

#### SAFETY DATA SHEET

# **SYN-OXIDE BLACK RAL 9005**

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

#### 1.1. Product identifier

#### Trade name

SYN-OXIDE BLACK RAL 9005

Unique formula identifier (UFI)

86D0-R0DT-8009-R8AU

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

Relevant identified uses of the substance or mixture

**Paint** 

# Uses advised against

None known.

# 1.3. Details of the supplier of the safety data sheet

# Company and address

# Laydex Ltd.

Unit 3,

Allied Industrial Estate,

Kylemore Road,

Inchicore,

D10 PY54, Dublin 10,

Ireland

+353 (0) 1642 6600

# E-mail

sales@laydex.com

# Revision

17/02/2023

# SDS Version

1.0

# 1.4. Emergency telephone number

The National Poisons Information Centre (NPIC)

Public: +353 (0) 1 809 2166 (7 days a week, 8am- 10pm)

Healthcare professionals: +353 (0) 1 809 2566 (24 h service)

See also section 4 "First aid measures"

# SECTION 2: Hazards identification

# 2.1. Classification of the substance or mixture

Flam. Liq. 3; H226, Flammable liquid and vapour.

STOT SE 3; H336, May cause drowsiness or dizziness.

STOT RE 2; H373, May cause damage to organs through prolonged or repeated exposure.

Aquatic Chronic 3; H412, Harmful to aquatic life with long lasting effects.

### 2.2. Label elements

# Hazard pictogram(s)



# Signal word

Warning

# Hazard statement(s)

Flammable liquid and vapour. (H226)

May cause drowsiness or dizziness. (H336)

May cause damage to organs through prolonged or repeated exposure. (H373)



Harmful to aquatic life with long lasting effects. (H412)

# Safety statement(s)

# General

If medical advice is needed, have product container or label at hand. (P101)

Keep out of reach of children. (P102)

#### Prevention

Do not breathe vapour/mist. (P260)

Avoid release to the environment. (P273)

#### Response

Get medical advice/attention if you feel unwell. (P314)

In case of fire: Use water mist/carbon dioxide/alcohol-resistant foam to extinguish. (P370+P378)

#### Storage

Store in a well-ventilated place. Keep cool. (P403+P235)

# Disposal

Dispose of contents/container in accordance with local regulation. (P501)

# Hazardous substances

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics

### Additional labelling

EUH208, Contains Cobalt bis(2-ethylhexanoate). May produce an allergic reaction.

#### 2.3. Other hazards

# Additional warnings

This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.

This product does not contain any substances considered to be endocrine disruptors in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

# SECTION 3: Composition/information on ingredients

# 3.1. Substances

Not applicable. This product is a mixture.

# 3.2. Mixtures

3.2. Mixtures				
Product/substance	Identifiers	% w/w	Classification	Note
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics	CAS No.: 64742-48-9 EC No.: 919-857-5 REACH: 01-2119463258-33-XXXX Index No.:	40-60%	EUH066 Flam. Liq. 3, H226 Asp. Tox. 1, H304 STOT SE 3, H336	[19]
Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	CAS No.: EC No.: 919-446-0 REACH: 01-2119458049-33-XXXX Index No.:	1-3%	EUH066 Flam. Liq. 3, H226 Asp. Tox. 1, H304 STOT SE 3, H336 STOT RE 1, H372 Aquatic Chronic 2, H411	
Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, salts with bentonite	CAS No.: 68953-58-2 EC No.: 273-219-4 REACH: Index No.:	<1%		[19]
N-pentan-2- ylidenehydroxylamine	CAS No.: 623-40-5 EC No.: 484-470-6 REACH: 01-0000020248-72-XXXX Index No.:	<1%	Acute Tox. 4, H302 Eye Irrit. 2, H319 Aquatic Chronic 3, H412	
2-ethylhexanoic acid, zirconium salt	CAS No.: 22464-99-9 EC No.: 245-018-1 REACH: 01-2119979088-21-XXXX Index No.:	<1%	Repr. 2, H361d	
Cobalt bis(2-ethylhexanoate)	CAS No.: 136-52-7 EC No.: 205-250-6 REACH: 01-2119524678-29-XXXX	<0.1%	Skin Sens. 1A, H317 Eye Irrit. 2, H319 Repr. 1B, H360	

