

SAFETY DATA SHEET

Based upon Regulation (EC) No 1907/2006, as amended by Regulation (EU) No 2015/830

NOVASTOP OIL HD

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

1.1. Product identifier

Product name : NOVASTOP OIL HD
Registration number REACH : Not applicable (mixture)
Product type REACH : Mixture

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

1.2.1 Relevant identified uses

Oil: additive

1.2.2 Uses advised against

No uses advised against known

1.3. Details of the supplier of the safety data sheet

Supplier of the safety data sheet

Novatio*
Industrielaan 5B
B-2250 Olen
☎ +32 14 25 76 40
☎ +32 14 22 02 66
info@novatio.be
*NOVATIO is a registered trademark of Novatech International N.V.

Manufacturer of the product

Novatech International N.V.
Industrielaan 5B
B-2250 Olen
☎ +32 14 85 97 37
☎ +32 14 85 97 38
info@tec7.be

1.4. Emergency telephone number

24h/24h (Telephone advice: English, French, German, Dutch):
+ 32 14 58 45 45 (BIG)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classified as dangerous according to the criteria of Regulation (EC) No 1272/2008

Class	Category	Hazard statements
Repr.	category 2	H361fd: Suspected of damaging fertility. Suspected of damaging the unborn child.
Aquatic Acute	category 1	H400: Very toxic to aquatic life.
Aquatic Chronic	category 2	H411: Toxic to aquatic life with long lasting effects.

2.2. Label elements



Contains: Phenol, isopropylated, phosphate (3:1).

Signal word Warning

H-statements

H361fd Suspected of damaging fertility. Suspected of damaging the unborn child.
H410 Very toxic to aquatic life with long lasting effects.

P-statements

P202 Do not handle until all safety precautions have been read and understood.
P280 Wear protective gloves and protective clothing.
P273 Avoid release to the environment.
P308 + P313 IF exposed or concerned: Get medical advice/attention.
P391 Collect spillage.

NOVASTOP OIL HD

P501

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

2.3. Other hazards

No other hazards known

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name REACH Registration No	CAS No EC No	Conc. (C)	Classification according to CLP	Note	Remark
Phenol, isopropylated, phosphate (3:1)	68937-41-7 273-066-3	C>50 %	Repr. 2; H361fd	(1)	Constituent
triphenyl phosphate	115-86-6 204-112-2	25%<C<50%	Aquatic Acute 1; H400 Aquatic Chronic 2; H411	(1)(2)	Constituent

(1) For H-statements in full: see heading 16

(2) Substance with a Community workplace exposure limit

SECTION 4: First aid measures

4.1. Description of first aid measures

General:

If you feel unwell, seek medical advice.

After inhalation:

Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service.

After skin contact:

Rinse with water. Soap may be used. Take victim to a doctor if irritation persists.

After eye contact:

Rinse with water. Remove contact lenses, if present and easy to do. Continue rinsing. Take victim to an ophthalmologist if irritation persists.

After ingestion:

Rinse mouth with water. Do not induce vomiting. Consult a doctor/medical service if you feel unwell.

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

4.2.1 Acute symptoms

After inhalation:

No effects known.

After skin contact:

No effects known.

After eye contact:

No effects known.

After ingestion:

No effects known.

4.2.2 Delayed symptoms

No effects known.

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

If applicable and available it will be listed below.

SECTION 5: Firefighting measures

5.1. Extinguishing media

5.1.1 Suitable extinguishing media:

Water spray. Alcohol-resistant foam. BC powder. Carbon dioxide.

5.1.2 Unsuitable extinguishing media:

No unsuitable extinguishing media known.

5.2. Special hazards arising from the substance or mixture

On burning: release of toxic and corrosive gases/vapours (phosphorus oxides, nitrous vapours, carbon monoxide - carbon dioxide).

5.3. Advice for firefighters

5.3.1 Instructions:

Dilute toxic gases with water spray. Take account of toxic/corrosive precipitation water. Take account of environmentally hazardous firefighting water. Use water moderately and if possible collect or contain it.

5.3.2 Special protective equipment for fire-fighters:

Gloves. Protective clothing. Heat/fire exposure: compressed air/oxygen apparatus.

