

SAFETY DATA SHEET

ORION 288

The safety data sheet is in accordance with Commission Regulation (EU) 2020/878 of 18 June 2020 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

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

Date issued	05.12.2013
Revision date	07.12.2021

1.1. Product identifier

Product name	ORION 288
REACH Reg. No.	01-2119535109-41
EC No.	273-066-3
Article no.	BL288C, BL288E, BL288FA, BL288H, BL288HA, BL288IN, BL288FA200
Product identity comments	UFI: UFI YF6Y-Q4XG-J109-MF71
Extended SDS with ES incorporated, comments	Exposure Scenario available.

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

Use of the substance / mixture	Lubricant
Consumer use	Yes

1.3. Details of the supplier of the safety data sheet

Distributor

Company name	Relekta AS
Office address	Innspurten 1A
Postal address	Postboks 6169 Etterstad
Postcode	0663
City	Oslo
Country	Norway
Telephone number	+47 22 66 04 00
Fax	+47 22 66 04 01
Email	post@relekta.no
Website	www.relekta.no

Enterprise No.	NO 831 881 372
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1.4. Emergency telephone number

Emergency telephone	<p>Telephone number: +47 22 59 13 00</p> <p>Description: Norwegian Poison Information Center</p> <p>Telephone number: 112</p> <p>Description: Sweden: Require Poison Information</p>
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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP / GHS]	<p>Repr. 2; H361fd</p> <p>STOT RE 2; H373</p> <p>Aquatic Chronic 1; H410</p>
Substance / mixture hazardous properties	Suspected of damaging fertility. Suspected of damaging the unborn child May cause damage to organs through prolonged or repeated exposure. Very toxic to aquatic life with long lasting effects.

2.2. Label elements

Hazard pictograms (CLP)



Composition on the label	Phenol, isopropylated, phosphate (3:1) [Triphenyl phosphate > 5%] ≤ 100 %
Signal word	Warning
Hazard statements	<p>H361fd Suspected of damaging fertility. Suspected of damaging the unborn child.</p> <p>H373 May cause damage to organs through prolonged or repeated exposure</p> <p>H410 Very toxic to aquatic life with long lasting effects.</p>
Precautionary statements	<p>P101 If medical advice is needed, have product container or label at hand.</p> <p>P260 Do not breathe dust / fume / gas / mist / vapours / spray.</p> <p>P280 Wear protective gloves / protective clothing / eye protection / face protection.</p> <p>P308+P313 IF exposed or concerned: Get medical advice / attention.</p> <p>P405 Store locked up.</p> <p>P501 Dispose of contents / container to an approved waste facility.</p>
Tactile warnings	Yes
Child-protection	No

2.3. Other hazards

PBT / vPvB	The chemical contains no PBT or vPvB substances.
Other hazards	None of the substances listed in section 3.2 are listed on ECHA's Endocrine disruptor assessment list.

SECTION 3: Composition / information on ingredients

3.1. Substances

Substance	Identification	Classification	Contents	Notes
Phenol, isopropylated, phosphate (3:1) [Triphenyl phosphate > 5%]	CAS No.: 68937-41-7 EC No.: 273-066-3 REACH Reg. No.: 01-2119535109-41	Repr. 2; H361fd STOT RE 2; H373 Aquatic Chronic 1; H410	≤ 100 %	
Substance comments	See section 16 for explanation of hazard statements (H) listed above.			

SECTION 4: First aid measures

4.1. Description of first aid measures

General	Emergency telephone number: see section 1.4. In case of unconsciousness or severe accidents, call 112.
Inhalation	Fresh air and rest. IF exposed or concerned: Get medical advice/attention.
Skin contact	Remove contaminated clothing. Wash the skin immediately with soap and water. Do not use solvents to clean the skin. IF exposed or concerned: Get medical advice/attention.
Eye contact	Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyes wide apart. By prolonged rinsing, use luke warm water to avoid damage to the eye. IF exposed or concerned: Get medical advice/attention.
Ingestion	Rinse mouth thoroughly. Give some cream or vegetable oil. Do not induce vomiting. Hold person under observation. IF exposed or concerned: Get medical advice/attention.