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	Index No.:		Aquatic Acute 1, H400 (M=1) Aquatic Chronic 3, H412
Calcium carbonate	CAS No.: 471-34-1 EC No.: 207-439-9 REACH: 01-2119486795-18-XXXX Index No.:	<0.1%	
ropionic acid	CAS No.: 79-09-4 EC No.: 201-176-3 REACH: 01-2119486971-24-XXXX Index No.: 607-089-00-0	<0.01%	Flam. Liq. 3, H226 Skin Corr. 1B, H314 Eye Dam. 1, H318 STOT SE 3, H335

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

#### Other information

[19] UVCB = Unknown or variable composition, complex reaction products or of biological materials

#### SECTION 4: First aid measures

# 4.1. Description of first aid measures

#### General information

In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet. Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

#### Inhalation

Upon breathing difficulties or irritation of the respiratory tract: Bring the person into fresh air and stay with him/her.

### Skin contact

Remove contaminated clothing and shoes immediately. Ensure to wash exposed skin thoroughly with water and soap. Skin cleanser can be used. DO NOT use solvents or thinners.

If skin irritation occurs: Get medical advice/attention.

#### Eve contact

Upon irritation of the eye: Remove contact lenses and open eyes widely. Flush eyes with water or saline water (20-30 °C) for at least 5 minutes. Seek medical assistance and continue flushing during transport.

#### Ingestion

If the person is conscious, rinse the mouth with water and stay with the person. Never give the person anything to drink.

In case of malaise, seek medical advice immediately and bring the safety data sheet or label from the product. Do not induce vomiting, unless recommended by the doctor. Have the person lean forward with head down to avoid inhalation of or choking on vomited material.

#### Burns

Rinse with water until pain stops then continue to rinse for 30 minutes.

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

Sensitisation: This product contains substances, which may trigger allergic reaction upon dermal contact. Manifestation of allergic reactions typically takes place within 12-72 hours after exposure.

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

Call a POISON CENTER/doctor if you feel unwell.

### Information to medics

Bring this safety data sheet or the label from this product.

# **SECTION 5: Firefighting measures**

# 5.1. Extinguishing media

Suitable extinguishing media: Alcohol-resistant foam, carbon dioxide, powder, water mist. Unsuitable extinguishing media: Waterjets should not be used, since they can spread the fire.

### 5.2. Special hazards arising from the substance or mixture

Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.

If the product is exposed to high temperatures, e.g. in the event of fire, dangerous decomposition compounds are

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produced. These are: Carbon oxides (CO / CO2)

# 5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact the National Poisons Information Centre (NPIC) on +353 (0) 1 809 256 (24 h service) in order to obtain further advice.

#### SECTION 6: Accidental release measures

# 6.1. Personal precautions, protective equipment and emergency procedures

Storages not yet ignited must be cooled by water mist. Remove flammable materials if conditions allow it. Ensure sufficient ventilation.

Avoid direct contact with spilled substances.

Avoid inhalation of vapours from spilled material.

#### 6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc. In the event of leakage to the surroundings, contact local environmental authorities.

# 6.3. Methods and material for containment and cleaning up

Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.

# 6.4. Reference to other sections

See section 13 "Disposal considerations" on handling of waste.

See section 8 "Exposure controls/personal protection" for protective measures.

# SECTION 7: Handling and storage

# 7.1. Precautions for safe handling

Ground and bond container and receiving equipment.

Use explosion-proof [electrical/lighting/ventilating] equipment.

Use non-sparking tools.

Take action to prevent static discharges.

It is recommended to install waste collection trays in order to prevent emissions to the waste water system and surrounding environment.

Avoid direct contact with the product.

Smoking, drinking and consumption of food is not allowed in the work area.

See section 8 "Exposure controls/personal protection" for information on personal protection.

# 7.2. Conditions for safe storage, including any incompatibilities

Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Take action to prevent static discharges.

Must be stored in a cool and well-ventilated area, away from possible sources of ignition.

#### Recommended storage material

Always store in containers of the same material as the original container.

# Storage temperature

No specific requirements

### Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

#### 7.3. Specific end use(s)

This product should only be used for applications quoted in section 1.2.

# SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

2-ethylhexanoic acid, zirconium salt

Long term exposure limit (8 hours) (mg/m³): 5 (as Zr)

Short term exposure limit (15 minutes) (mg/m³): 10 (as Zr)

2021 Code of Practice for the Safety, Health and Welfare at Work (Chemical Agents) Regulations (2001-2015) and the Safety, Health and Welfare at Work (Carcinogens) Regulations (2001-2019).

