

Safety data sheet

according to Regulation (EC) No 1907/2006, Article 31

Printing date 24.10.2024

Version number 3.00 (replaces version 2.00)

Revision: 24.10.2024

1 Identification of the substance/mixture and of the company/undertaking**1.1 Product identifier****Trade name:** Ralston Colorant ALK 27 Oxide Yellow**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

Restricted to professional users.

Dyestuff/Colouring agent

1.3 Details of the supplier of the safety data sheet**Manufacturer/Supplier:**

Ralston Colour & Coatings B.V.

part of

Royal Van Wijhe Verf

Russenweg 14

8041 AL ZWOLLE

THE NETHERLANDS

+31(0)38 - 429 1100

msds@ralstoncolour.com

1.4 Emergency telephone number:

NVIC

+31(0)88 755 8000

Only for the purpose of informing medical personnel in case of acute intoxications

*** 2 Hazards identification****2.1 Classification of the substance or mixture****Classification according to Regulation (EC) No 1272/2008**

Flam. Liq. 3 H226 Flammable liquid and vapour.

Skin Sens. 1 H317 May cause an allergic skin reaction.

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**Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labelled according to the CLP regulation.

Hazard pictograms

GHS02 GHS07 GHS08

Signal word Warning**Hazard-determining components of labelling:**

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

Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)

maleic anhydride

n-butyl acetate

(Contd. on page 2)

Safety data sheet

according to Regulation (EC) No 1907/2006, Article 31

Printing date 24.10.2024

Version number 3.00 (replaces version 2.00)

Revision: 24.10.2024

Trade name: Ralston Colorant ALK 27 Oxide Yellow

(Contd. of page 1)

Hazard statements

H226 Flammable liquid and vapour.

H317 May cause an allergic skin reaction.

H336 May cause drowsiness or dizziness.

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

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P241 Use explosion-proof equipment.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Additional information:

EUH066 Repeated exposure may cause skin dryness or cracking.

Restricted to professional users.

2.3 Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

Determination of endocrine-disrupting properties

80-46-6	p-(1,1-dimethylpropyl)phenol	List I; II
---------	------------------------------	------------

* 3 Composition/information on ingredients

3.2 Mixtures

Dangerous components:		
EC number: 919-857-5 Reg.nr.: 01-2119463258-33	Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics Alternative CAS number: 64742-47-8 ⚠ Flam. Liq. 3, H226; ⚠ Asp. Tox. 1, H304; ⚠ STOT SE 3, H336, EUH066	>10–≤25%
EC number: 919-446-0 Reg.nr.: 01-2119458049-33	Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%) Alternative CAS number: 64742-82-1 ⚠ Flam. Liq. 3, H226; ⚠ STOT RE 1, H372; Asp. Tox. 1, H304; ⚠ Aquatic Chronic 2, H411; ⚠ STOT SE 3, H336, EUH066	>2.5–<10%

(Contd. on page 3)

Safety data sheet

according to Regulation (EC) No 1907/2006, Article 31

Printing date 24.10.2024

Version number 3.00 (replaces version 2.00)

Revision: 24.10.2024

Trade name: Ralston Colorant ALK 27 Oxide Yellow

(Contd. of page 2)

CAS: 123-86-4 EINECS: 204-658-1 Index number: 607-025-00-1 Reg.nr.: 01-2119485493-29	n-butyl acetate Flam. Liq. 3, H226; STOT SE 3, H336, EUH066	≥0–≤2.5%
CAS: 1330-20-7 EINECS: 215-535-7 Index number: 601-022-00-9 Reg.nr.: 01-2119488216-32	xylene Flam. Liq. 3, H226; STOT RE 2, H373; Asp. Tox. 1, H304; Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335 Note: C	≥0–≤2.5%
CAS: 80-46-6 EINECS: 201-280-9 Reg.nr.: 01-2119971070-46	p-(1,1-dimethylpropyl)phenol Skin Corr. 1B, H314; Eye Dam. 1, H318; Aquatic Chronic 1, H410; Skin Sens. 1, H317	≥0.1–<0.25%
CAS: 108-31-6 EINECS: 203-571-6 Index number: 607-096-00-9 Reg.nr.: 01-2119472428-31	maleic anhydride Resp. Sens. 1, H334; STOT RE 1, H372; Skin Corr. 1B, H314; Eye Dam. 1, H318; Acute Tox. 4, H302; Skin Sens. 1A, H317, EUH071 Specific concentration limit: Skin Sens. 1A; H317: C ≥ 0.001 %	≥0.001–<0.1%
SVHC		
80-46-6	p-(1,1-dimethylpropyl)phenol	

Additional information: For the wording of the listed hazard phrases refer to section 16.