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

Acute symptoms and effects	No symptoms known or expected.
Delayed symptoms and effects	May cause damage to organs (liver, binyrer) through prolonged or repeated exposure (oral). Suspected of damaging fertility. Suspected of damaging the unborn child

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

Other information	Treat symptomatically. No specific information from the manufacturer.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Use fire-extinguishing media appropriate for surrounding materials.
Improper extinguishing media	Do not use water jet.

5.2. Special hazards arising from the substance or mixture

Fire and explosion hazards	The chemical is not classified as flammable.
Hazardous combustion products	May include, but is not limited to: Carbon dioxide (CO ₂). Carbon monoxide (CO).

Oxides of phosphorous (PO_x).

5.3. Advice for firefighters

Personal protective equipment	Use compressed air equipment when the chemical is involved in fire. In case of evacuation, an approved protection mask should be used. See also section 8.
Other information	Containers close to fire should be removed immediately or cooled with water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal protection measures	Ensure adequate ventilation. Use protective equipment as referred to in section 8. Avoid inhalation of vapours and contact with skin and eyes. In case of spills, beware of slippery floors and surfaces.
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6.2. Environmental precautions

Environmental precautionary measures	Do not allow to enter into sewer, water system or soil.
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6.3. Methods and material for containment and cleaning up

Clean up	Ventilate well. Absorb in vermiculite, dry sand or earth and place into containers. Collect in a suitable container and dispose as hazardous waste according to section 13.
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6.4. Reference to other sections

Other instructions	See also sections 8 and 13.
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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Handling	Observe good chemical hygiene practices. Use protective equipment as referred to in section 8. Provide adequate ventilation. Avoid exposure! Avoid inhalation of vapours and contact with skin and eyes. Pregnant women should not work with the product, if there is the least risk of exposure.
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Protective safety measures

Advice on general occupational hygiene	Do not eat, drink or smoke during work. Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash contaminated clothing before reuse.
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7.2. Conditions for safe storage, including any incompatibilities

Storage	Store in tightly closed original container in a dry, cool and well-ventilated place.
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Conditions for safe storage

Advice on storage compatibility	Keep away from: Food and feed.
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7.3. Specific end use(s)

Specific use(s)	See section 1.2. See exposure scenario.
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SECTION 8: Exposure controls / personal protection

8.1. Control parameters

Substance	Identification	Exposure limits	TWA Year
Triphenyl phosphate	CAS No.: 115-86-6	Country of origin: Norway Limit value (8 h) : 3 mg/m ³	
Control parameters comments	References (laws/regulations): Norwegian regulation on exposure limits: FOR-2011-12-06-1358 Forskrift om tiltaks- og grenseverdier (sist endret gjennom FOR-2021-06-28-2248).		

DNEL / PNEC

DNEL	<p>Group: Professional Route of exposure: Long-term inhalation (systemic) Value: 0,145 mg/m³</p> <p>Group: Professional Route of exposure: Acute inhalation (systemic) Value: 700 mg/m³</p> <p>Group: Professional Route of exposure: Acute dermal (local) Value: 16 mg/cm²</p> <p>Group: Professional Route of exposure: Long-term dermal (systemic) Value: 0,417 mg/kg</p> <p>Group: Professional Route of exposure: Acute dermal (systemic) Value: 2000 mg/kg</p> <p>Group: Consumer Route of exposure: Long-term inhalation (systemic) Value: 0,07 mg/m³</p> <p>Group: Consumer Route of exposure: Acute inhalation (systemic) Value: 350 mg/m³</p> <p>Group: Consumer Route of exposure: Long-term oral (systemic) Value: 0,04 mg/kg</p> <p>Group: Consumer Route of exposure: Acute dermal (local) Value: 8 mg/cm²</p> <p>Group: Consumer Route of exposure: Long-term dermal (systemic) Value: 0,208 mg/kg</p>
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PNEC	Group: Consumer
	Route of exposure: Acute dermal (systemic)
	Value: 100 mg/kg
	Route of exposure: Freshwater
	Value: 0,00031 mg/l
	Route of exposure: Saltwater
	Value: 0,000031 mg/l
	Route of exposure: Freshwater sediments
	Value: 0,185 mg/kg
	Route of exposure: Saltwater sediments
	Value: 0,0185 mg/kg
	Route of exposure: Soil
	Value: 2,5 mg/kg
	Route of exposure: Sewage treatment plant STP
	Value: 100 mg/l

