

**Safety Data Sheet**

according to UK REACH Regulation

187 System agent for winter use MP18700K05AB

Revision date: 14.11.2022

Product code: 1102363

Page 1 of 13

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

187 System agent for winter use MP18700K05AB

UFI: 68X4-M0TN-W00T-KG1Y

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

Additiv

1.3. Details of the supplier of the safety data sheet**Manufacturer**

Company name:	TUNAP GmbH & Co. KG	
Street:	Bürgermeister-Seidl-Str. 2	
Place:	D-82515 Wolfratshausen	
Telephone:	+ 49 (0) 8171/1600 - 0	Telefax: + 49 (0) 8171/1600 - 40
E-mail:	sdb@tunap.com	
Internet:	www.tunap.com	

Supplier

Company name:	TUNAP (UK) Limited
Street:	Unit 12 Tonbridge Trade Park, Ingot Way
Place:	GB Tonbridge, Kent. TN9 1GN
Telephone:	+44 (0)1732 365163
E-mail:	sdb@tunap.com
Internet:	www.tunap.co.uk

1.4. Emergency telephone number: 111 NHS (National Health Service)**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****GB CLP Regulation**

Acute Tox. 4; H302
Acute Tox. 4; H332
Asp. Tox. 1; H304
Aquatic Chronic 2; H411

Full text of hazard statements: see SECTION 16.

2.2. Label elements**GB CLP Regulation****Hazard components for labelling**

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics
2-Ethylhexyl nitrate
Hydrocarbons, C10, aromatics, >1% naphthalene

Signal word: Danger**Pictograms:****Hazard statements**

H302+H332 Harmful if swallowed or if inhaled.

**Safety Data Sheet**

according to UK REACH Regulation

187 System agent for winter use MP18700K05AB

Revision date: 14.11.2022

Product code: 1102363

Page 2 of 13

H304 May be fatal if swallowed and enters airways.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

P260 Do not breathe vapours.
P280 Wear protective gloves.
P273 Avoid release to the environment.
P302+P352 IF ON SKIN: Wash with plenty of water.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P331 Do NOT induce vomiting.
P304+P312 IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell.

Special labelling of certain mixtures

EUH066 Repeated exposure may cause skin dryness or cracking.

SECTION 3: Composition/information on ingredients**3.2. Mixtures****Relevant ingredients**

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (GB CLP Regulation)			
64742-48-9	Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics			50 - < 100 %
	918-481-9		01-2119457273-39	
	Asp. Tox. 1; H304 EUH066			
27247-96-7	2-Ethylhexyl nitrate			25 - < 50 %
	248-363-6		01-2119539586-27	
	Acute Tox. 4, Acute Tox. 4, Acute Tox. 4, Aquatic Chronic 2; H332 H312 H302 H411 EUH044 EUH066			
	Hydrocarbons, C10, aromatics, >1% naphthalene			1 - < 3 %
	919-284-0		01-2119463588-24	
	STOT SE 3, Asp. Tox. 1, Aquatic Chronic 2; H336 H304 H411 EUH066			
91-20-3	naphthalene			0.1 - < 1 %
	202-049-5	601-052-00-2		
	Carc. 2, Acute Tox. 4, Aquatic Acute 1, Aquatic Chronic 1; H351 H302 H400 H410			

Full text of H and EUH statements: see section 16.

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
		Specific Conc. Limits, M-factors and ATE	
64742-48-9	918-481-9	Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics	50 - < 100 %
		inhalation: LC50 = 4951 mg/l (vapours); dermal: LD50 = >3160 mg/kg; oral: LD50 = >8000 mg/kg	
27247-96-7	248-363-6	2-Ethylhexyl nitrate	25 - < 50 %
		inhalation: LC50 = 11 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists); dermal: LD50 = >4820 mg/kg; oral: LD50 = >9640 mg/kg	
	919-284-0	Hydrocarbons, C10, aromatics, >1% naphthalene	1 - < 3 %
		inhalation: LC50 = >4778 mg/l (vapours); dermal: LD50 = > 2000 mg/kg; oral: LD50 = 10650 mg/kg	
91-20-3	202-049-5	naphthalene	0.1 - < 1 %
		dermal: LD50 = 16000 mg/kg; oral: LD50 = 490 mg/kg	

**Safety Data Sheet**

according to UK REACH Regulation

187 System agent for winter use MP18700K05AB

Revision date: 14.11.2022

Product code: 1102363

Page 3 of 13

SECTION 4: First aid measures**4.1. Description of first aid measures****General information**

First aider: Pay attention to self-protection! Remove persons to safety. Never give anything by mouth to an unconscious person or a person with cramps.

