Safety Data Sheet

ACCORDING TO COMISSION REGULATION (EU) 2020/878 and UK REACH

Date 02/08/2024. Version 5

XO1490TA

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

1.1 Product identifier

Product name	XO1490TA
Trade name	Cooker
Product description	Liquid fuel additive
Contains	Hydrocarbons, C10, aromatics, <1% naphthalene Reaction mass of 2,6-di-tert-butylphenol and 2,4,6-tri-tert-butylphenol

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

Identified use(s)	Liquid fuel additive.
Uses advised against	Follow supplier's recommendations on correct use of the product.

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier	Fuel Additive Science Technologies Limited
Address	Unit 29, Atcham Business Park, Upton Magna, Shrewsbury, Shropshire
Postcode	SY4 4UG
Telephone	+44 (0)1743 761415
E-mail address of competent person responsible	info@fastexocet.co.uk

1.4 Emergency telephone number

In case of emergency, call	+44 (0) 333 333 9962 (UK number, 24 hours, 7 days)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

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

Asp. Tox. 1	H304	May be fatal if swallowed and enters airways.
Eye Dam. 1	H318	Causes serious eye damage.
STOT SE 3	H336	May cause drowsiness or dizziness.
Aquatic Acute 1	H400	Very toxic to aquatic life
Aquatic Chronic 2	H410	Very toxic to aquatic life with long lasting effects

2.2 Label elements

Hazard pictogram(s)

Signal Word	Danger	
Hazard Statement(s)	H304	May be fatal if swallowed and enters airways.
	H318	Causes serious eye damage.
	H336	May cause drowsiness or dizziness.
	H400	Very toxic to aquatic life
	H410	Very toxic to aquatic life with long lasting effects
Precautionary Statement(s)	P261	Avoid breathing fume/vapours.
	P271	Use only outdoors or in a well-ventilated area.
	P273	Avoid release to the environment.
	P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
	P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor.
	P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
	P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
	P310	Immediately call a POISON CENTER/doctor.

	P331	Do NOT induce vomiting.
	P391	Collect spillage
	P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
	P405	Store locked up.
	P501	Dispose of contents/container in accordance with local, state or national legislation.
Supplemental information on the label		
Supplementary Hazard Information (EU)	EUH066	Repeated exposure may cause skin dryness or cracking.
Hazardous components which must be on the label	Hydrocarbons, C10, aromatics, <1% naphthalene Reaction mass of 2,6-di-tert-butylphenol and 2,4,6-tri-tert-butylphenol	

2.3 Other hazards

Combustible liquid.
Spillages make surfaces slippery.
Contains reaction mass of 2,6-di-tert-butylphenol and 2,4,6-tri-tert-butyl phenol which is under assessment as Persistent, Bioaccumulative and Toxic (PBT list).
This mixture contains p-tert-butylphenol that is identified as endocrine disruptor with environmental effects.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical name	Identification Number(s) CAS No. / EC No. / Index No.	REACH Registration No.	% [weight]	Classification in accordance with Regulation (EC) No 1272/2008 (CLP)	Additional information*
Hydrocarbons, C10 aromatics, <1% naphthalene	64742-94-5 (**) 918-811-1 -	01-2119463583-34-0001 UK-01-0329875101-1-0002	75 - 85	Asp. Tox. 1 H304 STOT SE 3 H336 Aquatic Chronic 2 H411	EUH066 WEL
Reaction mass of 2,6-di-tert-butylphenol and 2,4,6-tri-tert-butyl phenol	- 907-745-9 -	01-2119538013-51	20 - ≤ 30	Eye Dam. 1 H318 Aquatic Acute 1 H400 Aquatic Chronic 1 H410	M (acute) =1 M (chronic) =1
Naphthalene	91-20-3 202-249-5 601-052-00-2	Compliant	< 0.5	Acute Tox. 4 H302 Carc. 2 H351 Aquatic Acute 1 H400 Aquatic Chronic 1 H410	WEL

Chemical name	Identification Number(s) CAS No. / EC No. / Index No.	REACH Registration No.	% [weight]	Classification in accordance with Regulation (EC) No 1272/2008 (CLP)	Additional information*
p-tert-butylphenol (***)	98-54-4 202-679-0 604-090-00-8	-	< 0.5	Skin Irrit. 2, H315 Eye Dam. 1, H318 Repr. 2, H361f Aquatic Chronic 1, H410	WEL M = 1

* Includes information relating to specific concentration limits, M-factors, ATEs, particle characteristics, supplementary hazard information, and indicates workplace exposure limits shown in Section 8.

