

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

1.1. Product identifier

Product form : Mixture
 Product name : 43920 - BRAKE FLUID DOT 4
 Product code : 43920

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

1.2.1. Relevant identified uses

Intended for general public
 Main use category : Industrial use, Professional use, Consumer use
 Function or use category : Lubricants and additives

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

77 Lubricants B.V.
 NL- 1761 JA
 The Netherlands
 T +31 (0)78 6527652
technical@77lubricants.nl - www.77lubricants.nl

1.4. Emergency telephone number

Country	Organisation/Company	Address	Emergency number	Comment
United Kingdom	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER	+44 20 7188 7188	
United Kingdom	National Poisons Information Service (Belfast Centre) Royal Victoria Hospital	Grosvenor Road BT12 6BA	0344 892 0111	Only for healthcare professionals

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Reproductive toxicity, Category 2 H361fd

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

Adverse physicochemical, human health and environmental effects

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

2.2. Label elements

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

Hazard pictograms (CLP) :



GHS08

Signal word (CLP) :

: Warning

Hazard statements (CLP) :

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

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Precautionary statements (CLP)	: P101 - If medical advice is needed, have product container or label at hand. P102 - Keep out of reach of children. P103 - Read carefully and follow all instructions. P202 - Do not handle until all safety precautions have been read and understood. P280 - Wear protective clothing, protective gloves, eye protection. P308+P313 - IF exposed or concerned: Get medical advice/attention.
EUH-statements	: EUH208 - Contains dihydro-3-(tetrapropenyl)furan-2,5-dione(26544-38-7). May produce an allergic reaction.

2.3. Other hazards

Contains no PBT and/or vPvB substances $\geq 0.1\%$ assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Tris[2-[2-(2-methoxyethoxy)ethoxy]ethyl] orthoborate	CAS-No.: 30989-05-0 EC-No.: 250-418-4 REACH-no: 01-2119462824-33	$\geq 25 - < 55$	Repr. 2, H361fd
2-(2-(2-butoxyethoxy)ethoxy)ethanol	CAS-No.: 143-22-6 EC-No.: 205-592-6 EC Index-No.: 603-183-00-0 REACH-no: 01-2119475107-38	$\geq 10 - < 45$	Eye Dam. 1, H318
2,2'-oxydiethanol substance with national workplace exposure limit(s) (AT, BG, DE, DK, EE, GB, HR, IE, LT, LV, PL, RO, SE, SI, SK, CH)	CAS-No.: 111-46-6 EC-No.: 203-872-2 EC Index-No.: 603-140-00-6 REACH-no: 01-2119457857-21	$\geq 5 - < 15$	Acute Tox. 4 (Oral), H302
2-(2-methoxyethoxy)ethanol substance with national workplace exposure limit(s) (AT, BE, BG, CY, CZ, DE, DK, ES, FI, FR, GB, GI, GR, HR, HU, IE, IT, LT, LU, LV, MT, NL, PL, PT, RO, SE, SI, SK, NO); substance with a Community workplace exposure limit	CAS-No.: 111-77-3 EC-No.: 203-906-6 EC Index-No.: 603-107-00-6 REACH-no: 01-2119475100-52	$\geq 1 - < 5$	Repr. 1B, H360D
dihydro-3-(tetrapropenyl)furan-2,5-dione	CAS-No.: 26544-38-7 EC-No.: 247-781-6 REACH-no: 01-2119979080-37	< 0.1	Eye Irrit. 2, H319 Skin Sens. 1A, H317 Aquatic Chronic 4, H413

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Specific concentration limits:		
Name	Product identifier	Specific concentration limits (%)
2-(2-(2-butoxyethoxy)ethoxy)ethanol	CAS-No.: 143-22-6 EC-No.: 205-592-6 EC Index-No.: 603-183-00-0 REACH-no: 01-2119475107-38	(20 ≤ C < 30) Eye Irrit. 2, H319 (30 ≤ C < 100) Eye Dam. 1, H318
2-(2-methoxyethoxy)ethanol	CAS-No.: 111-77-3 EC-No.: 203-906-6 EC Index-No.: 603-107-00-6 REACH-no: 01-2119475100-52	(3 ≤ C ≤ 100) Repr. 1B, H360D
dihydro-3-(tetrapropenyl)furan-2,5-dione	CAS-No.: 26544-38-7 EC-No.: 247-781-6 REACH-no: 01-2119979080-37	(0.2 ≤ C < 100) Skin Sens. 1A, H317

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

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: IF exposed or concerned: Get medical advice/attention.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Wash skin with plenty of water.
First-aid measures after eye contact	: Rinse eyes with water as a precaution.
First-aid measures after ingestion	: Call a poison center or a doctor if you feel unwell.

