

TORQUE FLUID 32

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

1.1 - Product identifier

Trade name/designation TORQUE FLUID 32

Chemical name

Product-type Mixture

Product code 12231

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

Relevant identified uses - Transmission oil.

Uses advised against - The uses are provided in Section 1.2. Other uses are not recommended unless a risk assessment is carried out, prior to commencement of that use, which demonstrates that the is safe.

1.3 - Details of the supplier of the safety data sheet

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1.4 - Emergency telephone number

- National Poisons Information Service of England: <http://npis.org> -
NHS 111: dial 111 United Kingdom

- Company phone number (see section 1.3).

SECTION 2: Hazards identification

2.1 - Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]

Eye Irrit. 2	Eye irritation - Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment - Aquatic Chronic 3

2.2 - Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Signal word : Warning

Hazard pictograms



Hazard statements

H319	Causes serious eye irritation.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements

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P264	Wash hands thoroughly after handling.
P273	Avoid release to the environment.
P280	Wear eye protection/protective gloves.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313	If eye irritation persists: Get medical advice/attention.
P501	Dispose of contents to an appropriate recycling or disposal facility in accordance with national regulation.

EUH-phrases : None

2.3 - Other hazards

SECTION 3: Composition / information on ingredients

3.1 - Substances

Not applicable

3.2 - Mixtures

Chemical name	No.	%	Class(es)	Specific concentration limit
Phosphorodithioic acid, mixed O,O-bis(2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts	CAS No. : 85940-28-9 Index No. : EC No. : 288-917-4	1,2	Aquatic Chronic 2 - H411 Eye Dam. 1 - H318 Skin Irrit. 2 - H315	Not applicable
Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate)	CAS No. : 4259-15-8 Index No. : EC No. : 224-235-5	0,425	Aquatic Chronic 2 - H411 Eye Dam. 1 - H318	Eye Dam. 1 - H318 : 50<%=100 Eye Irrit. 2 - H319 : 1<%=50
2,6-di-tert-butylphenol	CAS No. : 128-39-2 Index No. : EC No. : 204-884-0	0,1615	Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410 Skin Irrit. 2 - H315	M-factor: 1 / 1

SECTION 4: First aid measures

4.1 - Description of first aid measures

Following skin contact - No information available.

After eye contact - After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

After ingestion - When in doubt or if symptoms are observed, get medical advice.

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

Symptoms and effects - Following inhalation - No information available.

Symptoms and effects - Following skin contact - No data available.

Symptoms and effects - After eye contact - Causes serious eye irritation.

Symptoms and effects - After ingestion - No information available.

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

- No information available.

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SECTION 5: Firefighting measures

5.1 - Extinguishing media

Suitable extinguishing media

- ABC-powder
- Water mist
- Carbon dioxide (CO₂)

Unsuitable extinguishing media

- Strong water jet

5.2 - Special hazards arising from the substance or mixture

Special hazards arising from the substance or mixture

- No data available.

Hazardous decomposition products

- No data available.

5.3 - Advice for firefighters

- Do not allow run-off from fire-fighting to enter drains or water courses.

SECTION 6: Accidental release measures

6.1 - Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

- Goggles.
- Wear protective gloves.

For emergency responders

- Remove persons to safety.
- Use personal protection equipment.

6.2 - Environmental precautions

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

6.3 - Methods and material for containment and cleaning up

Methods and material for containment

- No information available.

Methods and material for cleaning up

- Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).
- Ventilate affected area.

Inappropriate techniques

- No information available.

6.4 - Reference to other sections

- Disposal: See section 13
- Personal protection equipment: see section 8
- Safe handling: See section 7

SECTION 7: Handling and storage

7.1 - Precautions for safe handling

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- Recommendation - No information available.
- Advices on general occupational hygiene - Wash hands before breaks and after work.

7.2 - Conditions for safe storage, including any incompatibilities

- Keep/store only in original container.

7.3 - Specific end use(s)

- Observe technical data sheet.

SECTION 8: Exposure controls/personal protection

8.1 - Control parameters

- No data available.