Reason for revision: 2; 3; 16

Publication date: 2000-06-05

Date of revision: 2017-05-08

Revision number: 0701

Product number: 32505

2 / 13

NOVASTOP OIL HD

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

No naked flames.

6.1.1 Protective equipment for non-emergency personnel

See heading 8.2

6.1.2 Protective equipment for emergency responders

Gloves. Protective clothing.

Suitable protective clothing

See heading 8.2

6.2. Environmental precautions

Contain released product. Dam up the liquid spill. Prevent soil and water pollution. Prevent spreading in sewers.

6.3. Methods and material for containment and cleaning up

Take up liquid spill into absorbent material, e.g.: sand or kieselguhr, powdered limestone. Scoop absorbed substance into closing containers. Carefully collect the spill/leftovers. Clean contaminated surfaces with an excess of water. Take collected spill to manufacturer/competent authority. Wash clothing and equipment after handling.

6.4. Reference to other sections

See heading 13.

SECTION 7: Handling and storage

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

7.1. Precautions for safe handling

Keep away from naked flames/heat. Gas/vapour heavier than air at 20°C. Observe strict hygiene. Keep container tightly closed. Remove contaminated clothing immediately. Do not discharge the waste into the drain.

7.2. Conditions for safe storage, including any incompatibilities

7.2.1 Safe storage requirements:

Store in a cool area. Store in a dry area. Ventilation at floor level. Provide for a tub to collect spills. Meet the legal requirements.

7.2.2 Keep away from:

Heat sources.

7.2.3 Suitable packaging material:

No data available

7.2.4 Non suitable packaging material:

No data available

7.3. Specific end use(s)

If applicable and available, exposure scenarios are attached in annex. See information supplied by the manufacturer.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 Occupational exposure

a) Occupational exposure limit values

If limit values are applicable and available these will be listed below.

Belgium

Phosphate de triphényle	Time-weighted average exposure limit 8 h	3 mg/m ³
-------------------------	--	---------------------

France

Phosphate de triphényle	Time-weighted average exposure limit 8 h (VL: Valeur non réglementaire indicative)	3 mg/m ³
-------------------------	--	---------------------

Germany

Phenol, isopropyliert, Phosphat (3:1)	Time-weighted average exposure limit 8 h (TRGS 900)	1 mg/m ³
---------------------------------------	---	---------------------

UK

Triphenyl phosphate	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	3 mg/m ³
	Short time value (Workplace exposure limit (EH40/2005))	6 mg/m ³

USA (TLV-ACGIH)

Triphenyl phosphate	Time-weighted average exposure limit 8 h (TLV - Adopted Value)	3 mg/m ³
---------------------	--	---------------------

b) National biological limit values

If limit values are applicable and available these will be listed below.

8.1.2 Sampling methods

Reason for revision: 2; 3; 16

Publication date: 2000-06-05

Date of revision: 2017-05-08

Revision number: 0701

Product number: 32505

3 / 13

NOVASTOP OIL HD

If applicable and available it will be listed below.

Triphenyl Phosphate	NIOSH	5038
---------------------	-------	------

8.1.3 Applicable limit values when using the substance or mixture as intended

If limit values are applicable and available these will be listed below.

8.1.4 DNEL/PNEC values

DNEL/DMEL - Workers

Phenol, isopropylated, phosphate (3:1)

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	0.29 mg/m ³	
	Acute systemic effects inhalation	20.1 mg/m ³	
	Long-term systemic effects dermal	4.17 mg/kg bw/day	
	Acute systemic effects dermal	200 mg/kg bw/day	
	Acute local effects dermal	16 mg/cm ³	

triphenyl phosphate

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	0.55 mg/m ³	
	Long-term systemic effects dermal	5.55 mg/kg bw/day	

DNEL/DMEL - General population

Phenol, isopropylated, phosphate (3:1)

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	0.07 mg/m ³	
	Acute systemic effects inhalation	5 mg/m ³	
	Long-term systemic effects dermal	2.08 mg/m ³	
	Acute systemic effects dermal	100 mg/m ³	
	Acute local effects dermal	8 mg/cm ³	
	Long-term systemic effects oral	0.04 mg/m ³	
	Acute systemic effects oral	50 mg/kg bw/day	

triphenyl phosphate

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	0.14 mg/m ³	
	Long-term systemic effects dermal	2.77 mg/kg bw/day	
	Long-term systemic effects oral	0.04 mg/kg bw/day	