8.2. Exposure controls

Precautionary measures to prevent exposure

Technical measures to prevent exposure	<p>Provide adequate ventilation. The personal protective equipment must be CE-marked and the latest version of the standards shall be used. The protective equipment and the specified standards recommended below are only suggestions, and should be selected on advice from the supplier of such equipment.</p> <p>A risk assessment of the work place/work activities (the actual risk) may lead to other control measures. The protection equipment's suitability and durability will depend on application.</p>
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Eye / face protection

Eye protection equipment	<p>Description: Wear splash-proof eye goggles to prevent any possibility of eye contact.</p> <p>Reference to relevant standard: EN 166 (Personal eye-protection. Specifications).</p>
Additional eye protection measures	<p>Eye wash facilities should be available at the work place. Either a fixed eye wash facility connected to the drinking water (preferably warm water) or a portable disposable unit.</p>

Hand protection

Suitable gloves type	Butyl rubber.
Breakthrough time	Comments: No specific information from the manufacturer.
Thickness of glove material	Comments: No specific information from the manufacturer.
Hand protection equipment	<p>Description: Use chemical resistant gloves. The gloves abilities may vary among the different glove manufacturers. Glove thickness must be chosen in consultation with the glove supplier, who can inform about the breakthrough time for the glove.</p>

	Reference to relevant standard: EN ISO 374 (Protective gloves against chemicals and micro-organisms). EN 420 (Protective gloves - General requirements and test methods).
Additional hand protection measures	Replace gloves if signs of wear and tear.

Skin protection

Recommended protective clothing	Description: Wear appropriate protective clothing to protect against skin contact.
Additional skin protection measures	Emergency shower should be available at the workplace.

Respiratory protection

Recommended respiratory protection	<p>Description: In case of inadequate ventilation or risk of inhalation of vapours, use suitable respiratory equipment with combination filter (type B/P3). At work in confined or poorly ventilated spaces, respiratory protection with air supply must be used.</p> <p>Reference to relevant standard: EN 14387 (Respiratory protective devices. Gas filter(s) and combined filter(s). Requirements, testing, marking). EN 12083 (Respiratory protective devices. Filters with breathing hoses, (Non-mask mounted filters). Particle filters, gas filters, and combined filters. Requirements, testing, marking).</p>
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Appropriate environmental exposure control

Environmental exposure controls	Do not allow to enter into sewer, water system or soil.
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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Fluid.
Colour	Colourless.
Odour	Odourless.
Odour limit	Comments: Not relevant.
pH	Comments: Not determined.
Melting point / melting range	Comments: Not determined.
Boiling point / boiling range	Value: 220 - 265 °C
Flash point	Value: ≥ 180 °C Method: ASTM D 93
Evaporation rate	Comments: Not determined.
Flammability	Not determined.
Explosion limit	Comments: Not determined.
Vapour pressure	Value: 0,45 kPa Temperature: 20 °C Value: 0,58 kPa

	Temperature: 25 °C
Vapour density	Comments: Not determined.
Relative density	Value: 1,153 - 1,183 Temperature: 20 °C
Solubility	Medium: Water Comments: Insoluble.
Partition coefficient: n-octanol/ water	Comments: Not relevant.
Auto-ignition temperature	Comments: Not determined.
Decomposition temperature	Comments: Not determined.
Viscosity	Value: 27 - 32 mPa.s Method: ASTM D 445 Type: Dynamic
Explosive properties	Not determined.
Oxidising properties	Not determined.