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

No additional information available

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media	: Do not use a water jet since it may cause the fire to spread.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

Precautionary measures fire	: Do not enter fire area without proper protective equipment, including respiratory protection.
Firefighting instructions	: Use water spray or fog for cooling exposed containers.
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Avoid spilling the product, as this might cause falls.

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6.1.1. For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.
Emergency procedures : Ventilate spillage area.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.
Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.
Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear personal protective equipment.
Handling temperature : ≤ 40 °C
Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store locked up. Store in a well-ventilated place. Keep cool.
Incompatible products : Oxidizing agent. Strong acids.
Maximum storage period : 2 year
Storage temperature : ≤ 40 °C
Storage area : Store at ambient temperature.
Special rules on packaging : Store in a closed container.

7.3. Specific end use(s)

brake fluids.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

2,2'-oxydiethanol (111-46-6)

United Kingdom - Occupational Exposure Limits

WEL TWA (OEL TWA) [1]	101 mg/m ³
WEL TWA (OEL TWA) [2]	23 ppm
WEL STEL (OEL STEL)	303 mg/m ³
WEL STEL (OEL STEL) [ppm]	69 ppm

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2-(2-methoxyethoxy)ethanol (111-77-3)

EU - Indicative Occupational Exposure Limit (IOEL)

IOEL TWA [ppm]	10 ppm
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United Kingdom - Occupational Exposure Limits

WEL TWA (OEL TWA) [1]	50.1 mg/m ³
WEL TWA (OEL TWA) [2]	10 ppm
WEL STEL (OEL STEL)	150.3 mg/m ³
WEL STEL (OEL STEL) [ppm]	30 ppm

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment:

Gloves. Safety glasses. Protective clothing.

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:

Safety glasses

Eye protection

Type	Field of application	Characteristics	Standard
Safety glasses	Droplet	clear	EN 166

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:

Protective gloves

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Hand protection					
Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Reusable gloves	Polyvinylchloride (PVC), Nitrile rubber (NBR), Butyl rubber	6 (> 480 minutes)	>0.35		EN ISO 374

8.2.2.3. Respiratory protection

Respiratory protection:

[In case of inadequate ventilation] wear respiratory protection.

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Yellow.
Odour	: Not available
Odour threshold	: Not available
Melting point	: ≤ -50 °C
Freezing point	: Not available
Boiling point	: Not available
Flammability	: Not applicable
Lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: > 120 °C
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
pH	: Not available
Viscosity, kinematic	: 10 – 20 mm ² /s @ 40°C
Solubility	: soluble in water.
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50°C	: Not available
Density	: 1.07 kg/m ³ @ 15°C (ASTM D4052)
Relative density	: Not available
Relative vapour density at 20°C	: Not available
Particle characteristics	: Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

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10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

Strong oxidizing agents. Strong acids.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

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

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Tris[2-[2-(2-methoxyethoxy)ethoxy]ethyl] orthoborate (30989-05-0)

LD50 oral (rat)	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 dermal (rat)	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal))

2-(2-(2-butoxyethoxy)ethoxy)ethanol (143-22-6)

LD50 oral (rat)	5300 mg/kg bodyweight
LD50 dermal (rabbit)	3540 mg/kg bodyweight

2,2'-oxydiethanol (111-46-6)

LD50 oral (rat)	12565 mg/kg
LD50 oral	1120 mg/kg
LD50 dermal (rabbit)	11890 mg/kg
LD50 dermal	11890 mg/kg
LC50 inhalation (rat) (Dust/Mist - mg/l/4h)	4.6 mg/l/4h

2-(2-methoxyethoxy)ethanol (111-77-3)

LD50 dermal (rabbit)	9404 mg/kg Animal: rabbit, Animal sex: male, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), 95% CL: 6696 - 13212
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dihydro-3-(tetrapropenyl)furan-2,5-dione (26544-38-7)

LD50 oral (rat)	2900 mg/kg
LD50 dermal (rabbit)	6200 – 7500 mg/kg
LC50 inhalation (rat) (Dust/Mist - mg/l/4h)	5.3 mg/l/4h

Skin corrosion/irritation : Not classified

2-(2-(2-butoxyethoxy)ethoxy)ethanol (143-22-6)

pH	7 Temp.: 20 °C
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Serious eye damage/irritation : Not classified

2-(2-(2-butoxyethoxy)ethoxy)ethanol (143-22-6)

pH 7 Temp.: 20 °C

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

2,2'-oxydiethanol (111-46-6)

NOAEL (chronic, oral, animal/male, 2 years) 1210 mg/kg bodyweight Animal: rat, Animal sex: male

NOAEL (chronic, oral, animal/female, 2 years) 1160 mg/kg bodyweight Animal: rat, Animal sex: female

Reproductive toxicity : Suspected of damaging fertility. Suspected of damaging the unborn child.