DNEL / PNEC

Phosphorodithioic acid, mixed O,O-bis(2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts (85940-28-9)

Type	Value	User	Effect
DNEL long-term oral (repeated)	0,19 mg/kg bw/day	Consumers	Systemic
DNEL long-term inhalative	6,6 mg/m ³	Workers	Systemic
DNEL long-term inhalative	1,67 mg/m ³	Consumers	Systemic
DNEL long-term dermal	9,6 mg/kg bw/day	Workers	Systemic
DNEL long-term dermal	4,8 mg/kg bw/day	Consumers	Systemic
PNEC aquatic, freshwater	0,002 mg/l		
PNEC aquatic, marine water	0,0002 mg/l		
PNEC aquatic, intermittent release	0,02 mg/l		
PNEC sediment, freshwater	19,3 mg/kg		
PNEC sediment, marine water	1,93 mg/kg		
PNEC soil	15,7 mg/kg		
PNEC sewage treatment plant (STP)	100 mg/l		

Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) (4259-15-8)

Type	Value	User	Effect
DNEL long-term oral (repeated)	0,19 mg/kg bw/day	Consumers	Systemic
DNEL long-term inhalative	6,6 mg/m ³	Workers	Systemic
DNEL long-term inhalative	1,67 mg/m ³	Consumers	Systemic
DNEL long-term dermal	9,6 mg/kg bw/day	Workers	Systemic
DNEL long-term dermal	4,8 mg/kg bw/day	Consumers	Systemic
PNEC aquatic, freshwater	0,004 mg/l		
PNEC aquatic, marine water	0,0046 mg/l		
PNEC aquatic, intermittent release	0,044 mg/l		
PNEC sediment, freshwater	0,322 mg/kg		
PNEC sediment, marine water	0,032 mg/kg		
PNEC soil	0,062 mg/kg		
PNEC Secondary Poisoning	8,33 mg/kg		
PNEC sewage treatment plant (STP)	3,8 mg/l		

2,6-di-tert-butylphenol (128-39-2)

Type	Value	User	Effect
DNEL long-term oral (repeated)	6,75 mg/kg bw/day	Consumers	Systemic
DNEL long-term inhalative	70,61 mg/m ³	Workers	Systemic
DNEL long-term inhalative	20,9 mg/m ³	Consumers	Systemic
DNEL long-term dermal	11,25 mg/kg bw/day	Workers	Systemic

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DNEL long-term dermal	6,75 mg/kg bw/day	Consumers	Systemic
PNEC aquatic, freshwater	0,001 mg/l		
PNEC aquatic, marine water	0,0001 mg/l		
PNEC aquatic, intermittent release	0,004 mg/l		
PNEC sediment, freshwater	0,317 mg/kg		
PNEC sediment, marine water	0,032 mg/kg		
PNEC soil	0,697 mg/kg		
PNEC Secondary Poisoning	60 mg/kg		
PNEC sewage treatment plant (STP)	10 mg/l		

8.2 - Exposure controls

Appropriate engineering controls - No information available.

Individual protection measures, such as personal protective equipment - Spectacles with side protection.

- Wear protective gloves.



Environmental exposure controls - No data available.

SECTION 9: Physical and chemical properties

9.1 - Information on basic physical and chemical properties

<u>Physical state</u> <u>Colour</u>	Liquid yellow	<u>Appearance</u> <u>Odour</u>	Liquid characteristic
Odour threshold		No information available.	
pH		No information available.	
Melting point		No information available.	
Freezing point		No information available.	
Boiling point		No information available.	
Flash point		220 °C Open cup	
Evaporation rate		No information available.	
flammability		Not relevant.	
Lower explosion limit		No information available.	
Upper explosion limit		No information available.	
Vapour pressure		No information available.	
Vapour density		No information available.	
Relative density		No information available.	
Density		0,87 g/ml @ 15°C	
Solubility (Water)		Insoluble	
Solubility (Ethanol)		No information available.	

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Solubility (Acetone)	No information available.
Solubility (Organic solvents)	No information available.
Log KOC	No information available.
Auto-ignition temperature	No information available.
Decomposition temperature	No information available.
Kinematic viscosity	5,42 mm ² /s (cSt) @ 100°C
Dynamic viscosity	No information available.

Particle characteristics

Particle size	No data available
Dustiness	No data available
Specific surface area	No data available
Shape	No data available

9.2 - Other information

VOC content	Undetermined
Minimum ignition energy	No data available
Conductivity	No data available
Refractive index	No data available
Solids content	No data available
Surface tension	No data available
Saturation concentration	No data available

- No data available.

SECTION 10: Stability and reactivity

10.1 - Reactivity

- This material is considered to be non-reactive under normal use conditions.

10.2 - Chemical stability

- The product is chemically stable under recommended conditions of storage, use and temperature.

10.3 - Possibility of hazardous reactions

- No hazardous reaction when handled and stored according to provisions.