** Identified as CAS 64742-94-5 outside the EU.

*** Identified as endocrine disruptor with environmental effects.

For full text of H-statements, see SECTION 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General notes	If medical advice is needed, have the safety data sheet or label to hand. If exposed or concerned, get medical advice/attention.
Following inhalation	May cause drowsiness or dizziness. Remove person to fresh air and keep comfortable for breathing. If symptoms persist, seek medical attention.
Following skin contact	Repeated exposure may cause skin dryness or cracking. Wash with plenty of water. Take off contaminated clothing and wash it before reuse. If skin irritation or rash occurs, get medical advice/attention.
Following eye contact	Causes serious eye damage. Immediately call a POISON CENTER or doctor. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Following ingestion	May be fatal if swallowed and enters airways. Immediately call a POISON CENTER/doctor. Do NOT induce vomiting. If vomiting occurs naturally, the patient should lean forward to reduce the risk of aspiration.
Self-protection of the first aider	When administering first aid, ensure that you are wearing the appropriate personal protective equipment according to the incident, injury, and surroundings.

4.2 Most important symptoms and effects, both acute and delayed

May be fatal if swallowed and enters airways. Causes serious eye damage. Repeated exposure may cause skin dryness or cracking. May cause drowsiness or dizziness.

4.3 Indication of any immediate medical attention and special treatments needed

Treat symptomatically. If swallowed, patient should be monitored for signs of breathing difficulty as effects of aspiration may be delayed for up to 48 hours. If breathing is laboured, oxygen should be administered by qualified personnel.

SECTION 5: Firefighting measures

5.1 Extinguishing Media

Suitable extinguishing media: Foam, carbon dioxide (CO_2) or dry powder.

Unsuitable extinguishing media: Do not use water jet or wet chemical fire extinguisher.

5.2 Special hazards arising from the substance or mixture

Combustible liquid.

Vapour may form explosive mixture with air. Vapour is heavier than air and may accumulate in confined spaces.

This material is toxic to aquatic life with long lasting effects; fire water contaminated with the material must be contained. Do not empty into drains.

Hazardous combustion products	Combustion may liberate toxic fumes: Carbon monoxide, carbon dioxide and various hydrocarbons.

5.3 Advice for fire-fighters

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

A self-contained breathing apparatus and suitable protective clothing should be worn in fire conditions. Evacuate area. Move containers from the fire area if it is safe to do so.

Fight any fire from a safe distance. Cool containers exposed to flames with plenty of water until well after the fire is out.

This material is toxic to aquatic life with long lasting effects; do not allow product or run-off to enter drains, sewers or watercourses.

Flash point: 63°C.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas as a priority. Ensure adequate ventilation. Do not touch or walk through spilt material. Avoid contact with skin, eyes, or clothing. Avoid breathing fume/vapours. The vapour is heavier than air; it will concentrate in low lying areas, beware of pits and confined spaces. No smoking.
For emergency responders	Keep unnecessary personnel away. Wear suitable protective clothing appropriate respirator when ventilation is inadequate (see Section 8). Do not touch or walk through spilt material. Avoid contact with skin, eyes, or clothing. Avoid breathing fume/vapours. The vapour is heavier than air; it will concentrate in low lying areas, beware of pits and confined spaces.

6.2 Environmental precautions

Very toxic to aquatic life with long lasting effects. Collect spillage. Do not allow to enter drains, sewers or watercourses. Spillages or uncontrolled discharges into watercourses must be alerted to the Environment Agency or other appropriate regulatory body.