9.2. Other information

Physical hazards

Dropping point	Value: -36 °C Comments: ISO 3016
Refractive index	Value: 1,551 Temperature: 25 °C

Other physical and chemical properties

Physical and chemical properties	No further information is available.
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SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	Under normal conditions and use there are not expected any reactivity hazards for this chemical.
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10.2. Chemical stability

Stability	Stable under normal temperature conditions and recommended use.
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	None under normal conditions. Dangerous polymerisation will not occur.
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10.4. Conditions to avoid

Conditions to avoid	None known.
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10.5. Incompatible materials

Materials to avoid	No specific substances indicated.
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10.6. Hazardous decomposition products

Hazardous decomposition products	None under normal conditions. See also section 5.2.
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SECTION 11: Toxicological information

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

Other toxicological data	Test data are available from the supplier/manufacturer.
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Other information regarding health hazards

Assessment of acute toxicity, classification	Based on available data, the classification criteria are not met.
Assessment of skin corrosion / irritation, classification	Based on available data, the classification criteria are not met.
Assessment of eye damage or irritation, classification	Based on available data, the classification criteria are not met.
Assessment of respiratory sensitisation, classification	Based on available data, the classification criteria are not met.
Assessment of skin sensitisation, classification	Based on available data, the classification criteria are not met.
Assessment of germ cell mutagenicity, classification	Based on available data, the classification criteria are not met.
Assessment of carcinogenicity, classification	Based on available data, the classification criteria are not met.
Assessment of reproductive toxicity, classification	Suspected of damaging fertility Suspected of damaging the unborn child
Assessment of specific target organ toxicity - single exposure, classification	Based on available data, the classification criteria are not met.
Assessment of specific target organ toxicity - repeated exposure, classification	May cause damage to organs (liver, biliary system) through prolonged or repeated exposure (oral). Classification: STOT RE 2; H373
Assessment of aspiration hazard, classification	Based on available data, the classification criteria are not met.

Symptoms of exposure

In case of ingestion	No specific information from the manufacturer.
In case of skin contact	No specific information from the manufacturer.
In case of inhalation	No specific information from the manufacturer.
In case of eye contact	No specific information from the manufacturer.

11.2 Other information

Other information

May cause damage to organs through prolonged or repeated exposure.
 Suspected of damaging the unborn child Mistenkes for å kunne skade forplantningsevnen.
 None of the substances listed in section 3.2 are listed on ECHA's Endocrine disruptor assessment list.

SECTION 12: Ecological information

12.1. Toxicity

Aquatic toxicity, fish

Value: 1,6 mg/l
 Effect dose concentration: LC50
 Test duration: 96 hour(s)
 Species: Oncorhynchus mykiss

Value: 3,1 µg/l
 Effect dose concentration: NOEC
 Test duration: 33 day(s)
 Species: Pimephales promelas
 Method: OECD Test Guideline 210

Aquatic toxicity, crustacean

Value: 2,44 mg/m²
 Effect dose concentration: EC50
 Test duration: 48 hour(s)
 Species: Daphnia magna

Value: 0,041 mg/l
 Effect dose concentration: NOEC
 Test duration: 21 day(s)
 Species: Daphnia magna
 Method: OECD Test Guideline 211

Ecotoxicity

Very toxic to aquatic life with long lasting effects.
 Additional test data is available from the supplier/manufacturer.

12.2. Persistence and degradability

Persistence and degradability description/evaluation

The product is not expected to be biodegradable.
 Biodegradation: 17,9 %. (28 days)

12.3. Bioaccumulative potential

Bioaccumulation, comments

Information on bioaccumulation is not available for the chemical.

12.4. Mobility in soil

Mobility

Insoluble in water.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment

The chemical contains no PBT or vPvB substances.

12.6. Endocrine disrupting properties

Endocrine disrupting properties

None of the substances listed in section 3.2 are listed on ECHA's Endocrine

	disruptor assessment list.
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12.7. Other adverse effects

Additional ecological information	Do not allow to enter into sewer, water system or soil.
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SECTION 13: Disposal considerations

13.1. Waste treatment methods

Appropriate methods of disposal for the chemical	Disposed of as hazardous waste by approved contractor. The waste code (EWC-Code) is intended as a guide. The code must be chosen by the user, if the use differs from the one mentioned below.
EWC waste code	EWC waste code: 070604 other organicsolvents, washing liquids and mother liquors Classified as hazardous waste: Yes
NORSAS	7152 Non-halogenated organic wastes.
Other information	Do not empty into drains.