After inhalation

Remove person to fresh air and keep comfortable for breathing. In all cases of doubt, or when symptoms persist, seek medical advice.

After contact with skin

Wash with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. In all cases of doubt, or when symptoms persist, seek medical advice.

After contact with eyes

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. In case of troubles or persistent symptoms, consult an ophthalmologist.

After ingestion

Do NOT induce vomiting. Observe risk of aspiration if vomiting occurs. Call a physician in any case!

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

Headache, nausea, dizziness, fatigue, skin irritation

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

Treat symptomatically. Call a POISON CENTER. Symptoms can occur only after several hours.

SECTION 5: Firefighting measures**5.1. Extinguishing media****Suitable extinguishing media**

Water fog. Foam. Carbon dioxide (CO₂). Extinguishing powder.

Unsuitable extinguishing media

High power water jet.

5.2. Special hazards arising from the substance or mixture

Incomplete combustion and thermolysis gases of different toxicity can occur. In the case of hydrocarbonaceous products such as CO, CO₂, aldehydes and soot. These can be very dangerous if they are inhaled in high concentrations or in enclosed spaces.

5.3. Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Move undamaged containers from immediate hazard area if it can be done safely. In case of fire: Wear self-contained breathing apparatus.

Additional information

Use water spray jet to protect personnel and to cool endangered containers. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

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

Wear breathing apparatus if exposed to vapours/dusts/aerosols. Remove all sources of ignition. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Wear personal protection equipment.

For non-emergency personnel

First aider: Pay attention to self-protection!

For emergency responders

Fight fire with normal precautions from a reasonable distance.

**Safety Data Sheet**

according to UK REACH Regulation

187 System agent for winter use MP18700K05AB

Revision date: 14.11.2022

Product code: 1102363

Page 4 of 13

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Prevent spread over a wide area (e.g. by containment or oil barriers). Ensure all waste water is collected and treated via a waste water treatment plant.

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

Prevent spread over a wide area (e.g. by containment or oil barriers).

For cleaning up

Clean contaminated articles and floor according to the environmental legislation.

Other information

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Clean contaminated articles and floor according to the environmental legislation.

6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

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

Observe instructions for use.

Dust must be exhausted directly at the point of origin. Vapours/aerosols must be exhausted directly at the point of origin. If local exhaust ventilation is not possible or not sufficient, the entire working area should be ventilated by technical means.

When using do not eat, drink, smoke, sniff.

Wear personal protection equipment (refer to section 8).

Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking.

Advice on general occupational hygiene

Avoid exposure. Wear suitable protective clothing. Draw up and observe skin protection programme.

Further information on handling

Avoid contact with skin and eyes.

7.2. Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

Keep container tightly closed. Observe legal regulations and provisions.

Hints on joint storage

Do not store together with: Oxidizing agents. Pyrophoric or self-heating substances. Food and feedingstuffs.

Further information on storage conditions

Store in a cool dry place. Observe legal regulations and provisions.

7.3. Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****Exposure limits (EH40)**

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
91-20-3	Naphthalene	10	50		TWA (8 h)	EU

**Safety Data Sheet**

according to UK REACH Regulation

187 System agent for winter use MP18700K05AB

Revision date: 14.11.2022

Product code: 1102363

Page 5 of 13

DNEL/DMEL values

CAS No	Substance			
DNEL type		Exposure route	Effect	Value
27247-96-7	2-Ethylhexyl nitrate			
Worker DNEL, long-term		inhalation	systemic	0,35 mg/m³
Worker DNEL, long-term		dermal	systemic	1 mg/kg bw/day
Consumer DNEL, long-term		dermal	systemic	0,52 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	0,025 mg/kg bw/day
	Hydrocarbons, C10, aromatics, >1% naphthalene			
Worker DNEL, long-term		inhalation	systemic	151 mg/m³
Worker DNEL, long-term		dermal	systemic	12,5 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	32 mg/m³
Consumer DNEL, long-term		dermal	systemic	7,5 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	7,5 mg/kg bw/day

PNEC values

CAS No	Substance	
Environmental compartment	Value	
27247-96-7	2-Ethylhexyl nitrate	
Freshwater	0,0008 mg/l	
Marine water	0,00008 mg/l	
Freshwater sediment	0,00074 mg/kg	
Marine sediment	0,00074 mg/kg	
Micro-organisms in sewage treatment plants (STP)	10 mg/l	
Soil	0,000191 mg/kg	

Additional advice on limit values

- a no restriction
- b End of exposure or end of shift
- c at long-term exposure:
- d before next shift

blood (B)

Urine (U)

8.2. Exposure controls**Appropriate engineering controls**

If handled uncovered, arrangements with local exhaust ventilation have to be used.