6.3 Methods and materials for containment and cleaning up

For containment	Stop the leak if it is safe to do so. Contain the spillage with sand, earth or any suitable adsorbent material.
For cleaning up	Use sand, earth or any suitable non-combustible adsorbent material to adsorb spillages. Using non-sparking tools transfer the contaminated absorbent material into a UN approved container for disposal. Containers should be sealed before being disposed of via an authorised waste disposal contractor.
Other advice	Caution – spillage area may be slippery. Collect spillage. Avoid release to the environment.

6.4 Reference to other sections

See Section 8 for personal protective equipment. See Section 13 for waste disposal.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid breathing fume/vapours. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection/hearing protection (see Section 8).

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against electrostatic discharges. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Keep away from heat.

Avoid release to the environment. Dispose of contents/container in accordance with local, state or national legislation.

7.2 Conditions for safe storage, including any incompatibilities

Keep away from heat and sources of ignition. Store locked up in a well-ventilated place. Keep container tightly closed. Store only in the original container. Empty containers retain product residue and can be hazardous. Protect from direct sunlight and from frost. Keep away from incompatible materials.

Keep away from oxidising agents. Avoid contact with acids, alkalis and oxidising agents.

Maximum handling temperature: 50 °C.

7.3 Specific end uses(s)

Liquid fuel additive.
Follow supplier's recommendations on correct use of the product.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Workplace exposure limits

Substance	Source	Limit value - 8 hours		Limit value - short term*		Comments
		ppm	mg/m³	ppm	mg/m³	
Hydrocarbons, C10 aromatics, <1% naphthalene	EH 40	-	500	-	-	Total hydrocarbon vapour (1)
Naphthalene	GESTIS ILV	10	50	-	-	Ireland
p-tert-butylphenol	GESTIS ILV	0.08	0.5	0.16	1	European Union (2)

Comments

* Short term is 15 minutes unless otherwise specified

1	Hydrocarbon solvents supplied as a complex mixture, HSE ACTS procedure, see EH40, paragraphs 84-88
2	Austria, Denmark, Germany, Switzerland
Recommended	Naphthalene CoRAP: Substance Evaluation Conclusion and Report

Derived No-Effect Level (DNELs) Workers

Substance	Route	Acute/short-term exposure		Long-term exposure	
		Systemic effects	Local effects	Systemic effects	Local effects
Hydrocarbons, C10 aromatics, <1% naphthalene	Inhalation	No hazard identified	No hazard identified	151 mg/m³ repeated dose toxicity	No hazard identified
	Dermal	No hazard identified	No hazard identified	12.5 mg/kg bw/day repeated dose toxicity	No hazard identified
	Eyes	No hazard identified	No hazard identified	No hazard identified	No hazard identified
Reaction mass of 2,6-di-tert-butylphenol and 2,4,6-tri-tert-butyl phenol	Inhalation	-	-	3.5 mg/m³ repeated dose toxicity	-
	Dermal	-	-	0.500 mg/kg bw/day repeated dose toxicity	-
	Eyes	High hazard (no threshold derived)	High hazard (no threshold derived)	High hazard (no threshold derived)	High hazard (no threshold derived)
Naphthalene	Inhalation	Low hazard (no threshold derived)	No hazard identified	25 mg/m³ repeated dose toxicity	25 mg/m³ irritation (respiratory tract)
	Dermal	Low hazard (no threshold derived)	No hazard identified	3.57 mg/kg bw/day repeated dose toxicity	No hazard identified
	Eyes	No hazard identified	No hazard identified	No hazard identified	No hazard identified
p-tert-butylphenol	Inhalation	Low hazard (no threshold derived)	No hazard identified	0.500 mg/m³ repeated dose toxicity	No hazard identified
	Dermal	Medium hazard (no threshold derived)	Medium hazard (no threshold derived)	0.071 mg/kg bw/day repeated dose toxicity	Medium hazard (no threshold derived)
	Eyes	Medium hazard (no threshold derived)	Medium hazard (no threshold derived)	Medium hazard (no threshold derived)	Medium hazard (no threshold derived)