* 4 First aid measures

4.1 Description of first aid measures

General information:

Take affected persons out into the fresh air.

Keep warm, position comfortably and cover well.

Consult doctor if symptoms persist.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

After inhalation:

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

After skin contact:

Immediately remove any clothing soiled by the product.

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

After eye contact:

Rinse opened eye for several minutes under running water.

Remove contact lenses, if present and easy to do. Continue rinsing.

After swallowing:

If person is conscious, rinse out mouth.

Do not induce vomiting; call for medical help immediately.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

(Contd. on page 4)

Safety data sheet

according to Regulation (EC) No 1907/2006, Article 31

Printing date 24.10.2024

Version number 3.00 (replaces version 2.00)

Revision: 24.10.2024

Trade name: Ralston Colorant ALK 27 Oxide Yellow

(Contd. of page 3)

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5 Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents:

CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

For safety reasons unsuitable extinguishing agents: Water with full jet

5.2 Special hazards arising from the substance or mixture

During heating or in case of fire poisonous gases are produced.

5.3 Advice for firefighters

Protective equipment:

Mouth respiratory protective device.

Wear fully protective suit.

Additional information

Cool endangered receptacles with water spray.

Collect contaminated fire fighting water separately. It must not enter the sewage system.

6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Mount respiratory protective device.

6.2 Environmental precautions:

Do not allow product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage system.

6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to section 13.

Ensure adequate ventilation.

6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

Wash hands thoroughly after handling.

Do not eat, drink or smoke when using this product.

Information about fire - and explosion protection:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Keep respiratory protective device available.

7.2 Conditions for safe storage, including any incompatibilities

Storage: Observe instructions for use / storage.

Requirements to be met by storerooms and receptacles: No special requirements.

Information about storage in one common storage facility: Store away from oxidising agents.

(Contd. on page 5)

Safety data sheet

according to Regulation (EC) No 1907/2006, Article 31

Printing date 24.10.2024

Version number 3.00 (replaces version 2.00)

Revision: 24.10.2024

Trade name: Ralston Colorant ALK 27 Oxide Yellow

(Contd. of page 4)

Further information about storage conditions:

Keep container tightly closed.

Store in a well-ventilated place. Keep cool.

Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

7.3 Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:

123-86-4 n-butyl acetate

IOELV (EU)	Short-term value: 723 mg/m ³ , 150 ppm Long-term value: 241 mg/m ³ , 50 ppm
WGW (Netherlands)	Short-term value: 723 mg/m ³ , 150 ppm Long-term value: 241 mg/m ³ , 50 ppm

1330-20-7 xylene

IOELV (EU)	Short-term value: 442 mg/m ³ , 100 ppm Long-term value: 221 mg/m ³ , 50 ppm Skin
WGW (Netherlands)	Short-term value: 442 mg/m ³ , 100 ppm Long-term value: 210 mg/m ³ , 47.5 ppm technisch mengsel

DNELs

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

Oral	DNEL Systemic; Long term	125 mg/kg bw/24h (Consumers)
Dermal	DNEL Systemic; Long term	125 mg/kg bw/24h (Consumers) 208 mg/kg bw/24h (Workers)
Inhalative	DNEL Systemic; Long term	185 mg/m ³ (Consumers) 871 mg/m ³ (Workers)

Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)

Oral	DNEL Systemic; Long term	26 mg/kg bw/24h (Consumers)
Dermal	DNEL Systemic; Long term	26 mg/kg bw/24h (Consumers) 44 mg/kg bw/24h (Workers)
Inhalative	DNEL Systemic; Long term	71 mg/m ³ (Consumers) 330 mg/m ³ (Workers)

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:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

(Contd. on page 6)

Safety data sheet

according to Regulation (EC) No 1907/2006, Article 31

Printing date 24.10.2024

Version number 3.00 (replaces version 2.00)

Revision: 24.10.2024

Trade name: Ralston Colorant ALK 27 Oxide Yellow

(Contd. of page 5)

Store protective clothing separately.

Respiratory protection:

Ensure good ventilation. This can be achieved by using a local exhaustion or general exhaust system. If these measures are insufficient to keep the vapour concentration below the workplace limit, wear an adequate respiratory protective device.

Hand protection



Protective gloves

As protection from splashes gloves made of the following materials are suitable:

Nitrile rubber, NBR

Eye/face protection



Tightly sealed goggles

9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Physical state

Fluid

Colour:

Yellow

Odour:

Product specific

Odour threshold:

Not determined.

Melting point/freezing point:

Undetermined.

Boiling point or initial boiling point and boiling range

154–193 °C (Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics)

Flammability

Flammable.

