

## TuffTechPro (PU)

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

## 1.1. Product identifier

Product name : TuffTechPro  
 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

Sealing compound

## 1.2.2 Uses advised against

No uses advised against known

## 1.3. Details of the supplier of the safety data sheet

Tuff Waterproofing Ltd,  
 Unit 5, First Avenue,  
 Sherburn Industrial Estate,  
 Sherburn in Elmet,  
 North Yorkshire LS25 6PD  
 T: 01977 680250

## 1.4. Emergency telephone number

T: 01977 680250

## SECTION 2: Hazards identification

## 2.1. Classification of the substance or mixture

Not classified as dangerous according to the criteria of Regulation (EC) No 1272/2008

## 2.2. Label elements

Not classified as dangerous according to the criteria of Regulation (EC) No 1272/2008

## Supplemental information

EUH208 Contains: triisobutyl phosphate. May produce an allergic reaction.  
 EUH210 Safety data sheet available on request.

## 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
diisononylphthalate 01-2119430798-28	28553-12-0 249-079-5	1%<C<10%		(2)(10)	Constituent
hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics 01-2119457273-39		1%<C<20%	Asp. Tox. 1; H304	(1)(10)	Constituent

# TuffTechPro (PU)

C18-C50 branched, cyclic and linear hydrocarbons – distillates	848301-69-9 482-220-0	0.1%<C<3%	Asp. Tox. 1; H304	(1)(10)	Constituent
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- (1) For H-statements in full: see heading 16  
(2) Substance with a Community workplace exposure limit  
(10) Subject to restrictions of Annex XVII of Regulation (EC) No. 1907/2006

## 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:

Wash immediately with lots of water. 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. 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:

Small fire: Quick-acting ABC powder extinguisher, Quick-acting BC powder extinguisher, Quick-acting class B foam extinguisher, Quick-acting CO<sub>2</sub> extinguisher.

Major fire: Class B foam (not alcohol-resistant).

#### 5.1.2 Unsuitable extinguishing media:

Small fire: Water (quick-acting extinguisher, reel); risk of puddle expansion.

Major fire: Water; risk of puddle expansion.

### 5.2. Special hazards arising from the substance or mixture

Upon combustion: CO and CO<sub>2</sub> are formed.

### 5.3. Advice for firefighters

#### 5.3.1 Instructions:

No specific fire-fighting instructions required.

#### 5.3.2 Special protective equipment for fire-fighters:

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

## 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. Safety glasses. Protective clothing.

##### Suitable protective clothing

See heading 8.2

### 6.2. Environmental precautions

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Contain released product, pump into suitable containers. Plug the leak, cut off the supply. Use appropriate containment to avoid environmental contamination.

## 6.3. Methods and material for containment and cleaning up

Cover spill with inert material, e.g.: sand, earth, vermiculite. Scoop solid spill into closing containers. Clean contaminated surfaces with an excess of water. 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

Observe strict hygiene. Keep container tightly closed.

### 7.2. Conditions for safe storage, including any incompatibilities

#### 7.2.1 Safe storage requirements:

Keep container in a well-ventilated place. Store at room temperature. Meet the legal requirements. Max. storage time: 1 year(s).

#### 7.2.2 Keep away from:

No data available.

#### 7.2.3 Suitable packaging material:

Polyethylene.

#### 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.

##### UK

Diisononyl phthalate	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	5 mg/m <sup>3</sup>
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##### b) National biological limit values

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

#### 8.1.2 Sampling methods

If applicable and available it will be listed below.