Derived No-Effect Level (DNELs) General population

Substance	Route	Acute/short-term exposure		Long-term exposure	
		Systemic effects	Local effects	Systemic effects	Local effects
Hydrocarbons, C10 aromatics, <1% naphthalene	Inhalation	No hazard identified	No hazard identified	32 mg/m³ repeated dose toxicity	No hazard identified
	Dermal	No hazard identified	No hazard identified	7.5 mg/kg bw/day repeated dose toxicity	No hazard identified
	Oral	No hazard identified	-	7.5 mg/kg bw/day repeated dose toxicity	-
	Eye	No hazard identified	No hazard identified	No hazard identified	No hazard identified
Reaction mass of 2,6-di-tert-butylphenol and 2,4,6-tri-tert-butyl phenol	Inhalation	-	-	-	-
	Dermal	-	-	-	-
	Oral	-	-	-	-
	Eye	-	-	-	-
	Eye	Medium hazard (no threshold derived)	Medium hazard (no threshold derived)	Medium hazard (no threshold derived)	Medium hazard (no threshold derived)

Substance	Route	Acute/short-term exposure		Long-term exposure	
		Systemic effects	Local effects	Systemic effects	Local effects
Naphthalene	Inhalation	No hazard identified	No hazard identified	No hazard identified	No hazard identified
	Dermal	No hazard identified	No hazard identified	No hazard identified	No hazard identified
	Oral	No hazard identified	No hazard identified	No hazard identified	No hazard identified
	Eye	No hazard identified	No hazard identified	No hazard identified	No hazard identified
p-tert-butylphenol	Inhalation	Low hazard (no threshold derived)	No hazard identified	0.090 mg/m³ repeated dose toxicity	No hazard identified
	Dermal	Medium hazard (no threshold derived)	Medium hazard (no threshold derived)	0.026 mg/kg bw/day repeated dose toxicity	Medium hazard (no threshold derived)
	Oral	Low hazard (no threshold derived)	-	0.026 mg/kg bw/day repeated dose toxicity	-
	Eye	Medium hazard (no threshold derived)	Medium hazard (no threshold derived)	Medium hazard (no threshold derived)	Medium hazard (no threshold derived)

Predicted No Effect Concentration (PNECs)

Substance	Hydrocarbons, C10 aromatics, <1% naphthalene	Reaction mass of 2,6-di-tert-butylphenol and 2,4,6-tri-tert-butyl phenol	Naphthalene	p-tert-butylphenol
Aqua, fresh water	No data available: testing technically not feasible	0.000300 mg/L	0.0024 mg/L	0.010 mg/L
Intermittent releases, fresh water	No data available: testing technically not feasible	-	0.020 mg/L	0.048 mg/L
Aqua, marine water	No data available: testing technically not feasible	0.000030 mg/L	0.0024 mg/L	0.001 mg/L
Intermittent releases, marine water	No data available: testing technically not feasible	-	No data available	-
Sewage treatment plants (STP)	No data available: testing technically not feasible	2.4 mg/L	2.9 mg/L	1.5 mg/L
Sediment, fresh water	No data available: testing technically not feasible	0.090 mg/kg sediment dw	0.0672 mg/Kg sediment dw	0.270 mg/kg sediment dw
Sediment, marine water	No data available: testing technically not feasible	0.009 mg/kg sediment dw	0.0672 mg/Kg sediment dw	0.027 mg/kg sediment dw
Air	No hazard identified	-	No hazard identified	No hazard identified
Soil	No data available: testing technically not feasible	0.044 mg/kg soil dw	0.0533 mg/kg soil dw	0.250 mg/kg soil dw
Hazard for Predators	No potential to cause toxic effects if accumulated (in higher organisms) via the food chain	8.33 mg/kg food	No potential for bioaccumulation	46.67 mg/kg food

8.2 Exposure controls

Appropriate engineering controls

Provide adequate ventilation, including appropriate local extraction, to minimise exposure to vapours.

Individual protection measures, such as personal protective equipment

Eye/face protection		Goggles or safety glasses with side shields giving complete protection to eyes. (EN 166) or face shield.
Skin protection		
Hand protection		Chemical resistant gloves (EN 374). Contact glove supplier to confirm suitable glove material, thickness, and breakthrough times. If contact with forearms is likely, wear gauntlet-style gloves.
Other		Long sleeve chemical resistant protective clothing. Plastic apron. Nitrile rubber boots
Respiratory protection		In the case of insufficient ventilation, wear respiratory equipment. Suitable respiratory protection for lower concentrations or short-term effect: Organic vapour filter type ABEK-P3 (EN 14387).
Thermal hazards		Wear suitable temperature resistant gloves and protective clothing if the product is heated.