Individual protection measures, such as personal protective equipment**Eye/face protection**

Suitable eye protection: Tightly sealed safety glasses.

EN 166

Hand protection

Protect skin by using skin protective cream. When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances.

**Safety Data Sheet**

according to UK REACH Regulation

187 System agent for winter use MP18700K05AB

Revision date: 14.11.2022

Product code: 1102363

Page 6 of 13

Suitable material: NBR (Nitrile rubber) Breakthrough time: 480min

Thickness of the glove material 0,45 mm

EN ISO 374

Skin protection

Wear suitable protective clothing. Take off immediately all contaminated clothing and wash it before reuse.

Respiratory protection

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

When exceeding the relevant workplace exposure limits, note the following:

Suitable respiratory protective equipment: Combination filter device (DIN EN 141)..

Filtering device with filter or ventilator filtering device of type: A

Observe the wear time limits as specified by the manufacturer.

Observe legal regulations and provisions.

Environmental exposure controls

Observe legal regulations and provisions.

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

Physical state:	Liquid	
Colour:	slightly yellow	
Odour:	solvent like	
		Test method
Melting point/freezing point:	not determined	
Boiling point or initial boiling point and boiling range:	100 °C	
Flammability:	not applicable	
	not applicable	
Lower explosion limits:	0,5 vol. %	
Upper explosion limits:	7 vol. %	
Flash point:	62 °C	ISO 3679
Decomposition temperature:	not determined	
pH-Value (at 20 °C):		DIN 19268
Viscosity / kinematic: (at 40 °C)	< 20,5 mm ² /s	DIN EN ISO 3104
Water solubility:	The study does not need to be conducted because the substance is known to be insoluble in water.	
Solubility in other solvents		
not determined		
Partition coefficient n-octanol/water:	not determined	
Vapour pressure:	not determined	
Density (at 20 °C):	0,845 g/cm ³	DIN 51757
Relative vapour density:	not determined	

9.2. Other information**Information with regard to physical hazard classes**

Self-ignition temperature

Solid:

not applicable

Gas:

not applicable

Oxidizing properties

Not oxidising.

Other safety characteristics

Evaporation rate:

not determined

**Safety Data Sheet**

according to UK REACH Regulation

187 System agent for winter use MP18700K05AB

Revision date: 14.11.2022

Product code: 1102363

Page 7 of 13

Solid content:	not determined	
Viscosity / dynamic:		DIN 53019-1
Flow time:		DIN EN ISO 2431
(at 20 °C)		

SECTION 10: Stability and reactivity**10.1. Reactivity**

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

The product is stable under normal conditions.

10.3. Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.

10.4. Conditions to avoid

Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Take precautionary measures against static discharges.

10.5. Incompatible materials

Oxidizing agents. Pyrophoric or self-heating substances.

10.6. Hazardous decomposition products

Incomplete combustion and thermolysis gases of different toxicity can occur. In the case of hydrocarbonaceous products such as CO, CO₂, aldehydes and soot. These can be very dangerous if they are inhaled in high concentrations or in enclosed spaces.

Further information

Do not mix with other chemicals.

SECTION 11: Toxicological information**11.1. Information on hazard classes as defined in GB CLP Regulation****Toxicocinetics, metabolism and distribution**

There are no data available on the mixture itself.

Acute toxicity

Harmful if swallowed.

Harmful if inhaled.