#### 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

###### diisononylphthalate

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	51.72 mg/m <sup>3</sup>	
	Long-term systemic effects dermal	366 mg/kg bw/day	

##### DNEL/DMEL - General population

###### diisononylphthalate

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects dermal	220 mg/kg bw/day	
	Long-term systemic effects inhalation	15.3 mg/m <sup>3</sup>	
	Long-term systemic effects oral	4.4 mg/kg bw/day	

##### PNEC

###### diisononylphthalate

Compartments	Value	Remark
Soil	30 mg/kg soil dw	

##### C18-C50 branched, cyclic and linear hydrocarbons – distillates

Compartments	Value	Remark
STP	10 mg/l	

#### 8.1.5 Control banding

If applicable and available it will be listed below.

### 8.2. Exposure controls

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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

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. Do not eat, drink or smoke during work.

### a) Respiratory protection:

Respiratory protection not required in normal conditions.

### b) Hand protection:

Gloves.

### c) Eye protection:

Face shield.

### 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	Paste
Odour	Characteristic odour
Odour threshold	No data available
Colour	Variable in colour, depending on the composition
Particle size	No data available
Explosion limits	No data available
Flammability	Non-flammable
Log Kow	Not applicable (mixture)
Dynamic viscosity	No data available
Kinematic viscosity	No data available
Melting point	No data available
Boiling point	No data available
Evaporation rate	No data available
Relative vapour density	No data available
Vapour pressure	No data available
Solubility	No data available
Relative density	1.50 ; 20 °C
Decomposition temperature	No data available
Auto-ignition temperature	No data available
Flash point	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

Surface tension	No data available
Absolute density	1500 kg/m <sup>3</sup> ; 20 °C

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No data available.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No data available.

### 10.4. Conditions to avoid

No data available.

### 10.5. Incompatible materials

No data available.

### 10.6. Hazardous decomposition products

Upon combustion: CO and CO<sub>2</sub> are formed.

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## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

#### 11.1.1 Test results

##### Acute toxicity

###### TuffTechPro

No (test) data on the mixture available

Judgement is based on the relevant ingredients

###### diisononylphthalate

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50		> 5000 mg/kg		Rat	Literature study	
Oral	LD50	Equivalent to OECD 401	> 10000 mg/kg bw		Rat (male/female)	Experimental value	
Dermal	LD50		> 3160 mg/kg bw	24 h	Rabbit (female)	Experimental value	
Inhalation (aerosol)	LC50	Other	> 4.4 mg/l air	4 h	Rat (male/female)	Experimental value	

###### hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	Equivalent to OECD 401	> 5000 mg/kg bw		Rat (male/female)	Read-across	
Dermal	LD50	Equivalent to OECD 402	> 3160 mg/kg bw	24 h	Rabbit (male/female)	Read-across	
Inhalation (aerosol)	LC50	Equivalent to OECD 403	> 5.6 mg/l	4 h	Rat (male)	Read-across	

###### C18-C50 branched, cyclic and linear hydrocarbons – distillates

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	OECD 420	> 5000 mg/kg bw		Rat (female)	Experimental value	
Dermal						Data waiving	
Inhalation						Data waiving	

##### Conclusion

Not classified for acute toxicity

##### Corrosion/irritation

###### TuffTechPro

No (test) data on the mixture available

Judgement is based on the relevant ingredients

###### diisononylphthalate

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Not irritating	Equivalent to OECD 405		24; 72 hours	Rabbit	Experimental value	
Skin	Slightly irritating	Equivalent to OECD 404	4 h	24; 72 hours	Rabbit	Experimental value	
Skin	Not irritating	Human observation	24 h		Human	Weight of evidence	

###### hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Not irritating	OECD 405		24; 48; 72 hours	Rabbit	Read-across	Single treatment
Skin	Not irritating	Equivalent to OECD 404	4 h	24; 48; 72 hours	Rabbit	Read-across	

###### C18-C50 branched, cyclic and linear hydrocarbons – distillates

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

##### Conclusion

Not classified as irritating to the skin

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Not classified as irritating to the eyes  
Not classified as irritating to the respiratory system