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. Inform environmental manager of all incidents involving this product.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

(a) Physical state	Liquid
(b) Colour	Amber
(c) Odour	Aromatic
Odour Threshold	Not available.
(d) Melting point/freezing point	Not available.
(e) Boiling point or initial boiling point and boiling range	Hydrocarbons, C10, aromatics, <1% naphthalene: 160 - 220 °C (ASTM D 86)
(f) Flammability	Combustible liquid.
(g) Lower and upper explosion limit	Hydrocarbons, C10, aromatics, <1% naphthalene: 0.6 - 7.0 % v/v (calculated)

(h) Flash point	63 °C
(i) Auto-ignition temperature	Hydrocarbons, C10, aromatics, <1% naphthalene: > 400 °C
(j) Decomposition temperature	Not available
(k) pH	Not available.
(l) Kinematic viscosity	1.72 cSt at 40 °C
(m) Solubility	Insoluble in water.
(n) Partition coefficient n-octanol/water (log value)	Not available.
(o) Vapour pressure	Hydrocarbons, C10, aromatics, <1% naphthalene: 0.09 kPa at 20°C
(p) Density and/or relative density	0.9031 g/cm^3 at 15°C
(q) Relative vapour density	> 1 (air = 1)
(r) Particle characteristics	Not applicable

9.2 Other information

None.

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No hazardous reactions expected during normal use.

10.4. Conditions to avoid

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

10.5. Incompatible materials

Acids, alkalis and oxidising agents.

10.6. Hazardous decomposition products

Combustion may liberate toxic fumes: carbon monoxide, carbon dioxide and various hydrocarbons.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

(a) acute toxicity

acute toxicity - oral	Not classified. Based on the available data, the classification criteria are not met.
acute toxicity - dermal	Not classified. Based on the available data, the classification criteria are not met.
acute toxicity - inhalation	Not classified. Based on the available data, the classification criteria are not met.

The following data is for the relevant product component:

Component	Acute Toxicity		
	Oral	Dermal	Inhalation
Naphthalene	LD_{50} 533 mg/Kg (mouse)	LD_{50} > 2000 mg/Kg	LC_{50} > 0.4 mg/L

(b) skin corrosion/irritation	Not classified. Based on the available data, the classification criteria are not met.
(c) serious eye damage/irritation	Eye Dam. 1. Causes serious eye damage.
(d) respiratory or skin sensitisation	
respiratory sensitisation	Not classified. Based on the available data, the classification criteria are not met.
skin sensitisation	Not classified. Based on the available data, the classification criteria are not met.
(e) germ cell mutagenicity	Not classified. Based on the available data, the classification criteria are not met.
(f) carcinogenicity	Not classified. Based on the available data, the classification criteria are not met.
(g) reproductive toxicity	Not classified. Based on the available data, the classification criteria are not met.
(h) STOT-single exposure	STOT SE 3. May cause drowsiness or dizziness.
(i) STOT-repeated exposure	Not classified. Based on the available data, the classification criteria are not met.
(j) aspiration hazard	Asp. Tox. 1. May be fatal if swallowed and enters airways.

Information on likely routes of exposure

Inhalation	Inhalation of vapour may cause severe drowsiness and dizziness.
Skin contact	May cause an allergic skin reaction. Repeated exposure may cause skin dryness or cracking.

Ingestion	May be fatal if swallowed and enters airways.
Eye contact	Causes serious eye damage.

Symptoms related to the physical, chemical and toxicological characteristics

See above.

11.2 Information on other hazards

Endocrine disrupting properties.

This mixture does not contain substances that cause endocrine disruption for human health.

SECTION 12: Ecological information

12.1. Toxicity

Aquatic acute 1

Aquatic chronic 1.

Very toxic to aquatic life with long lasting effects

Data on aquatic toxicity for major components.