PNEC

Phenol, isopropylated, phosphate (3:1)

Compartments	Value	Remark
Fresh water	0.00029 mg/l	
Marine water	0.000029 mg/l	
Aqua (intermittent releases)	0.00029 mg/l	
STP	100 mg/l	
Fresh water sediment	112 mg/kg sediment dw	
Marine water sediment	11.2 mg/kg sediment dw	
Soil	0.4 mg/kg soil dw	
Food	0.63 mg/kg food	

triphenyl phosphate

Compartments	Value	Remark
Fresh water	0.0037 mg/l	
Marine water	0.00037 mg/l	
Aqua (intermittent releases)	0.0025 mg/l	
STP	5 mg/l	
Fresh water sediment	0.2397 mg/kg sediment dw	
Marine water sediment	0.2397 mg/kg sediment dw	
Soil	0.0385 mg/kg soil dw	
Oral	0.833 mg/kg food	

8.1.5 Control banding

If applicable and available it will be listed below.

8.2. Exposure controls

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

8.2.1 Appropriate engineering controls

Keep away from naked flames/heat. Carry operations in the open/under local exhaust/ventilation or with respiratory protection.

8.2.2 Individual protection measures, such as personal protective equipment

Observe strict hygiene. Keep container tightly closed. Do not eat, drink or smoke during work.

a) Respiratory protection:

Wear gas mask with filter type A if conc. in air > exposure limit.

b) Hand protection:

Gloves.

c) Eye protection:

Reason for revision: 2; 3; 16

Publication date: 2000-06-05

Date of revision: 2017-05-08

Revision number: 0701

Product number: 32505

4 / 13

NOVASTOP OIL HD

Safety glasses.

d) **Skin protection:**

Protective clothing.

8.2.3 Environmental exposure controls:

See headings 6.2, 6.3 and 13

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical form	Liquid
Odour	Characteristic odour
Odour threshold	No data available
Colour	No data available on colour
Particle size	Not applicable (liquid)
Explosion limits	No data available
Flammability	Non combustible
Log Kow	Not applicable (mixture)
Dynamic viscosity	70 mPa.s ; 20 °C
Kinematic viscosity	60 mm ² /s ; 20 °C
Melting point	No data available
Boiling point	No data available
Flash point	No data available
Evaporation rate	No data available
Relative vapour density	No data available
Vapour pressure	No data available
Solubility	Water ; insoluble
Relative density	1.2 ; 20 °C
Decomposition temperature	No data available
Auto-ignition temperature	No data available
Explosive properties	No chemical group associated with explosive properties
Oxidising properties	No chemical group associated with oxidising properties
pH	No data available

9.2. Other information

Absolute density	1160 kg/m ³ ; 20 °C
------------------	--------------------------------

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available.

10.2. Chemical stability

No data available.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

Keep away from naked flames/heat.

10.5. Incompatible materials

No data available.

10.6. Hazardous decomposition products

On burning: release of toxic and corrosive gases/vapours (phosphorus oxides, nitrous vapours, carbon monoxide - carbon dioxide).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

11.1.1 Test results

Acute toxicity

NOVASTOP OIL HD

No (test) data on the mixture available

Phenol, isopropylated, phosphate (3:1)

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Dermal	LD50	Other	> 10000 mg/kg	14 day(s)	Rabbit	Experimental value	
Inhalation (aerosol)	LC50	Other	> 200 mg/l air	1 h	Rat (male/female)	Experimental value	

Reason for revision: 2; 3; 16

Publication date: 2000-06-05

Date of revision: 2017-05-08

Revision number: 0701

Product number: 32505

5 / 13

NOVASTOP OIL HD

triphenyl phosphate

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	Equivalent to OECD 401	> 20000 mg/kg bw		Rat (male/female)	Experimental value	
Dermal	LD50	Equivalent to OECD 402	> 10000 mg/kg bw		Rabbit	Experimental value	
Inhalation (dust)	LC50	Equivalent to OECD 403	> 200 mg/l	1 h	Rabbit (male/female)	Inconclusive, insufficient data	