### **DNEL**



Cobalt bis(2-ethylhexanoate)		
Duration:	Route of exposure:	DNEL:
Long term – Local effects - General population	Inhalation	37 μg/m³
Long term – Local effects - Workers	Inhalation	235.1 μg/m³
Long term – Systemic effects - General population	Oral	175 μg/kgbw/day
N-pentan-2-ylidenehydroxylamine		
Duration:	Route of exposure:	DNEL:
Long term – Systemic effects - General population	Dermal	42 μg/kgbw/day
Long term – Systemic effects - Workers	Dermal	97 μg/kgbw/day
Short term – Systemic effects - General population	Dermal	375 μg/kgbw/day
Short term – Systemic effects - Workers	Dermal	624 μg/kgbw/day
Long term – Systemic effects - General population	Inhalation	2.07 mg/m³
Long term – Systemic effects - Workers	Inhalation	8.3 mg/m <sup>3</sup>
Short term – Systemic effects - General population	Inhalation	6.21 mg/m³
Short term – Systemic effects - Workers	Inhalation	24.9 mg/m <sup>3</sup>
Long term – Systemic effects - General population	Oral	42 μg/kgbw/day
Short term – Systemic effects - General population	Oral	375 μg/kgbw/day

### **PNEC**

# Cobalt bis(2-ethylhexanoate)

Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		1.06 μg/L
Freshwater sediment		53.8 mg/kg
Marine water		2.36 μg/L
Marine water sediment		69.8 mg/kg
Sewage treatment plant		370 μg/L
Soil		10.9 mg/kg

# 8.2. Exposure controls

Compliance with the given occupational exposure limits values should be controlled on a regular basis.

### General recommendations

Smoking, drinking and consumption of food is not allowed in the work area.

# **Exposure scenarios**

There are no exposure scenarios implemented for this product.

# **Exposure limits**

Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above.

# Appropriate technical measures

The formation of vapours must be kept at a minimum and below current limit values (see above). Installation of a local exhaust system if normal air flow in the work room is not sufficient is recommended. Ensure eyewash and emergency showers are clearly marked.

# Hygiene measures

In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Always wash hands, forearms and face.

# Measures to avoid environmental exposure

Keep damming materials near the workplace. If possible, collect spillage during work.

# 8.3. Individual protection measures, such as personal protective equipment

#### Generally

Use only CE marked protective equipment.

# **Respiratory Equipment**

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	Туре	Class	Colour	Standards	
	Combination filter A1B2E1K1-P3	Class 1/2/3	Brown/Gray/Yellow/Green /White	EN14387	
Sk	in protection				
	Recommended	Type/Category	Standards		
	Wear appropriate protection clothing,	-	-		10

# Hand protection

e.g. coveralls in polypropylene or working clothes in cotton or polyester.

idila protection				
Material	Glove thickness (mm)	Breakthrough time (min.)	Standards	
Nitrile	0,11-0,14	6 (> 480 min)	EN374-2	

# Eye protection

Туре	Standards
Safety glasses	EN166



# SECTION 9: Physical and chemical properties

# 9.1. Information on basic physical and chemical properties

Physical state

Liquid

Colour

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Odour / Odour threshold

Hydrocarbon

рΗ

No information available as testing has not been completed.

Density (g/cm³)

Testing not relevant or not possible due to the nature of the product.

Relative density

1.05

Kinematic viscosity

0.22 cm<sup>2</sup>/s (40 °C)

Particle characteristics

Testing not relevant or not possible due to nature of the product.

# Phase changes

# Melting point/Freezing point (°C)

May start to solidify at the following temperature: -15°C This is based on data for the following ingredient: Hydrocarbons, C14-C18, n-alkanes, isoalkanes, cyclics, < 2% aromatics. Weighted average: -58.56°C

Softening point/range (waxes and pastes) (°C)

Does not apply to liquids.

Boiling point (°C)

>142

Vapour pressure

No information available as testing has not been completed.

Relative vapour density

Highest known value: 4.5 (Air = 1) (Hydrocarbons, C14-C18, n-alkanes, isoalkanes, cyclics, < 2% aromatics).

Decomposition temperature (°C)



# Stable under normal handling and storage conditions

# Data on fire and explosion hazards

Flash point (°C)

42

Flammability (°C)

The material is ignitiable.

Auto-ignition temperature (°C)

Lowest known value: >230°C (Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics).

Lower and upper explosion limit (% v/v)

Testing not relevant or not possible due to the nature of the product.