Component Name	Data
Hydrocarbons, C10 aromatics, <1% naphthalene	LC_{50}/96 h (Oncorhynchus mykiss): 2-5 mg/L (WAF) NOELR/28 d (Freshwater fish) 0.441 mg/L (growth, estimated) EC_{50}/48 h (Daphnia magna): 3-10 mg/L NOELR/21 d (freshwater invertebrate): 0.771 mg/L (reproduction, estimated) EL_{50}/72 h (Selenastrum capricornutum): 1-3 mg/L (WAF, growth rate and biomass) NOELR/48 h (Tetrahymena pyriformis): 1.718 (estimated, growth inhibition
Reaction mass of 2,6-di-tert-butylphenol and 2,4,6-tri-tert-butyl phenol	LC_{50}/96h (Oncorhynchus mykiss): 0.3 mg/L EC_{50}/48 h (Daphnia magna): 0.4 mg/L ErC_{50}/72 h (Selenastrum capricornutum): 4.9 mg/L NOEC (Selenastrum capricornutum): 2.8 mg/L
Naphthalene	LC_{50}/24 h (Fresh water fish): 0.9 mg/L LC_{50}/ 96 h (Marine water fish): 2.4 mg/L NOEC 40 d (Fresh water fish): 0.12 mg/L NOEC/ 40 d (Marine water fish): 0.4 mg/L LC_{50}/48 h (Daphnia magna): 2.16 mg/L

	NOEC (Fresh water invertebrates): 0.6 mg/L NOEC (Marine water invertebrates): 0.9 mg/L EC_{50} (Freshwater algae): 2.96 mg/L EC_{50} (Marine water algae): 0.410 mg/L EC_{50} (Microorganisms): 29 mg/L NOEC (Microorganisms): 10 mg/L
p-tert-butylphenol	LC_{50}/96 h (rainbow trout): 5.1 mg/L NOEC: 0.100 mg/L EC_{50}/48 h (Daphnia magna): 3.9 - 6.7 mg/L EC_{50}/21 d (Daphnia magna): 2.0 mg/L ErC_{50}/72 h (Selenastrum capricornutum): 14 mg/L NOEC (Selenastrum capricornutum): 0.32 mg/L

12.2. Persistence and degradability

No data available on the mixture. The following data are for the products components:

Component Name	Data
Hydrocarbons, C10 aromatics, <1% naphthalene	Inherently biodegradable.
Reaction mass of 2,6-di-tert-butylphenol and 2,4,6-tri-tert-butyl phenol	Not readily biodegradable. 2,4,6-tri-tert-butyl phenol is persistent and very persistent, based on a weight of-evidence approach.
Naphthalene	Readily biodegradable
p-tert-butylphenol	Readily biodegradable

12.3. Bioaccumulative potential

No data available on the mixture. The following data are for the products components:

Component Name	Partition coefficient n-octanol /water (log Kow)	Bioconcentration factor (BCF)
Hydrocarbons, C10 aromatics, <1% naphthalene	≥ 3.17 - ≤ 4.18 at 20 °C	The substance is a hydrocarbon UVCB.
Reaction mass of 2,6-di-tert-butylphenol and 2,4,6-tri-tert-butyl phenol	4.9	2,6-di-tert-butylphenol: 434.9 2,4,6-tri-tert-butylphenol: 3282. 2,4,6-tri-tert-butylphenol has the potential to bioaccumulate
Naphthalene	3.7 at 25 °C	168 (aquatic species)
p-tert-butylphenol	3 at 23 °C	Unlikely to bioaccumulate in the food chain.

12.4. Mobility in soil

The product is insoluble in water. It will float on water. Volatile components of the product will distribute to air. Potential for adsorption to soil and sediment.

12.5. Results of PBT and vPvB assessment

This mixture contains 2,4,6- tri-tert-butylphenol that meets the PBT and vPvB and T criteria.

Contains 20 - ≤ 30% reaction mass of 2,6-di-tertbutylphenol and 2,4,6-tri-tert-butyl phenol which is possibly Persistent, Bioaccumulative and Toxic.