Judgement is based on the relevant ingredients

Conclusion

Not classified for acute toxicity

Corrosion/irritation

NOVASTOP OIL HD

No (test)data on the mixture available

Phenol, isopropylated, phosphate (3:1)

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Not irritating	Other	4 seconds		Rabbit	Experimental value	

triphenyl phosphate

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Not irritating	Equivalent to OECD 405	24 h	1; 24; 48; 72; 168 hours	Rabbit	Experimental value	
Skin	Not irritating	OECD 404	4 h	24; 48; 72 hours	Rabbit	Experimental value	

Judgement is based on the relevant ingredients

Conclusion

Not classified as irritating to the skin

Not classified as irritating to the eyes

Not classified as irritating to the respiratory system

Respiratory or skin sensitisation

NOVASTOP OIL HD

No (test)data on the mixture available

Phenol, isopropylated, phosphate (3:1)

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Skin	Ambiguous	OECD 429			Mouse (female)	Experimental value	
Skin	Not sensitizing	Human observation			Human	Weight of evidence	

triphenyl phosphate

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Skin	Not sensitizing	OECD 406		24; 48 hours	Guinea pig (male)	Experimental value	
Skin	Not sensitizing	Human observation			Human	Experimental value	

Judgement is based on the relevant ingredients

Conclusion

Not classified as sensitizing for skin

Not classified as sensitizing for inhalation

Specific target organ toxicity

NOVASTOP OIL HD

No (test)data on the mixture available

Phenol, isopropylated, phosphate (3:1)

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
Oral (stomach tube)	NOAEL	OECD 422	< 25 mg/kg bw/day		No effect		Rat (male/female)	Experimental value
Dermal	NOAEL	OECD 410	200 mg/kg bw/day		No effect	4 weeks (6h/day, 5 days/week)	Rat (male/female)	Expert judgement
Dermal	LOAEL	OECD 410	1000 mg/kg bw/day		Systemic effects	4 weeks (6h/day, 5 days/week)	Rat (male/female)	Experimental value
Inhalation (aerosol)	NOEC	Subchronic toxicity test	10 mg/l air		No effect	90 days (continuous)	Rat (male/female)	Experimental value

Reason for revision: 2; 3; 16

Publication date: 2000-06-05

Date of revision: 2017-05-08

Revision number: 0701

Product number: 32505

6 / 13

NOVASTOP OIL HD

triphenyl phosphate

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
Oral (diet)	NOEL	OECD 407	23.5 mg/kg bw/day		No effect	4 weeks (daily)	Rat (male)	Experimental value
Oral (diet)	NOEL	OECD 407	161.4 mg/kg bw/day		No effect	4 weeks (daily)	Rat (female)	Experimental value
Oral (diet)	NOAEL	OECD 407	250 ppm		No effect	4 weeks (daily)	Rat (male)	Experimental value
Oral (diet)	NOAEL	OECD 407	4000 ppm	Liver	No effect	4 weeks (daily)	Rat (female)	Experimental value
Dermal	NOAEL	EPA OPPTS 870.3200	1000 mg/kg bw/day		No effect	3 weeks (5 days/week)	Rabbit (male/female)	Experimental value
Inhalation								Data waiving

Judgement is based on the relevant ingredients

Conclusion

Not classified for subchronic toxicity

Mutagenicity (in vitro)

NOVASTOP OIL HD

No (test)data on the mixture available

Phenol, isopropylated, phosphate (3:1)

Result	Method	Test substrate	Effect	Value determination
Negative with metabolic activation, negative without metabolic activation	Equivalent to OECD 471	Bacteria (S.typhimurium)	No effect	Experimental value
Negative with metabolic activation, negative without metabolic activation	OECD 473	Human lymphocytes	No effect	Experimental value

triphenyl phosphate

Result	Method	Test substrate	Effect	Value determination
Negative	OECD 473	Chinese hamster lung fibroblasts (V79)	No effect	Experimental value
Negative	OECD 471	Bacteria (S.typhimurium)	No effect	Experimental value
Negative without metabolic activation	Equivalent to OECD 482	Chinese hamster lung fibroblasts (V79)	No effect	Experimental value

Mutagenicity (in vivo)

NOVASTOP OIL HD

No (test)data on the mixture available

Phenol, isopropylated, phosphate (3:1)