Lower and upper explosion limit

Lower:

0.6 Vol % (Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%))

Upper:

7 Vol % (Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%))

Flash point:

~38 °C

Auto-ignition temperature:

>200 °C (Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%))

Decomposition temperature:

Not determined.

pH

Not determined.

Viscosity:

Kinematic viscosity

Not determined.

Dynamic at 20 °C:

1,141.3–1,592.43 mPas

Solubility

water:

Not miscible or difficult to mix.

Partition coefficient n-octanol/water (log value) Not determined.

(Contd. on page 7)

Safety data sheet

according to Regulation (EC) No 1907/2006, Article 31

Printing date 24.10.2024

Version number 3.00 (replaces version 2.00)

Revision: 24.10.2024

Trade name: Ralston Colorant ALK 27 Oxide Yellow

(Contd. of page 6)

Vapour pressure at 20 °C:	3.7 hPa (Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%))
Vapour pressure at 50 °C:	18 hPa
Density and/or relative density	
Density at 20 °C:	1.34–1.42 g/cm ³
Relative density	Not determined.
Vapour density	Not determined.
9.2 Other information	
Appearance:	
Form:	Pasty
Important information on protection of health and environment, and on safety.	
Ignition temperature:	Product is not selfigniting.
Explosive properties:	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
Solvent content:	
VOC (EC)	24.70 %
Solids content:	75.5 %
Change in condition	
Evaporation rate	Not determined.
Information with regard to physical hazard classes	
Flammable liquids	Flammable liquid and vapour.

10 Stability and reactivity

- 10.1 Reactivity** No further relevant information available.
- 10.2 Chemical stability** The product is stable.
- 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:** Oxidising substances.
- 10.6 Hazardous decomposition products:** No dangerous decomposition products known.

* 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)		
Dermal	LD50	>168,675–301,788 mg/kg (rabbit)
Inhalative	LC50/4 h	>928–1,660 mg/l
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics		
Oral	LD50	>5,000 mg/kg (rat)
Dermal	LD50	>5,000 mg/kg (rabbit)

(Contd. on page 8)

Safety data sheet

according to Regulation (EC) No 1907/2006, Article 31

Printing date 24.10.2024

Version number 3.00 (replaces version 2.00)

Revision: 24.10.2024

Trade name: Ralston Colorant ALK 27 Oxide Yellow

(Contd. of page 7)

Inhalative	LC50/4 h	>5,000 mg/l (rat)
Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)		
Oral	LD50	>15,000 mg/kg (rat)
Dermal	LD50	>3,400 mg/kg (rabbit)
Inhalative	LC50/4 h	13.1 mg/l (rat)
123-86-4 n-butyl acetate		
Oral	LD50	13,100 mg/kg (rat)
Dermal	LD50	>5,000 mg/kg (rabbit)
Inhalative	LC50/4 h	>21 mg/l (rat)
1330-20-7 xylene		
Oral	LD50	4,300 mg/kg (rat)
Dermal	LD50	2,000 mg/kg (rabbit)
108-31-6 maleic anhydride		
Oral	LD50	400 mg/kg (rat)
Dermal	LD50	2,620 mg/kg (rabbit)

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 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 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

Endocrine disrupting properties		
80-46-6	p-(1,1-dimethylpropyl)phenol	List I; II

12 Ecological information

12.1 Toxicity

Aquatic toxicity:	
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics	
EL0	1,000 mg/l /48h (daphnia)
EL50	>1,000 mg/l /72h (Pseudokirchneriella subcapitata)
	1,000 mg/l /48h (daphnia)
LL50	>1,000 mg/l /96h (Oncorhynchus mykiss)
NOELR	100 mg/l /72h (Pseudokirchneriella subcapitata)
Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	
EL50	4.6–10 mg/l /72h (Pseudokirchneriella subcapitata)
	10–22 mg/l /48h (daphnia)

(Contd. on page 9)

Safety data sheet

according to Regulation (EC) No 1907/2006, Article 31

Printing date 24.10.2024

Version number 3.00 (replaces version 2.00)

Revision: 24.10.2024

Trade name: Ralston Colorant ALK 27 Oxide Yellow

(Contd. of page 8)

LL50	10–30 mg/l /96h (Oncorhynchus mykiss)
LOEC	0.203 mg/l /21d (daphnia)
NOEC	0.097 mg/l /21d (daphnia)
NOELR	1 mg/l /72h (algae)

12.2 Persistence and degradability No further relevant information available.

12.3 Bioaccumulative potential No further relevant information available.

12.4 Mobility in soil No further relevant information available.

12.5 Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

12.6 Endocrine disrupting properties

For information on endocrine disrupting properties see section 11.

