

SAFETY DATA SHEET

Revision date: 10/05/2012

Print date: 14/05/2012

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

1.1 Product identifier:

ORION 295

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

special additive

Concentration in use: 100 %

1.3 Details of the supplier of the safety data sheet:

ORION INDUSTRIES BVBA

Groenveldstraat 13

3001 Heverlee

Tel:016.52.08.98 - Fax:016.49.02.10

E-mail:orion@orioncoltd.com - Website:www.orioncoltd.com

1.4 Emergency telephone number:

Local: 070.245.245

Worldwide: XX32.70.245.245

2 Hazards identification:

2.1 Classification of the substance or mixture:

Harmful Dangerous to the environment

R20 R37/38 R44 R51/53

2.2 Label elements:

Symbols:



Harmful



Dangerous to the environment

R-Phrases

R20	Harmful by inhalation.
R37/38	Irritating to respiratory system and skin.
R44	Risk of explosion if heated under confinement.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety phrases

S2	Keep out of reach of children.
S29	Do not empty into drains.
S46	If swallowed, seek medical advice immediately and show this container or label.
S61	Avoid release to the environment. Refer to special instructions/ Safety data sheets.

Contains:

2-ethylhexyl nitrate,
2-ethylhexan-1-ol,
Solvent naphtha (petroleum), heavy arom.

2.3 Other hazards:

none

3 Composition/information on ingredients:

2-ethylhexyl nitrate	> 50 %	CAS N° EINECS Registration no. CLP Classification R-Phrases	27247-96-7 248-363-6 20 - 44 - 51/53 - 65
2-ethylhexan-1-ol	10 - 25 %	CAS N° EINECS Registration no. CLP Classification R-Phrases	104-76-7 203-234-3 Skin Irrit. 2 H315 - Eye Irrit. 2 H319 - Acute Tox. 4 H332 - STOT SE 3 H335 20 - 36/37/38
Solvent naphtha (petroleum), heavy arom.	0,1 - 1 %	CAS N° EINECS Registration no. CLP Classification R-Phrases	64742-94-5 265-198-5 Flam. Liq. 3 H226 - Asp. Tox. 1 H304 - Eye Irrit. 2 H319 - Aquatic Chronic 2 H411 36/38 - 51/53 - 65

For the full text of the H & R phrases mentioned in this section, see section 16.

4 First aid measures:

4.1 Description of first aid measures:

Always ask medical advice as soon as possible should serious or continuous disturbances occur

Skin contact : remove contaminated clothing, wash skin with water and soap
Eye contact : rinse first with plenty of water, if necessary seek medical attention
Ingestion : rinse mouth, do not induce vomiting, take to hospital immediately
Inhalation : in case of serious or continuous discomforts: remove to fresh air and seek medical attention

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

Skin contact : redness, pain
Eye contact : redness
Ingestion : diarrhoea, headache, abdominal cramps, sleepiness, vomiting

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

none

5 Fire-fighting measures:

5.1 Extinguishing media :

CO₂, foam, powder, sprayed water

5.2 Special hazards arising from the substance or mixture:

none

5.3 Advice for fire-fighters:

Extinguishing agents to be avoided:none

6 Accidental release measures:

6.1 Personal precautions, protective equipment and emergency procedures:

no eating, drinking or smoking during work, keep in a sealed container, out of reach of children

6.2 Environmental precautions:

do not allow to flow into sewers or open water

6.3 Methods and material for containment and cleaning up:

remove by using absorbent material

6.4 Reference to other sections:

For further information check sections 8 & 13

7 Handling and storage:

7.1 Precautions for safe handling:

handle with care to avoid spillage

7.2 Conditions for safe storage, including any incompatibilities:

keep in a sealed container in a closed, frost-free, ventilated room Packing materials to be avoided: none

7.3 Specific end use(s):

special additive

8 Exposure controls/personal protection:

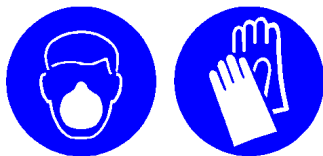
8.1 Control parameters:

Follows a list of the hazardous elements mentioned sub 3. of which the TLV value is known:

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8.2 Exposure controls:

Inhalation protection	: universal mask, ABEK
Skin protection	: gloves, chemical proof
Eye protection	: none
Other protection	: none



9 Physical and chemical properties:

Melting point/melting range, °C	: /
Boiling point/Boiling range, °C	: 184
pH	: /
pH 1% diluted in water	: /
Vapour pressure/20°C,Pa	: /
Vapour density, %	: n/a
Relative density/20°C	: 0,900
Appearance/20°C	: liquid
Flash point, °C	: 84
Flammability (solid, gas)	: n/a
Auto-ignition temperature,°C	: /