Result	Method	Exposure time	Test substrate	Organ	Value determination
Negative	OECD 475		Hamster (male/female)	Bone marrow	Experimental value

Classification is based on the relevant ingredients

Conclusion

Not classified for mutagenic or genotoxic toxicity

Carcinogenicity

NOVASTOP OIL HD

No (test)data on the mixture available

Classification is based on the relevant ingredients

Conclusion

Not classified for carcinogenicity

Reproductive toxicity

NOVASTOP OIL HD

No (test)data on the mixture available

Phenol, isopropylated, phosphate (3:1)

	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Developmental toxicity	Dose level (P)	OECD 421	< 400 mg/kg bw/day		Rat (male/female)	No effect		Experimental value
	LOAEL	EPA OPPTS 870.3700	20 mg/kg bw/day	19 day(s)	Rat (male/female)	Reduced skeletal	Foetus	Read-across
Maternal toxicity	NOAEL	EPA OPPTS 870.3700	20 mg/kg bw/day	19 day(s)	Rat	No effect		Read-across

Reason for revision: 2; 3; 16

Publication date: 2000-06-05

Date of revision: 2017-05-08

Revision number: 0701

Product number: 32505

7 / 13

NOVASTOP OIL HD

triphenyl phosphate

	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Developmental toxicity	NOAEL	Equivalent to OECD 414	≥ 690 mg/kg bw/day	13 weeks (daily)	Rat (male/female)	No effect		Experimental value
Maternal toxicity	NOAEL	Equivalent to OECD 414	≥ 690 mg/kg bw/day	13 weeks (daily)	Rat (female)	No effect		Experimental value
Effects on fertility	NOEL	Equivalent to OECD 415	690 mg/kg bw/day	13 weeks (daily)	Rat (male/female)	No effect		Experimental value

Classification is based on the relevant ingredients

Conclusion

Suspected of damaging the unborn child.

Suspected of damaging fertility.

Toxicity other effects

NOVASTOP OIL HD

No (test)data on the mixture available

Chronic effects from short and long-term exposure

NOVASTOP OIL HD

No effects known.

SECTION 12: Ecological information

12.1. Toxicity

NOVASTOP OIL HD

No (test)data on the mixture available

Phenol, isopropylated, phosphate (3:1)

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50	OECD 203	> 1000 mg/l	96 h	Danio rerio	Static system	Fresh water	Experimental value; GLP
Acute toxicity crustacea	LC50	OECD 202	> 1000 mg/l	48 h	Daphnia magna	Semi-static system	Fresh water	Experimental value; GLP
Toxicity algae and other aquatic plants	ErC50	OECD 201	> 1000 mg/l	72 h	Pseudokirchneriella subcapitata	Static system	Fresh water	Experimental value; GLP
Long-term toxicity fish	NOEC	Other	0.029 mg/l	90 day(s)	Pimephales promelas	Flow-through system	Fresh water	Experimental value; Growth
Long-term toxicity aquatic crustacea	NOEC	Other	0.063 mg/l	90 day(s)	Gammarus sp.	Flow-through system	Fresh water	Experimental value; Growth

triphenyl phosphate

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50	EPA 660/3 - 75/009	0.4 mg/l	96 h	Oncorhynchus mykiss	Static system	Fresh water	Experimental value; Nominal concentration
Acute toxicity crustacea	EC50	EPA 660/3 - 75/009	1 mg/l	48 h	Daphnia magna	Static system	Fresh water	Experimental value; Nominal concentration
Toxicity algae and other aquatic plants	EC50	US EPA	2 mg/l	96 h	Pseudokirchneriella subcapitata	Static system	Fresh water	Experimental value
	NOEC	Equivalent to OECD 201	0.25 mg/l - 2.5 mg/l	72 h	Pseudokirchneriella subcapitata	Static system	Fresh water	Experimental value; Growth rate
Long-term toxicity fish	EC10	US EPA	0.037 mg/l	30 day(s)	Oncorhynchus mykiss	Flow-through system	Fresh water	Experimental value; Nominal concentration
Long-term toxicity aquatic crustacea	NOEC	OECD 211	0.254 mg/l	21 day(s)	Daphnia magna	Semi-static system	Fresh water	Experimental value; GLP

Classification is based on the relevant ingredients

Conclusion

Toxic to aquatic life with long lasting effects.