Solubility

Solubility in water

Insoluble in cold water

n-octanol/water coefficient

Testing not relevant or not possible due to the nature of the product.

Solubility in fat (g/L)

Testing not relevant or not possible due to the nature of the product.

9.2. Other information

Evaporation rate (n-butylacetate = 100)

Highest known value: 0.04 (Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics ) Weighted average: 0.03compared with butyl acetate

VOC (g/L)

418

Other physical and chemical parameters

No data available.

# SECTION 10: Stability and reactivity

# 10.1. Reactivity

No data available.

# 10.2. Chemical stability

The product is stable under the conditions, noted in section 7 "Handling and storage".

# 10.3. Possibility of hazardous reactions

None known.

# 10.4. Conditions to avoid

Avoid static electricity.

Do not expose to any forms of heat (e.g. solar radiation). May lead to excess pressure.

# 10.5. Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

# 10.6. Hazardous decomposition products

The product is not degraded when used as specified in section 1.

# SECTION 11: Toxicological information

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

Acute toxicity

Product/substance

N-pentan-2-ylidenehydroxylamine

Test method:

Species:

Rat

Route of exposure: Test:

LD50

Result: Other information:

1135.27 mg/kg

Product/substance

2-ethylhexanoic acid, zirconium salt

Test method:

Species: Rabbit
Route of exposure: Dermal
Test: LD50
Result: > 5 g/kg



Other information:

Product/substance

2-ethylhexanoic acid, zirconium salt

Test method:

Species: Rat
Route of exposure: Oral
Test: LD50
Result: > 5 g/kg

Other information:

#### Skin corrosion/irritation

Based on available data, the classification criteria are not met.

### Serious eye damage/irritation

Based on available data, the classification criteria are not met.

# Respiratory sensitisation

Based on available data, the classification criteria are not met.

# Skin sensitisation

This product contains substances that may trigger an allergic reaction in already sensitized persons.

#### 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

May cause drowsiness or dizziness.

#### STOT-repeated exposure

May cause damage to organs through prolonged or repeated exposure.

#### Aspiration hazard

Based on available data, the classification criteria are not met.

# 11.2. Information on other hazards

# Long term effects

None known.

# Endocrine disrupting properties

Not applicable.

### Other information

Cobalt bis(2-ethylhexanoate) has been classified by IARC as a group 2B carcinogen.

# SECTION 12: Ecological information

12.1. Toxicity

Product/substance N-pentan-2-ylidenehydroxylamine

Test method:

Species: Fish, Oncorhynchus mykiss

Compartment:

 $\begin{array}{lll} \text{Duration:} & 96 \text{ hours} \\ \text{Test:} & \text{LC50} \\ \text{Result:} & \geq 100 \text{ mg/L} \end{array}$ 

Other information:

Product/substance N-pentan-2-ylidenehydroxylamine

Test method:

Species: Daphnia Compartment:

 Duration:
 48 hours

 Test:
 EC50

 Result:
 ≥100 mg/L

Other information:

Product/substance N-pentan-2-ylidenehydroxylamine Test method:

Species: Algae, Pseudokirchneriella subcapitata
Compartment:

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Duration: 72 hours
Test: IC50
Result: 54 mg/L

Other information:

# 12.2. Persistence and degradability

Product/substance N-pentan-2-ylidenehydroxylamine

Biodegradable: No

Test method:

Result: 9%: 28 days

# 12.3. Bioaccumulative potential

Product/substance 2-ethylhexanoic acid, zirconium salt

Test method:

Potential bioaccumulation: No data available. LogPow: No data available.

BCF: 2.96

Other information:

# 12.4. Mobility in soil

No data available.

#### 12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.

# 12.6. Endocrine disrupting properties

Not applicable.

# 12.7. Other adverse effects

This product contains substances that are toxic to the environment. May result in adverse effects to aquatic organisms.

This product contains substances, which may cause adverse long-term effects to the aquatic environment.

# **SECTION 13: Disposal considerations**

### Waste treatment methods

Product is covered by the regulations on hazardous waste.

HP 3 - Flammable

HP 5 - Specific Target Organ Toxicity (STOT)/Aspiration Toxicity

HP 14 - Ecotoxic

Dispose of contents/container to an approved waste disposal plant.

Commission Regulation (EU) No 1357/2014 of 18 December 2014 on waste.

# EWC code

Not applicable.

# Specific labelling

Not applicable.

# Contaminated packing

Packaging containing residues of the product must be disposed of similarly to the product.

