludge; Exposure Time: 28 d)(OECD Test Guideline 301B)
Readily biodegradable

Component:	Distillates (petroleum), hydrotreated light naphthenic	CAS-No. 64742-53-6
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Persistence and degradability
Persistence

|| Result : no data available

Biodegradability

|| Result : Readily biodegradable
The organic components of the product are readily biodegradable.

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Component:	Distillates (petroleum), hydrotreated heavy paraffinic	CAS-No. 64742-54-7
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Persistence and degradability

Persistence

Result	: no data available
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Biodegradability

Result	: Readily biodegradable The main components are readily biodegradable.
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Component:	Hydrocarbons, C15-C19, n-alkanes, isoalkanes, <2% aromatics
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Persistence and degradability

Persistence

Result	: Oxidises rapidly by photo-chemical reactions in air.
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Biodegradability

Result	: Readily biodegradable
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12.3. Bioaccumulative potential

Component:	Distillates (petroleum), hydrotreated light paraffinic	CAS-No. 64742-55-8
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Bioaccumulation

Result	: log Kow > 6 Bioaccumulation is potentially possible.
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Component:	White mineral oil (petroleum)	CAS-No. 8042-47-5
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Bioaccumulation

Result	: log Kow > 3,5 Can accumulate in aquatic organisms.
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Component:	Distillates (petroleum), hydrotreated light naphthenic	CAS-No. 64742-53-6
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Bioaccumulation

Result	: Potential bioaccumulation
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Component:	Distillates (petroleum), hydrotreated heavy paraffinic	CAS-No. 64742-54-7
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Bioaccumulation

Result : log Kow > 6
Contains components with potential for bioaccumulation.

Component:	Hydrocarbons, C15-C19, n-alkanes, isoalkanes, <2% aromatics
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Bioaccumulation

Result : Bioaccumulation is potentially possible.

12.4. Mobility in soil

Component:	Distillates (petroleum), hydrotreated light paraffinic	CAS-No. 64742-55-8
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Mobility

Water : The product is insoluble and floats on water.
Air : Low volatile liquid
Soil : Adsorbs on soil., immobile

Component:	White mineral oil (petroleum)	CAS-No. 8042-47-5
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Mobility

Water : The main components are insoluble and float on water.
Soil : Adsorbs on soil.

Component:	Distillates (petroleum), hydrotreated light naphthenic	CAS-No. 64742-53-6
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Mobility

: The product is insoluble and floats on water., Adsorbs on soil.

Component:	Distillates (petroleum), hydrotreated heavy paraffinic	CAS-No. 64742-54-7
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Mobility

Soil : The product is insoluble and floats on water., After release, adsorbs onto soil.

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Component: Hydrocarbons, C15-C19, n-alkanes,
isoalkanes, <2% aromatics

Mobility

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: Floats on water., Adsorbs on soil., Has low mobility.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment

Result : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6. Other adverse effects

Additional ecological information

Result : Should not be released into the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

- Product** : Disposal together with normal waste is not allowed. Do not let product enter drains. Can be incinerated, when in compliance with local regulations.
- Contaminated packaging** : Empty remaining contents. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not burn, or use a cutting torch on, the empty drum. Risk of explosion.
- European Waste Catalogue Number** : No waste code according to the European Waste Catalogue can be assigned for this product, as the intended use dictates the assignment. The waste code is established in consultation with the regional waste disposer.

SECTION 14: Transport information

Not dangerous goods for ADR, RID, IMDG and IATA.

14.1. UN number

Not applicable.

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14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

Not applicable.

14.4. Packaging group

Not applicable.

14.5. Environmental hazards

Not applicable.

14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

IMDG : Not applicable.

SECTION 15: Regulatory information

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

WGK (DE) : slightly water endangering; Self-classification according VwVwS of 17 May 1999, Annex 4

German Störfallverordnung : Does not fall under the German StörfallV. -

Directive 1999/13/EC : 0 %

Other regulations : Occupational restrictions: Take note of Dir 92/85/EEC on the safety and health of pregnant workers at work and of Dir 94/33/EC on the protection of young people at work.

Component:	White mineral oil (petroleum)	CAS-No. 8042-47-5
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EU. Regulation No 1451/2007 [Biocides], Annex I, OJ (L 325)	:	EC Number: , 232-455-8; Listed
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Component:	Distillates (petroleum), hydrotreated light naphthenic	CAS-No. 64742-53-6
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EU. REACH, Annex XVII, Marketing and Use Restrictions (Regulation	:	Point Nos.: , 28; Listed
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 EU. REACH, Annex XVII, , 265-156-6; Carcinogenicity; Category 1B
 Appendix 2, Entry 28 -
 Carcinogens (Regulation
 1907/2006/EC)

EU. Cosmetics Directive : Reference number: 777; Listed
 76/768/EEC - Annex II

EU. Directive : Hazard Designation: ; Carcinogen/Mutagen
 90/394/EEC

Component:	Distillates (petroleum), hydrotreated heavy paraffinic	CAS-No. 64742-54-7
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EU. REACH, Annex XVII, : , 265-157-1; Carcinogenicity; Category 1B
 Appendix 2, Entry 28 -
 Carcinogens (Regulation
 1907/2006/EC)
 EU. REACH, Annex XVII, Point Nos.: , 28; Listed
 Marketing and Use
 Restrictions (Regulation
 1907/2006/EC)

EU. Cosmetics Directive : Reference number: 778; Listed
 76/768/EEC - Annex II

EU. Directive : Hazard Designation: ; Carcinogen/Mutagen
 90/394/EEC

Component:	Distillates (petroleum), hydrotreated light paraffinic	CAS-No. 64742-55-8
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EU. REACH, Annex XVII, : , 265-158-7; Carcinogenicity; Category 1B
 Appendix 2, Entry 28 -
 Carcinogens (Regulation
 1907/2006/EC)
 EU. REACH, Annex XVII, Point Nos.: , 28; Listed
 Marketing and Use
 Restrictions (Regulation
 1907/2006/EC)

EU. Cosmetics Directive : Reference number: 779; Listed
 76/768/EEC - Annex II

EU. Directive : Hazard Designation: ; Carcinogen/Mutagen
 90/394/EEC

15.2. Chemical Safety Assessment

no data available

BREFO I 249**SECTION 16: Other information****Full text of H-Statements referred to under sections 2 and 3.**

H304 May be fatal if swallowed and enters airways.

Further information

Key literature references : Supplier information and data from the "Database of registered substances" of the European Chemicals Agency (ECHA) were used to create this safety data sheet.

Other information : The information provided in this Safety Data Sheet is correct to our knowledge at the date of its revision. The information given only describes the products with regard to safety arrangements and is not to be considered as a warranty or quality specification and does not constitute a legal relationship. The information contained in this Safety Data Sheet relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text

|| Indicates updated section.