12.2. Persistence and degradability

Reason for revision: 2; 3; 16

Publication date: 2000-06-05

Date of revision: 2017-05-08

Revision number: 0701

Product number: 32505

8 / 13

NOVASTOP OIL HD

Phenol, isopropylated, phosphate (3:1)

Biodegradation water

Method	Value	Duration	Value determination
OECD 301D: Closed Bottle Test	17.9 %; GLP	28 day(s)	Experimental value

triphenyl phosphate

Biodegradation water

Method	Value	Duration	Value determination
OECD 301C: Modified MITI Test (I)	83 % - 94 %	28 day(s)	Experimental value

Phototransformation air (DT50 air)

Method	Value	Conc. OH-radicals	Value determination
AOPWIN v1.90	11.8 h	1500000 /cm ³	Calculated value

Biodegradation soil

Method	Value	Duration	Value determination
	79.8 % - 84.4 %	101 day(s)	Experimental value

Half-life water (t1/2 water)

Method	Value	Primary degradation/mineralisation	Value determination
	3 day(s) - 28 day(s)	Primary degradation	Experimental value

Half-life soil (t1/2 soil)

Method	Value	Primary degradation/mineralisation	Value determination
	37 day(s)	Primary degradation	Experimental value

Conclusion

Contains non readily biodegradable component(s)

12.3. Bioaccumulative potential

NOVASTOP OIL HD

Log Kow

Method	Remark	Value	Temperature	Value determination
	Not applicable (mixture)			

Phenol, isopropylated, phosphate (3:1)

Log Kow

Method	Remark	Value	Temperature	Value determination
		4.92 - 5.17		Experimental value

triphenyl phosphate

BCF fishes

Parameter	Method	Value	Duration	Species	Value determination
BCF	Other	144; Fresh weight	18 day(s)	Oryzias latipes	Experimental value

BCF other aquatic organisms

Parameter	Method	Value	Duration	Species	Value determination
BCF		43; Chronic		Lemna sp.	Literature study

Log Kow

Method	Remark	Value	Temperature	Value determination
Equivalent to OECD 107		4.63	20 °C	Experimental value

Conclusion

Contains bioaccumulative component(s)

12.4. Mobility in soil

triphenyl phosphate

(log) Koc

Parameter	Method	Value	Value determination
Koc	Other	2514 - 3561	Experimental value
log Koc		3.4 - 3.55	Calculated value

Volatility (Henry's Law constant H)

Value	Method	Temperature	Remark	Value determination
0.00403 atm m ³ /mol		25 °C		Calculated value

Percent distribution

Method	Fraction air	Fraction biota	Fraction sediment	Fraction soil	Fraction water	Value determination
Mackay level I	0.7 %	0.03 %	41 %	43.9 %	14.3 %	Calculated value

Conclusion

Contains component(s) that adsorb(s) into the soil

12.5. Results of PBT and vPvB assessment

Reason for revision: 2; 3; 16

Publication date: 2000-06-05

Date of revision: 2017-05-08

Revision number: 0701

Product number: 32505

9 / 13

NOVASTOP OIL HD

Due to insufficient data no statement can be made whether the component(s) fulfil(s) the criteria of PBT and vPvB according to Annex XIII of Regulation (EC) No 1907/2006.

12.6. Other adverse effects

NOVASTOP OIL HD

Fluorinated greenhouse gases (Regulation (EU) No 517/2014)

None of the known components is included in the list of fluorinated greenhouse gases (Regulation (EU) No 517/2014)

Ozone-depleting potential (ODP)

Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009)

SECTION 13: Disposal considerations

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

13.1. Waste treatment methods

13.1.1 Provisions relating to waste

European Union

Hazardous waste according to Directive 2008/98/EC, as amended by Regulation (EU) No 1357/2014.

Waste material code (Directive 2008/98/EC, Decision 2000/0532/EC).

16 05 08* (gases in pressure containers and discarded chemicals: discarded organic chemicals consisting of or containing hazardous substances). Depending on branch of industry and production process, also other waste codes may be applicable.

13.1.2 Disposal methods

Dissolve or mix with a combustible solvent. Remove to an authorized incinerator with energy recovery. Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals. Do not discharge into drains or the environment.