# **SECTION 14: Transport information**

	14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information:
ADR	UN1263	PAINT RELATED MATERIAL	Class: 3 Labels: 3 Classification code: F1	III	No	Limited quantities: 5 L Tunnel restriction code: (D/E) See below for additional information.
IMDG	UN1263	PAINT RELATED MATERIAL	Class: 3 Labels: 3	III	No	Limited quantities: 5 L



	14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information:
			Classification code: F1			EmS: F-E S-E See below for additional information.
АТА	UN1263	PAINT RELATED MATERIAL	Class: 3 Labels: 3 Classification code: F1	III	No	See below for additional information.

<sup>\*</sup> Packing group

#### Additional information

ADR / See Table A, Section 3.2.1 for any information on special provisions, requirements, or warnings in connection with transport. See section 5.4.3, for instructions in writing regarding mitigation of damages in relation to incidents or accidents during transport.

IMDG / See section 3.2.1, for any information on special provisions, requirements, or warnings in connection with transport.

IATA / See Table 4.2 for any information on special provisions, requirements, or warnings in connection with transport.

This product is within scope of the regulations of transport of dangerous goods.

# 14.6. Special precautions for user

Not applicable.

# 14.7. Maritime transport in bulk according to IMO instruments

No data available.

# **SECTION 15: Regulatory information**

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

People under the age of 18 shall not be exposed to this product.

Pregnant women and women breastfeeding must not be exposed to this product. The risk, and possible technical precautions or design of the workplace needed to eliminate exposure, must be considered.

# Demands for specific education

No specific requirements.

# SEVESO - Categories / dangerous substances

P5c - FLAMMABLE LIQUIDS, Qualifying quantity (lower-tier): 5.000 tonnes / (upper-tier): 50.000 tonnes

# Additional information

Tactile warning.

### Sources

Protection of Young Persons (Employment) Act, 1996

Maternity Protection Act 1994 (34/1994) with later amendments.

SI No 209 of 2015 Chemicals Act (Control of Major Accident Hazards involving Dangerous Substances) Regulations 2015.

Commission Regulation (EU) No 1357/2014 of 18 December 2014 on waste.

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on

classification, labelling and packaging of substances and mixtures (CLP).

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

# 15.2. Chemical safety assessment

No

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<sup>\*\*</sup> Environmental hazards



#### SECTION 16: Other information

# Full text of H-phrases as mentioned in section 3

EUH066, Repeated exposure may cause skin dryness or cracking.

H226, Flammable liquid and vapour.

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.

H335, May cause respiratory irritation.

H336, May cause drowsiness or dizziness.

H360, May damage fertility or the unborn child.

H361d, Suspected of damaging the unborn child.

H372, Causes damage to organs through prolonged or repeated exposure.

H400, Very toxic to aquatic life.

H411, Toxic to aquatic life with long lasting effects.

H412, Harmful to aquatic life with long lasting effects.

# Abbreviations and acronyms

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway

ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road

ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

CAS = Chemical Abstracts Service

CE = Conformité Européenne

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]

CSA = Chemical Safety Assessment

CSR = Chemical Safety Report

DMEL = Derived Minimal Effect Level

DNEL = Derived No Effect Level

EINECS = European Inventory of Existing Commercial chemical Substances

ES = Exposure Scenario

EUH statement = CLP-specific Hazard statement

EWC = European Waste Catalogue

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IARC = International Agency for Research on Cancer (IARC)

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of

1978. ("Marpol" = marine pollution)

OECD = Organisation for Economic Co-operation and Development

PBT = Persistent, Bioaccumulative and Toxic

PNEC = Predicted No Effect Concentration

RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail

RRN = REACH Registration Number

SCL = A specific concentration limit

SVHC = Substances of Very High Concern

STOT-RE = Specific Target Organ Toxicity - Repeated Exposure

STOT-SE = Specific Target Organ Toxicity - Single Exposure

TWA = Time weighted average

UN = United Nations

UVBC = Unknown or variable composition, complex reaction products or of biological materials

VOC = Volatile Organic Compound

vPvB = Very Persistent and Very Bioaccumulative

# Additional information

The classification of the mixture in regard of health hazards is in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP).

The classification of the substance/mixture in regard of environmental hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP).





The classification of the mixture in regard to physical hazards has been based on experimental data.

# The safety data sheet is validated by

EcoOnline

#### Other

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a blue

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.

Country-language: IE-en