## Respiratory or skin sensitisation

### TuffTechPro

No (test) data on the mixture available

Judgement is based on the relevant ingredients

#### diisononylphthalate

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Skin	Not sensitizing	EU Method B.6	24 h	24; 48 hours	Guinea pig (female)	Experimental value	
Skin	Not sensitizing	Human observation			Human (male/female)	Weight of evidence	
Inhalation	Not sensitizing				Mouse	Experimental value	

#### hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Skin	Not sensitizing	Equivalent to OECD 406		24; 48 hours	Guinea pig (female)	Read-across	

#### C18-C50 branched, cyclic and linear hydrocarbons – distillates

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

### Conclusion

Not classified as sensitizing for skin

Not classified as sensitizing for inhalation

## Specific target organ toxicity

### TuffTechPro

No (test) data on the mixture available

Judgement is based on the relevant ingredients

#### diisononylphthalate

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
Oral	NOAEL	Equivalent to OECD 452	88.3 mg/kg bw/day	Liver; kidney	No effect	104 week(s)	Rat (male)	Experimental value
Oral	NOAEL	Equivalent to OECD 452	108.6 mg/kg bw/day	Liver; kidney	No effect	104 week(s)	Rat (male)	Experimental value
Dermal	NOAEL		500 mg/kg bw/day		Impairment of the blood forming system	6 weeks (5 days/week)	Rabbit	Experimental value
Inhalation (aerosol)	NOAEC		500 mg/m <sup>3</sup> air		Impairment of the blood forming system	2 weeks (6h/day, 5 days/week)	Rat (male)	Experimental value

#### hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
Oral (stomach tube)	NOAEL	Equivalent to OECD 422	≥ 1000 mg/kg bw/day		No effect		Rat (male/female)	Read-across
Dermal								Data waiving
Inhalation (vapours)	NOAEC	Equivalent to OECD 413	≥ 2200 mg/m <sup>3</sup> air		No effect	14 weeks (6h/day, 5 days/week)	Rat (female)	Read-across

#### C18-C50 branched, cyclic and linear hydrocarbons – distillates

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
Oral (stomach tube)	NOEL	OECD 408	50 mg/kg bw/day		No effect	90 day(s)	Rat (male/female)	Experimental value
Dermal								Data waiving
Inhalation								Data waiving

### Conclusion

Not classified for subchronic toxicity

## Mutagenicity (in vitro)

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No (test) data on the mixture available

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## diisononylphthalate

Result	Method	Test substrate	Effect	Value determination
Negative	Equivalent to OECD 471	Bacteria (S.typhimurium)		Experimental value
Negative	Equivalent to OECD 473	Chinese hamster ovary (CHO)		Experimental value

## hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics

Result	Method	Test substrate	Effect	Value determination
Negative with metabolic activation, negative without metabolic activation	OECD 471	Bacteria (S.typhimurium)	No effect	Read-across

## C18-C50 branched, cyclic and linear hydrocarbons – distillates

Result	Method	Test substrate	Effect	Value determination
Negative with metabolic activation, negative without metabolic activation	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

## Mutagenicity (in vivo)

### TuffTechPro

No (test)data on the mixture available

Judgement is based on the relevant ingredients

## hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics

Result	Method	Exposure time	Test substrate	Organ	Value determination
Negative	Equivalent to OECD 478		Rat (male)		Read-across

## C18-C50 branched, cyclic and linear hydrocarbons – distillates

Result	Method	Exposure time	Test substrate	Organ	Value determination
Negative (Oral (stomach tube))	OECD 475		Rat (male)		Experimental value

### Conclusion

Not classified for mutagenic or genotoxic toxicity

## Carcinogenicity

### TuffTechPro

No (test)data on the mixture available

Judgement is based on the relevant ingredients

## diisononylphthalate

Route of exposure	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Oral	NOAEL	EPA OTS 798.3300	88.3 mg/kg bw/day	104 week(s)	Rat (male)			Experimental value
Oral	NOAEL	EPA OTS 798.3300	108.6 mg/kg bw/day	104 week(s)	Rat (female)			Experimental value

## hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics

Route of exposure	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Inhalation (vapours)	NOAEC	Equivalent to OECD 453	≥ 2200 mg/m <sup>3</sup> air	105 weeks (6h/day, 5 days/week)	Rat (female)	No carcinogenic effect		Read-across

## C18-C50 branched, cyclic and linear hydrocarbons – distillates

Route of exposure	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Unknown								Data waiving

### Conclusion

Not classified for carcinogenicity

## Reproductive toxicity

### TuffTechPro

No (test)data on the mixture available

Judgement is based on the relevant ingredients

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# TuffTechPro (PU)

## diisononylphthalate

	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Developmental toxicity	NOAEL	OECD 414	1000 mg/kg bw/day	10 day(s)	Rat			Experimental value
Effects on fertility	NOAEL (P)	EPA OTS 798.4700	500 mg/kg bw/day		Rat (male/female)			Experimental value
	NOAEL (F1)	EPA OTS 798.4700	200 mg/kg bw/day - 260 mg/kg bw/day		Rat (male/female)			Experimental value

## hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics

	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Developmental toxicity	NOAEC		≥ 1575 mg/m <sup>3</sup>	10 days (6h/day)	Rat (female)	No effect		Experimental value
Maternal toxicity	NOAEL	Equivalent to OECD 414	≥ 5220 mg/kg bw/day	10 day(s)	Rat	No effect		Experimental value

## C18-C50 branched, cyclic and linear hydrocarbons – distillates

	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Developmental toxicity								Data waiving
Maternal toxicity								Data waiving
Effects on fertility (Oral (stomach tube))	NOAEL	EPA OPPTS 870.3800	1000 mg/kg bw/day		Rat (male/female)	No effect		Experimental value

### Conclusion

Not classified for reprotoxic or developmental toxicity

### Toxicity other effects

#### TuffTechPro

No (test) data on the mixture available

#### hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics

Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
			Skin	Skin dryness or cracking			Literature study

### Chronic effects from short and long-term exposure

#### TuffTechPro

Skin rash/inflammation.

## SECTION 12: Ecological information

### 12.1. Toxicity

#### TuffTechPro

No (test) data on the mixture available

Judgement of the mixture is based on the relevant ingredients

#### diisononylphthalate

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50	EU Method C.1	> 100 mg/l	96 h	Brachydanio rerio	Semi-static system	Fresh water	Experimental value; GLP
Acute toxicity crustacea	EC50	EU Method C.2	> 74 mg/l	48 h	Daphnia magna	Static system	Fresh water	Experimental value; GLP
Toxicity algae and other aquatic plants	EC50	EU Method C.3	> 88 mg/l	72 h	Desmodesmus subspicatus	Static system	Fresh water	Experimental value; GLP

#### hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LL50	OECD 203	> 1000 mg/l	96 h	Oncorhynchus mykiss	Semi-static system	Fresh water	Experimental value; GLP
Acute toxicity crustacea	EL50	OECD 202	> 1000 mg/l	48 h	Daphnia magna	Static system	Fresh water	Experimental value; GLP
Toxicity algae and other aquatic plants	NOELR	OECD 201	> 1000 mg/l	72 h	Pseudokirchneriella subcapitata	Static system	Fresh water	Experimental value; GLP
Toxicity aquatic micro-organisms	EL50		> 1000 mg/l	48 h	Tetrahymena pyriformis		Fresh water	QSAR

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## C18-C50 branched, cyclic and linear hydrocarbons – distillates