13.1.3 Packaging/Container

European Union

Waste material code packaging (Directive 2008/98/EC).

15 01 10* (packaging containing residues of or contaminated by dangerous substances).

SECTION 14: Transport information

Road (ADR)

14.1. UN number

UN number	3082
-----------	------

14.2. UN proper shipping name

Proper shipping name	Environmentally hazardous substance, liquid, n.o.s. (triphenyl phosphate)
----------------------	---

14.3. Transport hazard class(es)

Hazard identification number	90
Class	9
Classification code	M6

14.4. Packing group

Packing group	III
Labels	9

14.5. Environmental hazards

Environmentally hazardous substance mark	yes
--	-----

14.6. Special precautions for user

Special provisions	274
Special provisions	335
Special provisions	375
Special provisions	601
Limited quantities	Combination packagings: not more than 5 liters per inner packaging for liquids. A package shall not weigh more than 30 kg. (gross mass)

Rail (RID)

14.1. UN number

UN number	3082
-----------	------

14.2. UN proper shipping name

Proper shipping name	Environmentally hazardous substance, liquid, n.o.s. (triphenyl phosphate)
----------------------	---

14.3. Transport hazard class(es)

Hazard identification number	90
Class	9
Classification code	M6

14.4. Packing group

Packing group	III
Labels	9

Reason for revision: 2; 3; 16

Publication date: 2000-06-05

Date of revision: 2017-05-08

Revision number: 0701

Product number: 32505

10 / 13

NOVASTOP OIL HD

14.5. Environmental hazards

Environmentally hazardous substance mark	yes
--	-----

14.6. Special precautions for user

Special provisions	274
Special provisions	335
Special provisions	375
Special provisions	601
Limited quantities	Combination packagings: not more than 5 liters per inner packaging for liquids. A package shall not weigh more than 30 kg. (gross mass)

Inland waterways (ADN)

14.1. UN number

UN number	3082
-----------	------

14.2. UN proper shipping name

Proper shipping name	Environmentally hazardous substance, liquid, n.o.s. (triphenyl phosphate)
----------------------	---

14.3. Transport hazard class(es)

Class	9
Classification code	M6

14.4. Packing group

Packing group	III
Labels	9

14.5. Environmental hazards

Environmentally hazardous substance mark	yes
--	-----

14.6. Special precautions for user

Special provisions	274
Special provisions	335
Special provisions	375
Special provisions	601
Limited quantities	Combination packagings: not more than 5 liters per inner packaging for liquids. A package shall not weigh more than 30 kg. (gross mass)

Sea (IMDG/IMSBC)

14.1. UN number

UN number	3082
-----------	------

14.2. UN proper shipping name

Proper shipping name	Environmentally hazardous substance, liquid, n.o.s. (triphenyl phosphate)
----------------------	---

14.3. Transport hazard class(es)

Class	9
-------	---

14.4. Packing group

Packing group	III
Labels	9

14.5. Environmental hazards

Marine pollutant	P
Environmentally hazardous substance mark	yes

14.6. Special precautions for user

Special provisions	274
Special provisions	335
Special provisions	969
Limited quantities	Combination packagings: not more than 5 liters per inner packaging for liquids. A package shall not weigh more than 30 kg. (gross mass)

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Annex II of MARPOL 73/78	Not applicable, based on available data
--------------------------	---

Air (ICAO-TI/IATA-DGR)

14.1. UN number

UN number	3082
-----------	------

14.2. UN proper shipping name

Proper shipping name	Environmentally hazardous substance, liquid, n.o.s. (triphenyl phosphate)
----------------------	---

14.3. Transport hazard class(es)

Class	9
-------	---

14.4. Packing group

Packing group	III
Labels	9

14.5. Environmental hazards

Environmentally hazardous substance mark	yes
--	-----

14.6. Special precautions for user

NOVASTOP OIL HD

Special provisions	A97
Special provisions	A158
Special provisions	A197
limited quantities: maximum net quantity per packaging	30 kg G

SECTION 15: Regulatory information

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

European legislation:

VOC content Directive 2010/75/EU

VOC content	Remark
	No data available

REACH Annex XVII - Restriction

Subject to restrictions of Annex XVII of Regulation (EC) No. 1907/2006: restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.