STOT-single exposure : Not classified

2,2'-oxydiethanol (111-46-6)

NOAEL (dermal, rat/rabbit) 3549 mg/kg bodyweight

STOT-repeated exposure : Not classified

Tris[2-[2-(2-methoxyethoxy)ethoxy]ethyl] orthoborate (30989-05-0)

NOAEL (oral, rat, 90 days) ≥ 1000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)

2-(2-(2-butoxyethoxy)ethoxy)ethanol (143-22-6)

NOAEL (dermal, rat/rabbit, 90 days) > 1000 mg/kg bodyweight/day Animal: rabbit, Guideline: OECD Guideline 410 (Repeated Dose Dermal Toxicity: 21/28-Day Study)

2,2'-oxydiethanol (111-46-6)

LOAEL (oral, rat, 90 days) 40000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity Study in Rodents)

2-(2-methoxyethoxy)ethanol (111-77-3)

LOAEL (oral, rat, 90 days) 1800 mg/kg bodyweight/day Animal: rat, Animal sex: male, Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity Study in Rodents)

NOAEL (oral, rat, 90 days) 900 mg/kg bodyweight/day Animal: rat, Animal sex: male, Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity Study in Rodents), Remarks on results: other:

NOAEC (inhalation, rat, vapour, 90 days) > 1.06 mg/l Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study)

dihydro-3-(tetrapropenyl)furan-2,5-dione (26544-38-7)

NOAEL (subacute, oral, animal/male, 28 days) 300 mg/kg bodyweight

Aspiration hazard : Not classified

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Viscosity, kinematic 10 – 20 mm²/s @ 40°C

Tris[2-[2-(2-methoxyethoxy)ethoxy]ethyl] orthoborate (30989-05-0)

Viscosity, kinematic 16.2 mm²/s @20°C

2-(2-(2-butoxyethoxy)ethoxy)ethanol (143-22-6)

Viscosity, kinematic 9.2 mm²/s Temp.: 'other:25.0°C' Parameter: 'kinematic viscosity (in mm²/s)'

2-(2-methoxyethoxy)ethanol (111-77-3)

Viscosity, kinematic 3.9 mm²/s

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dihydro-3-(tetrapropenyl)furan-2,5-dione (26544-38-7)

Viscosity, kinematic	0.428 mm ² /s
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11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

Hazardous to the aquatic environment, short-term (acute) : Not classified

Hazardous to the aquatic environment, long-term (chronic) : Not classified

Not rapidly degradable

Tris[2-[2-(2-methoxyethoxy)ethoxy]ethyl] orthoborate (30989-05-0)

LC50 - Fish [1]	> 222.2 mg/l Test organisms (species): Oncorhynchus mykiss
LC50 - Fish [2]	> 1010 mg/l Test organisms (species): Oncorhynchus mykiss
EC50 - Crustacea [1]	> 211.2 mg/l Test organisms (species): Daphnia magna
EC50 - Crustacea [2]	> 960 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	> 224.4 mg/l Test organisms (species): other:Pseudokirchneriella subcapitata
EC50 72h - Algae [2]	> 1020 mg/l Test organisms (species): other:Pseudokirchneriella subcapitata

2-(2-(2-butoxyethoxy)ethoxy)ethanol (143-22-6)

LC50 - Fish [1]	2400 mg/l Pimephales promelas
EC50 - Crustacea [1]	> 500 mg/l Daphnia magna
EC50 72h - Algae [1]	500 mg/l Pseudokirchneriella subcapitata
NOEC chronic crustacea	> 100 mg/l Daphnia magna (21d)
NOEC chronic algae	> 100 mg/l Pseudokirchneriella subcapitata

2,2'-oxydiethanol (111-46-6)

LC50 - Fish [1]	75200 mg/l Test organisms (species): Pimephales promelas
EC50 - Crustacea [1]	84000 mg/l
EC50 72h - Algae [1]	1054 mg/l Scenedesmus subspicatus
EC50 96h - Algae [1]	6500 – 13000 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 96h - Algae [2]	9362 mg/l Test organisms (species): other:
NOEC (chronic)	≥ 1000 mg/l Test organisms (species): Americamysis bahia (previous name: Mysidopsis bahia) Duration: '23 d'
NOEC chronic crustacea	≥ 1000 mg/l Americamysis bahia (23d)