12.7 Other adverse effects

Remark: Harmful to fish

Additional ecological information:

General notes:

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

Harmful to aquatic organisms

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.

European waste catalogue	
HP3	Flammable
HP5	Specific Target Organ Toxicity (STOT)/Aspiration Toxicity
HP14	Ecotoxic

Uncleaned packaging:

Recommendation: Disposal must be made according to official regulations.

14 Transport information

14.1 UN number or ID number

ADR, IMDG, IATA

UN1263

14.2 UN proper shipping name

ADR

UN1263 PAINT

IMDG

PAINT

IATA

Paint

(Contd. on page 10)

Safety data sheet

according to Regulation (EC) No 1907/2006, Article 31

Printing date 24.10.2024

Version number 3.00 (replaces version 2.00)

Revision: 24.10.2024

Trade name: Ralston Colorant ALK 27 Oxide Yellow

(Contd. of page 9)

14.3 Transport hazard class(es)

ADR, IMDG, IATA



Class 3 Flammable liquids.

Label 3

14.4 Packing group

ADR, IMDG, IATA III

14.5 Environmental hazards: Not applicable.

14.6 Special precautions for user Warning: Flammable liquids.

Hazard identification number (Kemler code): 30

EMS Number: F-E,S-E

Stowage Category A

14.7 Maritime transport in bulk according to

IMO instruments Not applicable.

Transport/Additional information:

ADR

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

Transport category 3

Tunnel restriction code D/E

Remarks: Exempted according to 2.2.3.1.5 (Viscous liquids)

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

UN "Model Regulation": UN 1263 PAINT, 3, III

15 Regulatory information

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

Directive 2012/18/EU

Named dangerous substances - ANNEX I None of the ingredients is listed.

Seveso category P5c FLAMMABLE LIQUIDS

Qualifying quantity (tonnes) for the application of lower-tier requirements 5,000 t

Qualifying quantity (tonnes) for the application of upper-tier requirements 50,000 t

REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II

None of the ingredients is listed.

(Contd. on page 11)

Safety data sheet

according to Regulation (EC) No 1907/2006, Article 31

Printing date 24.10.2024

Version number 3.00 (replaces version 2.00)

Revision: 24.10.2024

Trade name: Ralston Colorant ALK 27 Oxide Yellow

(Contd. of page 10)

REGULATION (EU) 2019/1148

Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

None of the ingredients is listed.

Annex II - REPORTABLE EXPLOSIVES PRECURSORS

None of the ingredients is listed.

National regulations:

Biocidal Products Regulation

Substances of very high concern (SVHC) according to REACH, Article 57

80-46-6 p-(1,1-dimethylpropyl)phenol

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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

- H226 Flammable liquid and vapour.
- H302 Harmful if swallowed.
- H304 May be fatal if swallowed and enters airways.
- H312 Harmful in contact with skin.
- H314 Causes severe skin burns and eye damage.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.
- H332 Harmful if inhaled.
- H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- H335 May cause respiratory irritation.
- H336 May cause drowsiness or dizziness.
- H372 Causes damage to organs through prolonged or repeated exposure.
- H373 May cause damage to organs through prolonged or repeated exposure.
- H410 Very toxic to aquatic life with long lasting effects.
- H411 Toxic to aquatic life with long lasting effects.
- EUH066 Repeated exposure may cause skin dryness or cracking.
- EUH071 Corrosive to the respiratory tract.

Classification according to Regulation (EC) No 1272/2008

The classification of the mixture is generally based on the calculation method using substance data according to Regulation (EC) No 1272/2008.

Flammable liquids	On basis of test data
Skin sensitisation	Calculation method
Specific target organ toxicity (single exposure)	
Specific target organ toxicity (repeated exposure)	
Hazardous to the aquatic environment - long-term (chronic) aquatic hazard	

Date of previous version: 04.05.2023

Version number of previous version: 2.00

(Contd. on page 12)

Safety data sheet

according to Regulation (EC) No 1907/2006, Article 31

Printing date 24.10.2024

Version number 3.00 (replaces version 2.00)

Revision: 24.10.2024

Trade name: Ralston Colorant ALK 27 Oxide Yellow

(Contd. of page 11)

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)

VOC: Volatile Organic Compounds (USA, EU)

DNEL: Derived No-Effect Level (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

SVHC: Substances of Very High Concern

vPvB: very Persistent and very Bioaccumulative

ATE: Acute toxicity estimate values

Flam. Liq. 3: Flammable liquids – Category 3

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

Resp. Sens. 1: Respiratory sensitisation – Category 1

Skin Sens. 1: Skin sensitisation – Category 1

Skin Sens. 1A: Skin sensitisation – Category 1A

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

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.**