

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 24.11.2023





Version number 2 (replaces version 1)

Revision: 24.11.2023

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

- **1.1 Product identifier**
- **Trade name:** OptiScint Flow
- **Article number:** 6013791, 6013793, 6013796
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
 No further relevant information available.
- **Application of the substance / the mixture** Laboratory chemicals
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
 Revvity Health Sciences B.V.
 Rigaweg 22
 9723 TH Groningen
 The Netherlands
 Phone: 0031 50 5445900
 www.revvity.com
- **Further information obtainable from:**
 Quality Assurance, Environment, Safety & Health (QA/ESH)
 SDS.Groningen@revvity.com
- **1.4 Emergency telephone number:**
 +31 50 5445971
 CHEMTREC: +1 703-527-3887

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**
-  health hazard
 Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.
-  corrosion
 Eye Dam. 1 H318 Causes serious eye damage.
-  environment
 Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects.
-  Skin Irrit. 2 H315 Causes skin irritation.
 Skin Sens. 1 H317 May cause an allergic skin reaction.
- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
 The product is classified and labelled according to the GB CLP regulation.

(Contd. on page 2)

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according to 1907/2006/EC, Article 31

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Version number 2 (replaces version 1)

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Trade name: **OptiScint Flow**

(Contd. of page 1)

Hazard pictograms



Signal word *Danger*

Hazard-determining components of labelling:

alcohols, C11-15-secondary, ethoxylated
Diisopropyl naphthalene isomers
bis(2-ethylhexyl) hydrogen phosphate
Phosphoric acid, 2-ethylhexyl ester

Hazard statements

H315 Causes skin irritation.
H318 Causes serious eye damage.
H317 May cause an allergic skin reaction.
H304 May be fatal if swallowed and enters airways.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P273 Avoid release to the environment.
P280 Wear protective gloves / eye protection / face protection.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
P331 Do NOT induce vomiting.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

2.3 Other hazards

Results of PBT and vPvB assessment

PBT:

38640-62-9	Diisopropyl naphthalene isomers
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vPvB:

38640-62-9	Diisopropyl naphthalene isomers
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SECTION 3: Composition/information on ingredients

3.2 Mixtures

Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:

CAS: 38640-62-9 EINECS: 254-052-6	Diisopropyl naphthalene isomers ⚠ Asp. Tox. 1, H304 ⚠ Aquatic Chronic 1, H410 PBT; vPvB	40-60%
CAS: 68131-40-8 Polymer	alcohols, C11-15-secondary, ethoxylated ⚠ Eye Dam. 1, H318 Aquatic Chronic 3, H412	10-20%
CAS: 68131-40-8	alcohols, C11-15-secondary, ethoxylated ⚠ Aquatic Chronic 2, H411 ⚠ Skin Sens. 1, H317	10-20%

(Contd. on page 3)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 24.11.2023

Version number 2 (replaces version 1)

Revision: 24.11.2023

Trade name: OptiScint Flow

(Contd. of page 2)

CAS: 68131-40-8 Polymer	alcohols, C11-15-secondary, ethoxylated Aquatic Chronic 3, H412	10-20%
CAS: 78-40-0 EINECS: 201-114-5 Index number: 015-013-00-7	Triethyl phosphate ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319	2.5-10%
CAS: 298-07-7 EINECS: 206-056-4	bis(2-ethylhexyl) hydrogen phosphate ⚠ Skin Corr. 1B, H314 ⚠ Acute Tox. 4, H302	2.5-10%
CAS: 12645-31-7 EINECS: 235-741-0	Phosphoric acid, 2-ethylhexyl ester ⚠ Skin Corr. 1B, H314	2.5-10%

· Non-dangerous components

CAS: 92-71-7 EINECS: 202-181-3	2,5-Diphenyloxazole (PPO)	0-2.5%
CAS: 7732-18-5 EINECS: 231-791-2	water, distilled, conductivity or of similar purity	0-2.5%
CAS: 13280-61-0 EINECS: 236-285-5	1,4-Bis-(2-methylstyryl)-benzene (bis-MSB)	0-2.5%

· Additional information: For the wording of the listed hazard phrases refer to section 16.**SECTION 4: First aid measures**

- **4.1 Description of first aid measures**
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** If symptoms persist consult doctor.
- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.
- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:** No special measures required.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** Not required.
- **6.2 Environmental precautions:**
Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- **6.4 Reference to other sections**
See Section 7 for information on safe handling.