SECTION 14: Transport information

Dangerous goods	Yes
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14.1. UN number

ADR/RID/ADN	3082
IMDG	3082
ICAO/IATA	3082

14.2. UN proper shipping name

Proper shipping name English ADR/RID/ADN	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Technical name/Danger releasing substance English ADR/RID/ADN	(Phenol, isopropylated phosphate (3:1) [Triphenyl phosphate > 5%])
ADR/RID/ADN	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Technical name/danger releasing substance ADR/RID/ADN	(Fenol, isopropylert, fosfat (3:1)[Trifenyfosfat > 5%])
IMDG	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Technical name/danger releasing substance IMDG	(Phenol, isopropylated phosphate (3:1) [Triphenyl phosphate > 5%])
ICAO/IATA	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Technical name/danger releasing substance ICAO/IATA	(Phenol, isopropylated phosphate (3:1) [Triphenyl phosphate > 5%])

14.3. Transport hazard class(es)

ADR/RID/ADN	9
Classification code ADR/RID/ADN	M6

IMDG	9
ICAO/IATA	9

14.4. Packing group

ADR/RID/ADN	III
IMDG	III
ICAO/IATA	III

14.5. Environmental hazards

IMDG Marine pollutant	Yes
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14.6. Special precautions for user

Special safety precautions for user	Not entered.
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14.7. Maritime transport in bulk according to IMO instruments

Product name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Ship type required	Data lacking.

Additional information

Hazard label ADR/RID/ADN	9
Hazard label IMDG	9
Hazard label ICAO/IATA	9

ADR/RID Other information

Tunnel restriction code	-
Limited quantity	5L
Excepted quantity	E1
Special provisions	274, 335, 375, 601
Transport category	3
Hazard No.	90
Other applicable information ADR/RID	90

IMDG Other information

EmS	F-A, S-F
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SECTION 15: Regulatory information

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

References (laws/regulations)	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP-regulation) with later amendments. Regulation (EC) No 1907/2006 on the registration, evaluation, authorization and restriction of chemicals (REACH Regulation), with later amendments. The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009. The List of Wastes (England) (Amendment) Regulations 2005. (SI 2005 No. 895). Norwegian regulation on declaration: FOR-2015-05-19-541, 01.06.2015 with later amendments.
Declaration No.	633693

15.2. Chemical safety assessment

Chemical safety assessment performed	Yes
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SECTION 16: Other information

Supplier's notes	The information contained in this SDS must be made available to all those who handle the product.
List of relevant H-phrases (Section 2 and 3)	H361fd Suspected of damaging fertility. Suspected of damaging the unborn child. H373 May cause damage to organs through prolonged or repeated exposure H410 Very toxic to aquatic life with long lasting effects.
CLP classification, comments	Calculation method.
Key literature references and sources for data	Suppliers Safety data sheet dated: 14.02.2018 (LANXESS)
Abbreviations and acronyms used	ADR: The European Agreement concerning the International Carriage of Dangerous Goods by Road EWC: European Waste Code (a code from the EU's common classification system for waste) EC50: The effective concentration of substance that causes 50% of the maximum response IATA: The International Air Transport Association ICAO: The International Civil Aviation Organisation IMDG: The International Maritime Dangerous Goods Code LC50: Median concentration lethal to 50% of a test population. NOEC: No observed effect concentration OECD: Organisation for Economic Cooperation and Development. PBT: Persistent, Bioaccumulative and Toxic RID: The Regulations concerning the International Carriage of Dangerous Goods by Rail vPvB: very Persistent and very Bioaccumulative
Information added, deleted or revised	Relevant changes compared to the previous version of the safety data sheet are indicated with verticle lines in the left margin.
Checking quality of information	This SDS is quality controlled by Kiwa Kompetanse AS in Norway, certified according to the Quality Management System requirements specified in ISO 9001:2015.
Version	2

Prepared by

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