12.6. Endocrine disrupting properties

This mixture contains p-tert-butylphenol that is identified as endocrine disruptor with environmental effects.

12.7. Other adverse effects

No known other significant effects or critical hazards.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recover or recycle if possible. The assignment of a waste code should be assessed based on the waste generated. Before disposing the product, solutions and any by-products, it should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor.

Product and packaging to be disposed of as hazardous waste. Disposal should be in accordance with local, state, or national legislation. Do not landfill.

Empty containers retain product residue and can be hazardous. Dispose of uncleaned empty containers as hazardous waste in accordance with local, state, or national legislation.

Contaminated adsorbent must be removed in sealed, plastic lined drums and disposed of via an authorised waste disposal contractor. Do not empty into drains; dispose of this material and its container in a safe way.

SECTION 14: Transport information

ADR/ADN/RID/IATO/ICAO/IMDG Code

14.1. UN number or ID number

3082

14.2. UN proper shipping name

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains hydrocarbons, C10 aromatics, <1% naphthalene and reaction mass of 2,6-di-tert-butylphenol and 2,4,6-tri-tert-butyl phenol)

14.3. Transport hazard class(es)

9

14.4. Packing group

III

14.5. Environmental hazards

ADR/ADN/RID/IATO/ICAO	Yes
IMDG Code	Marine pollutant

14.6. Special precautions for user

Read SDS and supplier instructions on correct use of the product.

ADR Tunnel Restriction Code	(-)
ADR Transport Category	3
IMDG EmS:	F-A, S-F

14.7. Maritime transport in bulk according to IMO instruments

The product is not intended to be transported in bulk.

15: Regulatory information

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

UK Regulations

This product has been classified according to Regulation (EC) No 1272/2008 (CLP) amended by GB CLP (UK SI 2019/720 as amended).

This SDS has been prepared in accordance with REACH Regulation (EC) No 1907/2006, amended by UK REACH (UK SI 2019/758 as amended).

Health and Safety at Work Act

The Control of Major Accident Hazards (COMAH) Regulations.

The Control of Substances Hazardous to Health (COSHH) Regulations

Hazardous Waste (England and Wales) Regulations 2005

UK Waste (Circular Economy) (Amendment) Regulations 2020

The Waste (England and Wales) Regulations 2011

EU Regulations

This product has been classified according to Regulation (EC) No. 1272/2008 (CLP).

This SDS has been prepared in accordance with REACH Regulation (EC) No 1907/2006 as amended by Commission Regulation EU 2020/878.

Candidate List of Substances of Very High Concern for Authorisation:

p-tert-butylphenol EC 202-436-9: Included in the Candidate List of substances of very high concern for Authorisation.
Reason for inclusion: Endocrine disrupting properties (Article 57(f) - environment)

Authorisations and/or restrictions on use:

Reaction mass of 2,6-di-tert-butylphenol and 2,4,6-tri-tert-butyl phenol EC 907-745-9: Possible restriction.
Assessment of regulatory needs report for substances containing 4-tert-butylphenol
Restriction of 4-TBP as a substance, constituent or impurity in other substances, mixtures and articles up to a certain threshold is proposed to ensure that environmental emissions of 4-TBP are minimised. Ideally the entry should address both emissions from the production stage and emissions/exposure as a result of use. The entry would cover a wide scope – potentially all substances containing 4-TBP, including those that may be placed on the market in the future. This would help address the additivity effect of many low-level emissions.

Naphthalene CAS 91-20-3: Intended to be restricted and entered in Annex XVII to REACH
REACH: Annex XVII Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures, and articles.

Community Rolling Action Plan (CoRAP)

Reaction mass of 2,6-di-tert-butylphenol and 2,4,6-tri-tert-butyl phenol EC 907-745-9: concluded
Naphthalene EC 202-049-5: concluded
p-tert-butylphenol EC 202-436-9: concluded

Other EU regulations

Regulation (EC) N° 850/2004 of the European Parliament and of the Council on persistent organic pollutants

No components listed.

Regulation (EC) N° 2037/2000 on substances that deplete the ozone layer

No components listed.

Regulation (EU) N° 649/2012 of the European Parliament and of the Council concerning the export and import of hazardous chemicals

No components listed.