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LL50	OECD 203	> 1000 mg/l	96 h	Danio rerio	Semi-static system	Fresh water	Experimental value; GLP
Acute toxicity crustacea	EL50	OECD 202	> 100 mg/l	48 h	Daphnia magna	Static system		Experimental value; Locomotor effect
Toxicity algae and other aquatic plants	EL50	OECD 201	> 100 mg/l	72 h	Desmodesmus subspicatus	Static system		Experimental value; Nominal concentration
Long-term toxicity fish	NOELR	OECD 210	100 mg/l	33 day(s)	Pimephales promelas	Semi-static system	Fresh water	Experimental value; Nominal concentration
Long-term toxicity aquatic crustacea	EL50	OECD 211	> 100 mg/l	21 day(s)	Daphnia magna	Semi-static system	Fresh water	Experimental value; Nominal concentration

### Conclusion

Not classified as dangerous for the environment according to the criteria of Regulation (EC) No 1272/2008

## 12.2. Persistence and degradability

### diisononylphthalate

#### Biodegradation water

Method	Value	Duration	Value determination
OECD 302B: Inherent Biodegradability: Zahn-Wellens/EMPA Test	> 90 %	55 day(s)	Experimental value
EU Method C.4	81 %; GLP	28 day(s)	Experimental value

### hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics

#### Biodegradation water

Method	Value	Duration	Value determination
OECD 301F: Manometric Respirometry Test	80 %; GLP	28 day(s)	Read-across

#### Biodegradation soil

Method	Value	Duration	Value determination
Equivalent or similar to OECD 304A	59.7 % - 62.6 %; Oxygen consumption	61 day(s)	Read-across

### C18-C50 branched, cyclic and linear hydrocarbons – distillates

#### Biodegradation water

Method	Value	Duration	Value determination
ISO 14593	65 %; GLP	28 day(s)	Experimental value

### Conclusion

Contains non readily biodegradable component(s)

## 12.3. Bioaccumulative potential

### TuffTechPro

#### Log Kow

Method	Remark	Value	Temperature	Value determination
	Not applicable (mixture)			

### diisononylphthalate

#### BCF fishes

Parameter	Method	Value	Duration	Species	Value determination
BCF		< 3	14 day(s)	Oncorhynchus mykiss	Experimental value

#### Log Kow

Method	Remark	Value	Temperature	Value determination
OECD 117		8.8 - 9.7	25 °C	Experimental value

### hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics

#### Log Kow

Method	Remark	Value	Temperature	Value determination
	No data available			

### C18-C50 branched, cyclic and linear hydrocarbons – distillates

#### BCF fishes

Parameter	Method	Value	Duration	Species	Value determination
BCF		≤ 29; GLP	28 day(s)	Cyprinus carpio	Experimental value

#### Log Kow

Method	Remark	Value	Temperature	Value determination
EU Method A.8		> 6.5	40 °C	Experimental value

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# TuffTechPro (PU)

## Conclusion

Contains bioaccumulative component(s)

## 12.4. Mobility in soil

diisononylphthalate

### (log) Koc

Parameter	Method	Value	Value determination
Koc	SRC PCKOCWIN v2.0	947900	Calculated value
log Koc	SRC PCKOCWIN v2.0	6	Calculated value

### Percent distribution

Method	Fraction air	Fraction biota	Fraction sediment	Fraction soil	Fraction water	Value determination
Mackay level III	0.9 %	0 %	22.4 %	68.5 %	0.2 %	Calculated value

hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics

### Percent distribution

Method	Fraction air	Fraction biota	Fraction sediment	Fraction soil	Fraction water	Value determination
Mackay level III	65.8 %	0 %	22.9 %	9.6 %	1.7 %	Calculated value

C18-C50 branched, cyclic and linear hydrocarbons – distillates

### (log) Koc

Parameter	Method	Value	Value determination
log Koc	EU Method C.19	> 5.63	Experimental value

## Conclusion

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

## 12.5. Results of PBT and vPvB assessment

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

## 12.6. Other adverse effects

TuffTechPro

### 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

Can be considered as non hazardous waste according to Directive 2008/98/EC, as amended by Regulation (EU) No 1357/2014 and Regulation (EU) No 2017/997. The waste code must be assigned by the user, preferably in consultation with the (environmental) authorities concerned.