(Contd. on page 4)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 24.11.2023

Version number 2 (replaces version 1)

Revision: 24.11.2023

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See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

(Contd. of page 3)

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** No special precautions are necessary if used correctly.
- **Information about fire - and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
- **Appropriate engineering controls** No further data; see section 7.
- **Individual protection measures, such as personal protective equipment**
- **General protective and hygienic measures:** Wash hands before breaks and at the end of work.
- **Respiratory protection:** Not required.
- **Hand protection**



Protective gloves

EN ISO 374-1/Type B

- **Material of gloves**

Nitrile rubber, NBR

Recommended thickness of the material: ≥ 0.2 mmBreakthrough time: > 120 minutes

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

- **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye/face protection**



Tightly sealed goggles

(Contd. on page 5)

Safety data sheet
 according to 1907/2006/EC, Article 31

Printing date 24.11.2023

Version number 2 (replaces version 1)

Revision: 24.11.2023

Trade name: OptiScint Flow

· **Body protection:** Protective work clothing

(Contd. of page 4)

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· Colour:	Colourless
· Odour:	Characteristic
· Odour threshold:	Not determined.
· Melting point/freezing point:	Undetermined.
· Boiling point or initial boiling point and boiling range	215 °C (419 °F) (78-40-0 Triethyl phosphate)
· Flammability	Not applicable.
· Lower and upper explosion limit	
· Lower:	0.4 Vol % (38640-62-9 Diisopropyl naphthalene isomers)
· Upper:	4.7 Vol % (38640-62-9 Diisopropyl naphthalene isomers)
· Flash point:	115 °C (239 °F) (78-40-0 Triethyl phosphate)
· Decomposition temperature:	Not determined.
· pH at 20 °C (68 °F)	<5
· Viscosity:	
· Kinematic viscosity	28 cSt at 20°C
· Dynamic:	Not determined.
· Solubility	
· water:	Fully miscible.
· Partition coefficient n-octanol/water (log value)	Not determined.
· Vapour pressure at 20 °C (68 °F):	>0 hPa
· Density and/or relative density	
· Density at 20 °C (68 °F):	0.96-0.98 g/cm ³ (8.0112-8.1781 lbs/gal)
· Relative density	Not determined.
· Vapour density	Not determined.

· **9.2 Other information**

· Appearance:	
· Form:	Fluid
· Important information on protection of health and environment, and on safety.	
· Ignition temperature:	Product is not selfigniting.
· Explosive properties:	Product does not present an explosion hazard.
· Change in condition	
· Evaporation rate	Not determined.

· **Information with regard to physical hazard classes**

· Explosives	Void
· Flammable gases	Void
· Aerosols	Void
· Oxidising gases	Void
· Gases under pressure	Void
· Flammable liquids	Void
· Flammable solids	Void
· Self-reactive substances and mixtures	Void
· Pyrophoric liquids	Void

(Contd. on page 6)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 24.11.2023

Version number 2 (replaces version 1)

Revision: 24.11.2023

Trade name: OptiScint Flow

(Contd. of page 5)

- **Pyrophoric solids** Void
- **Self-heating substances and mixtures** Void
- **Substances and mixtures, which emit flammable gases in contact with water** Void
- **Oxidising liquids** Void
- **Oxidising solids** Void
- **Organic peroxides** Void
- **Corrosive to metals** Void
- **Desensitised explosives** Void

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

* **SECTION 11: Toxicological information**

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
- **Acute toxicity** Based on available data, the classification criteria are not met.

· **LD/LC50 values relevant for classification:**

ATE (Acute Toxicity Estimates)

Oral	LD50	22,071 mg/kg
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- **Skin corrosion/irritation**
Causes skin irritation.
- **Serious eye damage/irritation** Causes serious eye damage.
- **Respiratory or skin sensitisation** May cause an allergic skin reaction.
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard**
May be fatal if swallowed and enters airways.
- **11.2 Information on other hazards**

· **Endocrine disrupting properties**

None of the ingredients is listed.

* **SECTION 12: Ecological information**

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.

(Contd. on page 7)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 24.11.2023

Version number 2 (replaces version 1)

Revision: 24.11.2023

Trade name: OptiScint Flow

(Contd. of page 6)

- **12.4 Mobility in soil** No further relevant information available.
- **12.5 Results of PBT and vPvB assessment**

· **PBT:**

38640-62-9	Diisopropyl naphthalene isomers
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· **vPvB:**

38640-62-9	Diisopropyl naphthalene isomers
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- **12.6 Endocrine disrupting properties**
 The product does not contain substances with endocrine disrupting properties.
- **12.7 Other adverse effects**
- **Additional ecological information:**
- **General notes:**
 Water danger class 3 (German Regulation) (Self-assessment): extremely hazardous for water
 Do not allow product to reach ground water, water course or sewage system, even in small quantities.
 Danger to drinking water if even extremely small quantities leak into the ground.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**
 Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