2-(2-methoxyethoxy)ethanol (111-77-3)

LC50 - Fish [1]	7500 mg/l Lepomis macrochirus
EC50 - Crustacea [1]	> 1000 mg/l Daphnia magna
EC50 72h - Algae [1]	> 1000 mg/l Skeletonema costatum

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dihydro-3-(tetrapropenyl)furan-2,5-dione (26544-38-7)

LC50 - Fish [1]	> 100 mg/l <i>Oncorhynchus mykiss</i>
EC50 - Crustacea [1]	> 100 mg/l <i>Daphnia magna</i>
EC50 96h - Algae [1]	160 mg/l <i>Raphidocelis subcapitata</i>
NOEC chronic algae	33 mg/l <i>Pseudokirchneriella subcapitata</i> (96h)

12.2. Persistence and degradability

Tris[2-[2-(2-methoxyethoxy)ethoxy]ethyl] orthoborate (30989-05-0)

Persistence and degradability	Readily biodegradable.
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2-(2-(2-butoxyethoxy)ethoxy)ethanol (143-22-6)

Persistence and degradability	Readily biodegradable.
Biodegradation	68 % 14d

2,2'-oxydiethanol (111-46-6)

Persistence and degradability	Readily biodegradable.
Biochemical oxygen demand (BOD)	0.02 g O ₂ /g substance
Chemical oxygen demand (COD)	1.51 g O ₂ /g substance
BOD (% of ThOD)	0.015 % ThOD
Biodegradation	90 % 28d

2-(2-methoxyethoxy)ethanol (111-77-3)

Biodegradation	100 % 28d
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dihydro-3-(tetrapropenyl)furan-2,5-dione (26544-38-7)

Persistence and degradability	Not readily biodegradable.
Biodegradation	9.9 % OECD 301D (28d)

12.3. Bioaccumulative potential

Tris[2-[2-(2-methoxyethoxy)ethoxy]ethyl] orthoborate (30989-05-0)

Partition coefficient n-octanol/water (Log Pow)	-4.37
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2-(2-(2-butoxyethoxy)ethoxy)ethanol (143-22-6)

Bioconcentration factor (BCF REACH)	3
Partition coefficient n-octanol/water (Log Pow)	0.51

2,2'-oxydiethanol (111-46-6)

BCF - Fish [1]	100 – 180
Bioconcentration factor (BCF REACH)	100
Partition coefficient n-octanol/water (Log Pow)	-1.98

2-(2-methoxyethoxy)ethanol (111-77-3)

Bioconcentration factor (BCF REACH)	3
Partition coefficient n-octanol/water (Log Pow)	-0.47 (@20 °C pH 6.7)

dihydro-3-(tetrapropenyl)furan-2,5-dione (26544-38-7)

Partition coefficient n-octanol/water (Log Kow)	> 4.39
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12.4. Mobility in soil

2,2'-oxydiethanol (111-46-6)

Surface tension	0.0485 N/m
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0

2-(2-methoxyethoxy)ethanol (111-77-3)

Surface tension	0.0359 N/m
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dihydro-3-(tetrapropenyl)furan-2,5-dione (26544-38-7)

Organic Carbon Normalized Adsorption Coefficient (Log Koc)	2.92
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12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
European List of Waste (LoW, EC 2000/532)	: 16 01 13* - brake fluids
HP Code	: HP4 - "Irritant – skin irritation and eye damage:" waste which on application can cause skin irritation or damage to the eye.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
Not regulated for transport				
14.2. UN proper shipping name				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.4. Packing group				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.5. Environmental hazards				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
No supplementary information available				

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14.6. Special precautions for user

Overland transport

Not regulated

Transport by sea

Not regulated

Air transport

Not regulated

Inland waterway transport

Not regulated

Rail transport

Not regulated

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acronyms:

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
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Abbreviations and acronyms:

ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disrupting properties

Full text of H- and EUH-statements:

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Chronic 4	Hazardous to the aquatic environment – Chronic Hazard, Category 4
EUH208	Contains dihydro-3-(tetrapropenyl)furan-2,5-dione(26544-38-7). May produce an allergic reaction.

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Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Full text of H- and EUH-statements:	
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
H302	Harmful if swallowed.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H360D	May damage the unborn child.
H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child.
H413	May cause long lasting harmful effects to aquatic life.
Repr. 1B	Reproductive toxicity, Category 1B
Repr. 2	Reproductive toxicity, Category 2
Skin Sens. 1A	Skin sensitisation, category 1A

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.