#### 13.1.2 Disposal methods

Remove to an authorized incinerator equipped with an afterburner and a flue gas scrubber with energy recovery. Remove waste in accordance with local and/or national regulations. Do not discharge into drains or the environment.

#### 13.1.3 Packaging/Container

No data available

## SECTION 14: Transport information

### Road (ADR), Rail (RID), Inland waterways (ADN), Sea (IMDG/IMSBC), Air (ICAO-TI/IATA-DGR)

#### 14.1. UN number

Transport	Not subject
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#### 14.2. UN proper shipping name

#### 14.3. Transport hazard class(es)

Hazard identification number	
Class	
Classification code	

#### 14.4. Packing group

Packing group	
Labels	

#### 14.5. Environmental hazards

Environmentally hazardous substance mark	no
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#### 14.6. Special precautions for user

Special provisions	
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Limited quantities

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

## 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
11.52 %	
172.73 g/l	

REACH Annex XVII - Restriction

Contains component(s) 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
<p>· hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, &lt; 2% aromatics</p> <p>· C18-C50 branched, cyclic and linear hydrocarbons – distillates</p>	<p>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:</p> <p>(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;</p> <p>(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;</p> <p>(c) hazard class 4.1;</p> <p>(d) hazard class 5.1.</p>
<p>· diisononylphthalate</p>	<p>The following phthalates (or other CAS- and EC numbers covering the substance); Di-“isononyl” phthalate (DINP)</p>
	<p>1. Shall not be used in:</p> <ul style="list-style-type: none"> <li>— ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,</li> <li>— tricks and jokes,</li> <li>— games for one or more participants, or any article intended to be used as such, even with ornamental aspects,</li> </ul> <p>2. Articles not complying with paragraph 1 shall not be placed on the market.</p> <p>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:</p> <ul style="list-style-type: none"> <li>— can be used as fuel in decorative oil lamps for supply to the general public, and,</li> <li>— present an aspiration hazard and are labelled with R65 or H304,</li> </ul> <p>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).</p> <p>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:</p> <p>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”;</p> <p>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”;</p> <p>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.</p> <p>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.</p> <p>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.’</p>
	<p>1. Shall not be used as substances or in mixtures, in concentrations greater than 0,1 % by weight of the plasticised material, in toys and childcare articles which can be placed in the mouth by children.</p> <p>2. Such toys and childcare articles containing these phthalates in a concentration greater than 0,1 % by weight of the plasticised material shall not be placed on the market.</p> <p>3. For the purpose of this entry “childcare article” shall mean any product intended to facilitate sleep, relaxation, hygiene, the feeding of children or sucking on the part of children.</p>

#### National legislation Belgium

TuffTechPro

No data available

#### National legislation The Netherlands

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Waterbezwaarlijkheid

B (4)

#### National legislation France

TuffTechPro

No data available

#### National legislation Germany

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WGK	1; Classification water polluting based on the components in compliance with Verwaltungsvorschrift wassergefährdender Stoffe (VwVwS) of 27 July 2005 (Anhang 4) and Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen (AwSV) of 18 April 2017
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## diisononylphthalate

TA-Luft	5.2.5; I
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## hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics

TA-Luft	5.2.5
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## C18-C50 branched, cyclic and linear hydrocarbons – distillates

TA-Luft	5.2.5; I
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### **National legislation United Kingdom**

#### TuffTechPro

No data available

### **Other relevant data**

#### TuffTechPro

No data available

## **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 heading 3:**

H304 May be fatal if swallowed and enters airways.

(*)	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

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 has been elaborated for use within the European Union, Switzerland, Iceland, Norway and Lichtenstein. It may be consulted in other countries, where local legislation with regards to the set-up of safety data sheets will take precedence. It is your obligation to verify and apply such local legislation. 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.

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