**Safety Data Sheet**

according to UK REACH Regulation

187 System agent for winter use MP18700K05AB

Revision date: 14.11.2022

Product code: 1102363

Page 8 of 13

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
64742-48-9	Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics				
	oral	LD50 >8000 mg/kg	Rat		
	dermal	LD50 >3160 mg/kg	Rabbit		
	inhalation (4 h) vapour	LC50 4951 mg/l	Rat		
27247-96-7	2-Ethylhexyl nitrate				
	oral	LD50 >9640 mg/kg	Rat		
	dermal	LD50 >4820 mg/kg	Rabbit		
	inhalation (4 h) vapour	LC50 11 mg/l	Rat		
	inhalation dust/mist	ATE 1,5 mg/l			
	Hydrocarbons, C10, aromatics, >1% naphthalene				
	oral	LD50 10650 mg/kg	Rat	Study report (1991)	OECD Guideline 420
	dermal	LD50 > 2000 mg/kg	Rabbit	Study report (1995)	OECD Guideline 402
	inhalation (4 h) vapour	LC50 >4778 mg/l	Rat		
91-20-3	naphthalene				
	oral	LD50 490 mg/kg	Rat		
	dermal	LD50 16000 mg/kg	Rat		

Irritation and corrosivity

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation: Based on available data, the classification criteria are not met.

Repeated exposure may cause skin dryness or cracking.

Sensitising effects

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

Carcinogenic/mutagenic/toxic effects for reproduction

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

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

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

No indications of human carcinogenicity exist.

No indications of human germ cell mutagenicity exist.

No indications of human reproductive toxicity exist.

STOT-single exposure

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

STOT-repeated exposure

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

Aspiration hazard

May be fatal if swallowed and enters airways.

Information on likely routes of exposure

Ingestion, Inhalation, Skin contact, Eye contact.

Reference to other sections: 2.1, 4.2.

**Safety Data Sheet**

according to UK REACH Regulation

187 System agent for winter use MP18700K05AB

Revision date: 14.11.2022

Product code: 1102363

Page 9 of 13

Specific effects in experiment on an animal

No information available.

11.2. Information on other hazards**Endocrine disrupting properties**

This product does not contain a substance that has endocrine disrupting properties with respect to humans as no components meets the criteria.

Other information

No information available.

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

The product is not: Ecotoxic.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
64742-48-9	Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics					
	Acute fish toxicity	LC50 >1000 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)		
	Acute algae toxicity	ErC50 >1000 mg/l	96 h	Scenedesmus subspicatus		
	Acute crustacea toxicity	EC50 >1000 mg/l	48 h	Daphnia magna		
27247-96-7	2-Ethylhexyl nitrate					
	Acute fish toxicity	LC50 2 mg/l	96 h	Danio rerio	Study report (2010)	OECD Guideline 203
	Acute algae toxicity	ErC50 > 12,6 mg/l	72 h	Pseudokirchneriella subcapitata	Study report (1998)	OECD Guideline 201
	Acute crustacea toxicity	EC50 > 12,6 mg/l	48 h	Daphnia magna	Study report (1998)	OECD Guideline 202
	Acute bacteria toxicity	EC50 > 1000 mg/l ()	3 h	activated sludge of a predominantly domestic sewage	Study report (2010)	OECD Guideline 209
	Hydrocarbons, C10, aromatics, >1% naphthalene					
	Acute fish toxicity	LC50 >1 mg/l	96 h	Pimephales promelas (fathead minnow)		
	Acute algae toxicity	ErC50 > 1 - < 3 mg/l	72 h	Pseudokirchneriella subcapitata	Study report (1993)	OECD Guideline 201
	Acute crustacea toxicity	EC50 1,4 mg/l	48 h	Daphnia magna		
	Fish toxicity	NOEC 0,487 mg/l	28 d	Oncorhynchus mykiss	CONCAWE, Brussels, Belgium (2010)	The aquatic toxicity was estimated by a
	Crustacea toxicity	NOEC 0,851 mg/l	21 d	Daphnia magna	CONCAWE, Brussels, Belgium (2010)	The aquatic toxicity was estimated by a
91-20-3	naphthalene					
	Acute fish toxicity	LC50 0,213 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)		
	Acute crustacea toxicity	EC50 1,6 mg/l	48 h	Daphnia magna		

12.2. Persistence and degradability

The product has not been tested.

**Safety Data Sheet**

according to UK REACH Regulation

187 System agent for winter use MP18700K05AB

Revision date: 14.11.2022

Product code: 1102363

Page 10 of 13

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
64742-48-9	Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics			
	OECD Guideline 301 F	89,8	28	ECHA
	Readily biodegradable (according to OECD criteria).			

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
27247-96-7	2-Ethylhexyl nitrate	5,24
91-20-3	naphthalene	3,35

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH.

The product has not been tested.