	Designation of the substance, of the group of substances or of the mixture	Conditions of restriction
· NOVASTOP OIL HD	Liquid substances or mixtures which are regarded as dangerous in accordance with Directive 1999/45/EC or are fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: (a) hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F; (b) hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10; (c) hazard class 4.1; (d) hazard class 5.1.	1. 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 ashtrays, — tricks and jokes, — games for one or more participants, or any article intended to be used as such, even with ornamental aspects.2. Articles not complying with paragraph 1 shall not be placed on the market.3. 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 H304.4. 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).5. 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: a) 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"; b) 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"; c) 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 2010.6. 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.7. 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.'

National legislation Belgium

NOVASTOP OIL HD

No data available

National legislation The Netherlands

NOVASTOP OIL HD

Waste identification (the Netherlands)	LWCA (the Netherlands): KGA category 03
Waterbezwaarlijkheid	A (1)

National legislation France

NOVASTOP OIL HD

No data available

National legislation Germany

NOVASTOP OIL HD

WGK	2; Classification water polluting based on the components in compliance with Verwaltungsvorschrift wassergefährdender Stoffe (VwVwS) of 27 July 2005 (Anhang 4)
-----	---

triphenyl phosphate

TA-Luft	5.2.5; I
---------	----------

National legislation United Kingdom

NOVASTOP OIL HD

Reason for revision: 2; 3; 16

Publication date: 2000-06-05

Date of revision: 2017-05-08

Revision number: 0701

Product number: 32505

12 / 13

NOVASTOP OIL HD

No data available

Other relevant data

NOVASTOP OIL HD

No data available

triphenyl phosphate

TLV - Carcinogen	Triphenyl phosphate; A4
------------------	-------------------------

15.2. Chemical safety assessment

No chemical safety assessment has been conducted for the mixture.

SECTION 16: Other information

Full text of any H-statements referred to under headings 2 and 3:

H361fd Suspected of damaging fertility. Suspected of damaging the unborn child.

H400 Very toxic to aquatic life.

H411 Toxic to aquatic life with long lasting effects.

(*)	INTERNAL CLASSIFICATION BY BIG
CLP (EU-GHS)	Classification, labelling and packaging (Globally Harmonised System in Europe)
DMEL	Derived Minimal Effect Level
DNEL	Derived No Effect Level
EC50	Effect Concentration 50 %
ERC50	EC50 in terms of reduction of growth rate
LC50	Lethal Concentration 50 %
LD50	Lethal Dose 50 %
NOAEL	No Observed Adverse Effect Level
NOEC	No Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
PBT	Persistent, Bioaccumulative & Toxic
PNEC	Predicted No Effect Concentration
STP	Sludge Treatment Process
vPvB	very Persistent & very Bioaccumulative

M-factor

triphenyl phosphate	1	Acute	BIG
---------------------	---	-------	-----

The information in this safety data sheet is based on data and samples provided to BIG. The sheet was written to the best of our ability and according to the state of knowledge at that time. The safety data sheet only constitutes a guideline for the safe handling, use, consumption, storage, transport and disposal of the substances/preparations/mixtures mentioned under point 1. New safety data sheets are written from time to time. Only the most recent versions may be used. Old versions must be destroyed. Unless indicated otherwise word for word on the safety data sheet, the information does not apply to substances/preparations/mixtures in purer form, mixed with other substances or in processes. The safety data sheet offers no quality specification for the substances/preparations/mixtures in question. Compliance with the instructions in this safety data sheet does not release the user from the obligation to take all measures dictated by common sense, regulations and recommendations or which are necessary and/or useful based on the real applicable circumstances. BIG does not guarantee the accuracy or exhaustiveness of the information provided and cannot be held liable for any changes by third parties. This safety data sheet is only to be used within the European Union, Switzerland, Iceland, Norway and Liechtenstein. Any use outside of this area is at your own risk. Use of this safety data sheet is subject to the licence and liability limiting conditions as stated in your BIG licence agreement or when this is failing the general conditions of BIG. All intellectual property rights to this sheet are the property of BIG and its distribution and reproduction are limited. Consult the mentioned agreement/conditions for details.

Reason for revision: 2; 3; 16

Publication date: 2000-06-05

Date of revision: 2017-05-08

Revision number: 0701

Product number: 32505

13 / 13