SECTION 14: Transport information

- | | |
|---------------------------------------|--|
| · 14.1 UN number or ID number | |
| · ADR, IMDG, IATA | UN3082 |
| · 14.2 UN proper shipping name | |
| · ADR | 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Diisopropyl naphthalene isomers, alcohols, C11-15-secondary, ethoxylated) |
| · IMDG | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Diisopropyl naphthalene isomers, alcohols, C11-15-secondary, ethoxylated), MARINE POLLUTANT |
| · IATA | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Diisopropyl naphthalene isomers, alcohols, C11-15-secondary, ethoxylated) |

(Contd. on page 8)

Safety data sheet
according to 1907/2006/EC, Article 31

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(Contd. of page 7)

· **14.3 Transport hazard class(es)**

· **ADR**



· **Class**

9 (M6) Miscellaneous dangerous substances and articles.

· **Label**

9

· **IMDG, IATA**



· **Class**

9 Miscellaneous dangerous substances and articles.

· **Label**

9

· **14.4 Packing group**

· **ADR, IMDG, IATA**

III

· **14.5 Environmental hazards:**

Product contains environmentally hazardous substances: Diisopropyl naphthalene isomers

· **Marine pollutant:**

Symbol (fish and tree)

· **Special marking (ADR):**

Symbol (fish and tree)

· **Special marking (IATA):**

Symbol (fish and tree)

· **14.6 Special precautions for user**

Warning: Miscellaneous dangerous substances and articles.

· **Hazard identification number (Kemler code):**

90

· **EMS Number:**

F-A,S-F

· **Stowage Category**

A

· **14.7 Maritime transport in bulk according to IMO instruments**

Not applicable.

· **Transport/Additional information:**

· **ADR**

· **Excepted quantities (EQ)**

Code: E1

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 1000 ml

· **Tunnel restriction code**

-

· **IMDG**

· **Limited quantities (LQ)**

5L

· **Excepted quantities (EQ)**

Code: E1

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 1000 ml

(Contd. on page 9)

Safety data sheet
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Version number 2 (replaces version 1)

Revision: 24.11.2023

Trade name: OptiScint Flow

(Contd. of page 8)

· UN "Model Regulation":	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (DIISOPROPYL NAPHTHALENE ISOMERS, ALCOHOLS, C11-15-SECONDARY, ETHOXYLATED), 9, III
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SECTION 15: Regulatory information

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

· **Regulated explosives precursors**

None of the ingredients is listed.

· **Regulated poisons**

None of the ingredients is listed.

· **Reportable explosives precursors**

None of the ingredients is listed.

· **Reportable poisons**

None of the ingredients is listed.

· **Directive 2012/18/EU**

- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **Seveso category E1** Hazardous to the Aquatic Environment
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 100 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 200 t
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant phrases**

- H302 Harmful if swallowed.
- H304 May be fatal if swallowed and enters airways.
- H314 Causes severe skin burns and eye damage.
- H317 May cause an allergic skin reaction.
- 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.

· **Department issuing SDS:** Quality Assurance, Environment, Safety & Health (QA/ESH)

· **Contact:** SDS.Groningen@revvity.com

· **Abbreviations and acronyms:**

- ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
- IMDG: International Maritime Code for Dangerous Goods
- IATA: International Air Transport Association
- GHS: Globally Harmonised System of Classification and Labelling of Chemicals
- EINECS: European Inventory of Existing Commercial Chemical Substances
- ELINCS: European List of Notified Chemical Substances
- CAS: Chemical Abstracts Service (division of the American Chemical Society)

(Contd. on page 10)

Safety data sheet
according to 1907/2006/EC, Article 31

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Trade name: OptiScint Flow

(Contd. of page 9)

*LC50: Lethal concentration, 50 percent**LD50: Lethal dose, 50 percent**PBT: Persistent, Bioaccumulative and Toxic**vPvB: very Persistent and very Bioaccumulative**Acute Tox. 4: Acute toxicity – Category 4**Skin Corr. 1B: Skin corrosion/irritation – Category 1B**Skin Irrit. 2: Skin corrosion/irritation – Category 2**Eye Dam. 1: Serious eye damage/eye irritation – Category 1**Eye Irrit. 2: Serious eye damage/eye irritation – Category 2**Skin Sens. 1: Skin sensitisation – Category 1**Asp. Tox. 1: Aspiration hazard – Category 1**Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1**Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2**Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3*** Data compared to the previous version altered.*

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