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7. Other adverse effects

No information available.

Further information

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

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

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation.

List of Wastes Code - residues/unused products

070704 WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the MFSU of fine chemicals and chemical products not otherwise specified; other organic solvents, washing liquids and mother liquors; hazardous waste

List of Wastes Code - used product

070704 WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the MFSU of fine chemicals and chemical products not otherwise specified; other organic solvents, washing liquids and mother liquors; hazardous waste

List of Wastes Code - contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste

Contaminated packaging

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

**Safety Data Sheet**

according to UK REACH Regulation

187 System agent for winter use MP18700K05AB

Revision date: 14.11.2022

Product code: 1102363

Page 11 of 13

Land transport (ADR/RID)

14.1. UN number or ID number:	UN 3082
14.2. UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2-ethylhexyl nitrate)
14.3. Transport hazard class(es):	9
14.4. Packing group:	III
Hazard label:	9
Classification code:	M6
Special Provisions:	274 335 375 601
Excepted quantity:	E1
Transport category:	3
Hazard No:	90
Tunnel restriction code:	-

Other applicable information (land transport)

Limited quantity (LQ): 5 L

Inland waterways transport (ADN)

14.1. UN number or ID number:	UN 3082
14.2. UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2-ethylhexyl nitrate)
14.3. Transport hazard class(es):	9
14.4. Packing group:	III
Hazard label:	9
Classification code:	M6
Special Provisions:	274 335 375 601
Excepted quantity:	E1

Other applicable information (inland waterways transport)

Limited quantity (LQ): 5 L

Marine transport (IMDG)

14.1. UN number or ID number:	UN 3082
14.2. UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2-ethylhexyl nitrate)
14.3. Transport hazard class(es):	9
14.4. Packing group:	III
Hazard label:	9
Marine pollutant:	yes
Special Provisions:	274, 335, 969
Excepted quantity:	E1
EmS:	F-A, S-F

Other applicable information (marine transport)

Limited quantity (LQ): 5 L

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number:	UN 3082
14.2. UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2-ethylhexyl nitrate)
14.3. Transport hazard class(es):	9
14.4. Packing group:	III
Hazard label:	9
Special Provisions:	A97 A158 A197
Limited quantity Passenger:	30 kg G
Passenger LQ:	Y964
Excepted quantity:	E1
IATA-packing instructions - Passenger:	964
IATA-max. quantity - Passenger:	450 L
IATA-packing instructions - Cargo:	964

**Safety Data Sheet**

according to UK REACH Regulation

187 System agent for winter use MP18700K05AB

Revision date: 14.11.2022

Product code: 1102363

Page 12 of 13

IATA-max. quantity - Cargo:

450 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS:

Yes

Danger releasing substance:

2-ethylhexyl nitrate

14.6. Special precautions for user

No information available.

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****EU regulatory information**

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 28, Entry 75

Directive 2010/75/EU on industrial emissions:

No information available.

Directive 2004/42/EC on VOC in paints and varnishes:

No information available.

Additional information

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

National regulatory information

Water hazard class (D):

2 - obviously hazardous to water

SECTION 16: Other information**Changes**

This data sheet contains changes from the previous version in section(s): 1,2,6,9,11,14,15.

Abbreviations and acronyms

Acute Tox: Acute toxicity

Asp. Tox: Aspiration hazard

Carc: Carcinogenicity

STOT SE: Specific target organ toxicity - single exposure

Aquatic Acute: Acute aquatic hazard

Aquatic Chronic: Chronic aquatic hazard

ADR: Accord européen sur le transport des marchandises dangereuses par Route

(European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service

LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%

**Safety Data Sheet**

according to UK REACH Regulation

187 System agent for winter use MP18700K05AB

Revision date: 14.11.2022

Product code: 1102363

Page 13 of 13

Classification for mixtures and used evaluation method according to GB CLP Regulation

Classification	Classification procedure
Acute Tox. 4; H302	Calculation method
Acute Tox. 4; H332	Calculation method
Asp. Tox. 1; H304	Calculation method
Aquatic Chronic 2; H411	Calculation method

Relevant H and EUH statements (number and full text)

H302	Harmful if swallowed.
H302+H332	Harmful if swallowed or if inhaled.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H332	Harmful if inhaled.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
EUH044	Risk of explosion if heated under confinement.
EUH066	Repeated exposure may cause skin dryness or cracking.

Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

(The data for the relevant ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)