Regulation (EU) N° 528/2012 Biocidal Products Regulation

No components listed.

Waste Framework Directive 2008/98/EC as amended.
Chemical Agents Directive (CAD) Council Directive 98/24/EC as amended.
Occupational Exposure Limits – Indicative OELVs

15.2. Chemical safety assessment

A REACH chemical safety assessment has not been carried out.

SECTION 16: Other information

i) Indication of changes

Version:	5.0
Issue date:	02/08/2024
Previous Version:	4.0
Issue date of previous version:	07/12/2018

ii) Abbreviations and acronyms

ATE	Acute Toxicity Estimate
BCF	Bioconcentration Factor
bw	Body weight
CAS	Chemical Abstracts Service
CLP	Classification, Labelling and Packaging
dw	Dry weight
EC number	European Inventory of Existing Commercial Chemical Substances or European List of Notified Chemical Substances number
EC_{50}	Effective Concentration 50 %
EL_{50}	Effective Loading rate 50%
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC_{50}	Lethal Concentration 50%
LD_{50}	Lethal Dose 50%
LOEL	Lowest Observed Effect Level
NOEL	No Observed Effect Level
NOELR	No Observed Effect Loading Rate
PBT	Persistent, Bioaccumulative and Toxic
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
SCL	Specific Concentration Limit
vPvB	Very Persistent and Very Bioaccumulative
WAF	Water accommodated Fraction
WEL	Workplace Exposure Limit

iii) Key literature references and sources for data

Supplier's safety data sheet
Regulation (EC) No. 1272/2008.
Regulation (EC) No. 1907/2006
Mandatory Classification and Labelling List (GB MCL List)

ECHA REACH dossiers

HSE EH40/2005 4th Edition, 2020

GESTIS ILV (https://limitvalue.ifa.dguv.de/)

Endocrine Disruptor Lists (https://edlists.org/)

Regulation (EC) N° 850/2004 of the European Parliament and of the Council on persistent organic pollutants.

Regulation (EC) N° 2037/2000 on substances that deplete the ozone layer.

Regulation (EU) N° 649/2012 of the European Parliament and of the Council concerning the export and import of hazardous chemicals.

Regulation (EU) N° 528/2012 Biocidal Products Regulation

iv) Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP] and GB CLP

Classification according to Regulation (EC) No. 1272/2008 and GB CLP	Classification procedure
Asp. Tox. 1; H304	Calculation method
Eye Dam. 1; H318	Calculation method
STOT SE 3; H336	Calculation method
Aquatic Acute 1 H400	Summation method
Aquatic Chronic 1 H410	Summation method

v) Relevant H-statements (number and full text)

Acute Tox. 4; H302	Acute oral toxicity, category 4. Harmful if swallowed
Asp. Tox. 1; H304	Aspiration hazard, category 1. May be fatal if swallowed and enters airways
Skin Irrit. 2; H315	Skin corrosion/irritation, category 2. Causes skin irritation
Eye Dam. 1; H318	Serious eye damage/eye irritation, category 1. Causes serious eye damage
STOT SE 3; H336	Specific target organ toxicity — single exposure, category 3. May cause drowsiness or dizziness
Carc. 2; H351	Carcinogenicity, category 2. Suspected of causing cancer
Repr. 2; H361f	Reproductive toxicity, category 2. Suspected of damaging fertility.
Aquatic Acute 1; H400	Hazardous to the aquatic environment, aquatic acute, category 1. Very toxic to aquatic life
Aquatic Chronic 1; H410	Hazardous to the aquatic environment, aquatic chronic, category 2. Very toxic to aquatic life with long lasting effects
Aquatic Chronic 2; H411	Hazardous to the aquatic environment, aquatic chronic, category 2. Toxic to aquatic life with long lasting effects
EUH066	Repeated exposure may cause skin dryness or cracking.

vi) Training advice

Always read the label, safety data sheet and product information before use. Do not handle until all safety precautions have been read and understood.

Users should have received chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene. Provide adequate information, instruction, and training to operators.

vii) Further information

No additional information

End of safety data sheet.

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