10.4 - Conditions to avoid

- Stable under recommended storage and handling conditions.

10.5 - Incompatible materials

- No data available.

10.6 - Hazardous decomposition products

- No data available.

SECTION 11: Toxicological information

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

Acute toxicity - Not classified

Toxicity : Mixture

LD50 oral (rat)	No data available
LD50 dermal (rat)	No data available
LD50 dermal (rabbit)	No data available
LC50 inhalation gas (rat)	No data available
LC50 inhalation dusts and mists (rat)	No data available
LC50 inhalation vapours (rat)	No data available

- No data available.

Toxicity : Substances

Phosphorodithioic acid, mixed O,O-bis(2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts (85940-28-9)

LD50 oral (rat)	3080 mg/kg (OECD Guideline 401, Acute Oral Toxicity)
LD50 dermal (rabbit)	> 20000 mg/kg (OECD Guideline 402, Acute Dermal Toxicity)
LC50 inhalation dusts and mists (rat)	> 2,3 mg/l (OECD Guideline 403, Acute inhalation toxicity) Practically nontoxic.

Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) (4259-15-8)

LD50 oral (rat)	3100 mg/kg (OECD Guideline 401, Acute Oral Toxicity)
LD50 dermal (rabbit)	> 5000 mg/kg (OECD Guideline 402, Acute Dermal Toxicity)

2,6-di-tert-butylphenol (128-39-2)

LD50 oral (rat)	> 5000 mg/kg (OECD Guideline 401, Acute Oral Toxicity)
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Skin corrosion/irritation - Not classified

- No data available.

Serious eye damage/eye irritation - Eye irritation - Category 2 - Causes serious eye irritation.

- Causes serious eye irritation.

Respiratory or skin sensitisation - Not classified

- No data available.

Germ cell mutagenicity - Not classified

- No data available.

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<u>Carcinogenicity</u>	- Not classified
	- No data available.
<u>Reproductive toxicity</u>	- Not classified
	- No data available.
<u>STOT-single exposure</u>	- Not classified
	- No data available.
<u>STOT-repeated exposure</u>	- Not classified
	- No data available.
<u>Aspiration hazard</u>	- Not classified
	- No information available.

11.2 - Information on other hazards

- No information available.

SECTION 12: Ecological information

12.1 - Toxicity

Toxicity : Mixture

EC50 48 hr crustacea	No data available
LC50 96 hr fish	No data available
ErC50 algae	No data available
ErC50 other aquatic plants	No data available
NOEC chronic fish	No data available
NOEC chronic crustacea	No data available
NOEC chronic algae	No data available
NOEC chronic other aquatic plants	No data available

- Harmful to aquatic life with long lasting effects.

Toxicity : Substances

Phosphorodithioic acid, mixed O,O-bis(2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts (85940-28-9)	
EC50 48 hr crustacea	5,4 mg/l Daphnia magna (Big water flea) OECD 202
LC50 96 hr fish	4,5 mg/l Oncorhynchus mykiss (rainbow trout) OECD 203
ErC50 algae	2,1 mg/l Selenastrum capricornutum OECD 201

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NOEC chronic crustacea	0,4 mg/l Daphnia magna (Big water flea) OECD 211
NOEC chronic algae	1 mg/l Selenastrum capricornutum OECD 201
Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) (4259-15-8)	
EC50 48 hr crustacea	75 mg/l Daphnia magna (Big water flea) OECD 202
LC50 96 hr fish	4,4 mg/l Oncorhynchus mykiss (rainbow trout) OECD 203
NOEC chronic crustacea	> 0,53 mg/l Daphnia magna (Big water flea) OECD 211
2,6-di-tert-butylphenol (128-39-2)	
EC50 48 hr crustacea	0,45 mg/l Daphnia magna (Big water flea)
LC50 96 hr fish	1,4 mg/l Pimephales promelas (fathead minnow)
ErC50 algae	1,2 mg/l Pseudokirchneriella subcapitata
NOEC chronic crustacea	0,035 mg/l Daphnia magna (Big water flea)
NOEC chronic algae	0,64 mg/l Pseudokirchneriella subcapitata

12.2 - Persistence and degradability

Mixture

Biochemical oxygen demand (BOD)	No data available
Chemical oxygen demand (COD)	No data available
% of biodegradation in 28 days	No data available

- No data available.