Upper flammability or explosive limit, Vol %	: 12,7
Lower flammability or explosive limit, Vol %	: 1,1
Explosive properties	: n/a
Oxidising properties	: n/a
Decomposition temperature, °C	: n.d.a.
Solubility in water	: insoluble
Partition coefficient: n-octanol/water, %	: n/a
Odour	: characteristic
Odour threshold	: n/a
Dynamic viscosity, mPa.s/20°C	: /
Kinematic viscosity, mm ² /s/20°C	: /
Evaporation rate (n-BuAc = 1)	: n/a

9.2 Other information:

Volatile organic component (VOC), %	: 0
Volatile organic component (VOC), g/l	: 180

10 Stability and reactivity:

10.1 Reactivity:

keep in a sealed container in a closed, frost-free, ventilated room

10.2 Chemical stability:

keep away from sources of ignition

10.3 Possibility of hazardous reactions:

none known

10.4 Conditions to avoid:

handle with care to avoid spillage

10.5 Incompatible materials:

none

10.6 Hazardous decomposition products:

keep away from sources of ignition

11 Toxicological information:

11.1 Information on toxicological effects:

About the substance itself	: not applicable under actual EEC guidelines for preparations
General information	: see ingredients under section 3
Calculated acute toxicity, LD50 oral rat, mg/kg	: 4412

12. Ecological information:

12.1 Toxicity:

not applicable under actual EEC guidelines for preparations

12.2 Persistence and degradability:

not applicable

12.3 Bioaccumulative potential:

not applicable under actual EEC guidelines for preparations

12.4 Mobility in soil:

Water hazard class, WGK: 2

12.5 Results of PBT and vPvB assessment:

not applicable under actual EEC guidelines for preparations

12.6 Other adverse effects:

not applicable under actual EEC guidelines for preparations

13 Disposal considerations:

13.1 Waste treatment methods:

Draining into the sewers is not permitted. Removal should be carried out by licensed services.

Possible restrictive regulations by local authority should always be adhered to.

14 Transport information:

14.1 UN number:

3082

14.2 UN proper shipping name:

UN 3082, Environmentally hazardous substance, liquid, n.o.s., mixture with 2-ethylhexyl nitrate, 9, III, (E) , Environmentally hazardous

14.3 Transport hazard class(es):

class(es):9

Identification number of the hazard: 90

14.4 Packing group:

III

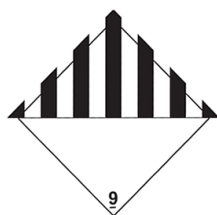
14.5 Environmental hazards:

Environmentally hazardous

14.6 Special precautions for user:

Hazard characteristics:

Risk to the aquatic environment or the sewerage system.



15 Regulatory information:

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

Water hazard class, WGK : 2
Volatile organic component (VOC), : 0
%
Volatile organic component (VOC), : 180
g/l

15.2 Chemical Safety Assessment:

n.d.a.

16. Other information:

Legend to abbreviations used in the safety data sheet:

n.d.a.	: No data available
n/a	: not applicable
Nr	: number
CAS	: Chemical Abstracts Service
EINECS	: European INventory of Existing Commercial chemical Substances
WGK	: Water hazard class
WGK 1	: slightly hazardous for water
WGK 2	: hazardous for water
WGK 3	: extremely hazardous for water
ADR	: Accord européen relatif au transport international des marchandises Dangereuses par Route
TLV	: Threshold Limit Value
PTB	: persistent, toxic, bioaccumulative
vPvB	: very persistent and very bioaccumulative substances
CLP	: Classification , Labelling and Packaging of chemicals

Legend to the R & H Phrases used in the safety data sheet:

R20 Harmful by inhalation. R36 Irritating to eyes. R37 Irritating to respiratory system. R38 Irritating to skin. R44 Risk of explosion if heated under confinement. R51 Toxic to aquatic organisms. R53 May cause long-term adverse effects in the aquatic environment. R65 Harmful: may cause lung damage if swallowed

H226 Flammable liquid and vapour. H304 May be fatal if swallowed and enters airways. H315 Causes skin irritation. H319 Causes serious eye irritation. H332 Harmful if inhaled. H335 May cause respiratory irritation. H411 Toxic to aquatic life with long lasting effects.

Composition by regulation (EC) 648/2004:

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Reason of revision, changes of following items: 2, 8, 15, 16

MSDS reference number:

ECM-101811

This safety information sheet has been compiled in accordance with annex II/A of the regulation (EU) No 453/2010. Classification has been calculated in accordance with the European directive 67/548/EWG, 1999/45/EC and regulation 1272/2008 with their respective amendments. It has been compiled with the utmost care.. We cannot, however, accept responsibility for damage, of any kind, that may be caused by using these data or the product concerned.. To use this preparation for an experiment or a new application, the user must carry out a material suitability and safety study himself.