Substances

Phosphorodithioic acid, mixed O,O-bis(2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts (85940-28-9)	
% of biodegradation in 28 days	1,5 % Not readily biodegradable (according to OECD criteria). (aerobik conditions) OECD 301B

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Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) (4259-15-8)	
% of biodegradation in 28 days	< 5 % Not readily biodegradable (according to OECD criteria). OECD 301D (aerobik conditions)
2,6-di-tert-butylphenol (128-39-2)	
% of biodegradation in 28 days	12 % < V < 24 % Chemical oxygen demand (COD) Not readily biodegradable (according to OECD criteria).

12.3 - Bioaccumulative potential

Mixture

Bioconcentration factor (BCF)	No data available
Log KOC	No information available.

- No data available.

Substances

Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) (4259-15-8)	
Log KOC	< 3,5 Does not significantly accumulate in organisms.
2,6-di-tert-butylphenol (128-39-2)	
Bioconcentration factor (BCF)	660 L/kg May accumulate in organisms.

12.4 - Mobility in soil

- No data available.

12.5 - Results of PBT and vPvB assessment

12.6 - Endocrine disrupting properties

- No information available.

12.7 - Other adverse effects

- No data available.

SECTION 13: Disposal considerations

13.1 - Waste treatment methods

Waste treatment methods - No information available.

Sewage disposal - No information available.

Special precautions for waste treatment - No information available.

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Community or national or regional provisions - Dispose of waste according to applicable legislation.

SECTION 14: Transport information

14.1 - UN number or ID number

Not applicable

14.2 - UN proper shipping name

Not applicable

14.3 - Transport hazard class(es)

Not applicable

14.4 - Packing group

Not applicable

14.5 - Environmental hazards

Not applicable

14.6 - Special precautions for user

Not applicable

14.7 - Maritime transport in bulk according to IMO instruments

Not applicable

- Not applicable.

SECTION 15: Regulatory information

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

Substances REACH candidates None

Substances Annex XIV None

Substances Annex XVII None

VOC content No data available

15.2 - Chemical Safety Assessment

SECTION 16: Other information

SDS versions

Version	Issue date	Author	Description of the amendments
4	30/12/2025		Organised according to current legislation.
3	01/03/2025		Updated according to current legislation.
2	30/08/2016		Updated according to current legislation.
1	13/06/2011		It was prepared for the first time.

Certificate holder: Samed Ergenekon - Chemical Assessment Specialist (Certificate No: TUV/11.271.08
Certificate Date: 17.02.2025 - Certificate valid for 5 years)

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Abbreviations and acronyms

- ADR: The Agreement concerning the International Carriage of Dangerous Goods by Road
- ATE: Acute Toxicity Estimate.
- LC50: Lethal Concentration to 50 % of a test animals.
- LOEC: Lowest Observed Effect Concentration.
- LD50: Lethal Dose to 50% of a test animals.
- LOEL: Lowest Observed Adverse Effect Level.
- DNEL: Derived no-effect level.
- EC50: Effective concentration of the substance that causes adverse effects in 50% of test animals.
- IATA: International Air Transport Association.
- IMDG: International Maritime Dangerous Goods.
- EC No: European Community number
- NOEC: No Observed Effect Concentration.
- NOEL: No observable effect level.
- CAS No.: Chemical Abstracts Service number.
- ICAO: International Civil Aviation Organization
- PBT: Persistent, Bioaccumulative and Toxic.
- PNEC: Predicted no-effect concentration.
- RID: International Carriage of Dangerous Goods by Rail.
- STEL: Short-term exposure limit
- TWA: Time weighted average
- OEL: Occupational exposure limit.
- vPvB: very Persistent and very Bioaccumulative.

Texts of the regulatory sentences

Aquatic Acute 1	Hazardous to the aquatic environment - Aquatic Acute 1
Aquatic Chronic 1	Hazardous to the aquatic environment - Aquatic Chronic 1
Aquatic Chronic 2	Hazardous to the aquatic environment - Aquatic Chronic 2
Aquatic Chronic 3	Hazardous to the aquatic environment - Aquatic Chronic 3
Eye Dam. 1	Serious eye damage, Category 1
Eye Irrit. 2	Eye irritation - Category 2
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
Not Classified	Not classified
Skin Irrit. 2	Irritation, Category 2

The information provided in this Safety Data Sheet (SDS) is current on the date the SDS was prepared or revised. Implementation of measures that are provided on SDS is under downstream user companies' responsibility. Downstream users may change the measures in the SDS according to the conditions in their own business.

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