



Safety Data Sheet dated 13/05/2014 version 6.1 dated 27/7/2015 This safety data sheet has been completely updated in compliance to Regulation 2015/830/EU.

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

1.1. Product identifier

Mixture identification:

Trade name: 2K DTM Metal Cladding Paint Gloss

Trade code: P2192KDTM

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

Recommended use:

As primer and final-coat for metals and alloys.

1.3. Details of the supplier of the safety data sheet

Seller: Palatine Paints & Chemicals Ltd. 55 Smallbrook Lane, Leigh, Lancashire WN7 5PZ Tel. +44 (0)1942 884122

Competent person responsible for the safety data sheet: sales@palatinepaints.co.uk

1.4. Emergency telephone number Tel: +44(0) 1942 884122 (08.00 / 17.00 Mon-Fri)

UK: NPIS National Poisons Information Centre Tel: +44 0344 892 0111

IRL: Beaumont Hospital - National Poisons Information Centre: Tel: +353 1 8092566

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP):

Warning, Flam. Liq. 3, Flammable liquid and vapour.

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

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Symbols:



Warning

Hazard statements:

H226 Flammable liquid and vapour.

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.

P233 Keep container tightly closed.

P241 Use explosion-proof electrical equipment.

P273 Avoid release to the environment.

P370+P378 In case of fire, use a foam fire extinguisher to extinguish.

P501 Dispose of contents/container in accordance with applicable regulations.

Special Provisions:

None

Contents:

reaction mass of

alfa-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-omega-

hydroxypoly(oxyethylene) and

alfa-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-omega-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyloxypoly(oxyethylene): May produce an allergic reaction.

Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate: May produce an allergic reaction. [3-[3-(2H-Benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]-hydroxypoly(oxo-1,2-ethanediyl): May produce an allergic reaction. 3-aminopropyltriethoxysilane: May produce an allergic reaction.

Special provisions according to Annex XVII of REACH and subsequent amendments: Restricted to professional users.

2.3. Other hazards

vPvB Substances: None - PBT Substances: None

Other Hazards:

No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	Ident. Number		Classification
>= 12.5% - < 15%	n-butyl acetate	Index number: CAS: EC: REACH No.:	607-025-00-1 123-86-4 204-658-1 01- 2119485493 -29	◆ 2.6/3 Flam. Liq. 3 H226◆ 3.8/3 STOT SE 3 H336EUH066
>= 5% - < 7%	Solvent naphtha (petroleum), light arom.; Low boiling point naphtha - unspecified	Index number: CAS: EC: REACH No.:	64742-95-6 265-199-0	 \$2.6/3 Flam. Liq. 3 H226 \$3.8/3 STOT SE 3 H335 \$3.10/1 Asp. Tox. 1 H304 \$3.8/3 STOT SE 3 H336 \$4.1/C2 Aquatic Chronic 2 H411 EUH066
>= 3% - < 5%	Xylene [Reaction mass of ethylbenzene and m-xylene and p-xylene] (Benzene < 0, 01%)	EC: REACH No.:	905-562-9 01- 2119555267 -33	
>= 3% - < 5%	2-methoxy-1- methylethyl acetate	Index number: CAS: EC: REACH No.:	108-65-6 203-603-9	◆ 2.6/3 Flam. Liq. 3 H226

>= 1% - < 3%	Reaction mass of ethylbenzene and xylene	EC: REACH No.:	905-588-0 01- 2119539452 -40-0	 2.6/3 Flam. Liq. 3 H226 3.1/4/Inhal Acute Tox. 4 H332 3.1/4/Dermal Acute Tox. 4 H312 3.2/2 Skin Irrit. 2 H315
>= 0.5% - < 1%	acetone; propan-2- one; propanone	Index number: CAS: EC: REACH No.:	606-001-00-8 67-64-1 200-662-2 01- 2119471330 -49	© 2.6/2 Flam. Liq. 2 H225 © 3.3/2 Eye Irrit. 2 H319 © 3.8/3 STOT SE 3 H336 EUH066
>= 0.25% - < 0.5%	reaction mass of alfa-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl) propionyl-omega-hydroxypoly(oxyethylen e) and alfa-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl) propionyl-omega-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl) propionyloxypoly(oxyethylene)	Index number: EC: REACH No.:	607-176-00-3 400-830-7 01- 0000015075 -76	 ♦ 3.4.2/1-1A-1B Skin Sens. 1,1A, 1B H317 ♦ 4.1/C2 Aquatic Chronic 2 H411
>= 0.1% - < 0.25%	Reaction mass of Bis(1,2,2,6,6- pentamethyl-4- piperidyl) sebacate and Methyl 1,2,2,6,6- pentamethyl-4- piperidyl sebacate	EC: REACH No.:	915-687-0 01- 2119491304 -40	 \$\psi_3.4.2/1-1A-1B\$ Skin Sens. 1,1A, 1B H317 \$\psi_4.1/C1\$ Aquatic Chronic 1 H410
>= 0.1% - < 0.25%	[3-[3-(2H-Benzotriazol- 2-yl)-5-(1,1- dimethylethyl)-4- hydroxyphenyl]-1- oxopropyl]- hydroxypoly(oxo-1,2- ethanediyl)	CAS:	104810-48-2	 \$\Delta\$ 3.4.2/1-1A-1B Skin Sens. 1,1A, 1B H317 \$\Delta\$ 4.1/C2 Aquatic Chronic 2 H411
>= 0.1% - < 0.25%	3- aminopropyltriethoxysila ne	Index number: CAS: EC: REACH No.:	612-108-00-0 919-30-2 213-048-4 01- 2119480479 -24	 \$3.1/4/Oral Acute Tox. 4 H302 \$3.2/1B Skin Corr. 1B H314 \$3.4.2/1-1A-1B Skin Sens. 1,1A, 1B H317
218 ppm	xylene	Index number: CAS: EC:	601-022-00-9 1330-20-7 215-535-7	

		REACH No.:	01- 2119488216 -32	 ♦ 3.9/2 STOT RE 2 H373 • 3.2/2 Skin Irrit. 2 H315 • 3.1/4/Dermal Acute Tox. 4 H312 • 3.1/4/Inhal Acute Tox. 4 H332
80 ppm	ethylbenzene	Index number: CAS: EC: REACH No.:	100-41-4 202-849-4	 \$2.6/2 Flam. Liq. 2 H225 \$3.1/4/Inhal Acute Tox. 4 H332 \$3.9/2 STOT RE 2 H373 \$3.10/1 Asp. Tox. 1 H304
20 ppm	toluene	Index number: CAS: EC: REACH No.:	108-88-3 203-625-9	 2.6/2 Flam. Liq. 2 H225 3.7/2 Repr. 2 H361d 3.10/1 Asp. Tox. 1 H304 3.9/2 STOT RE 2 H373 3.2/2 Skin Irrit. 2 H315 3.8/3 STOT SE 3 H336

The full text of H-phrases is shown in section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Wash with plenty of water and soap.

In case of eyes contact:

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. In case of Ingestion:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

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

None

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

Treatment:

None

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

5.3. Advice for firefighters

Use suitable breathing apparatus.

Collect contaminated fire extinguishing water separately. This must not be discharged into

Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Remove all sources of ignition.

Remove persons to safety.

See protective measures under point 7 and 8.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

6.3. Methods and material for containment and cleaning up

Wash with plenty of water.

6.4. Reference to other sections

See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Contamined clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

Store at below 20 ℃. Keep away from unguarded flam e and heat sources. Avoid direct exposure to sunlight.

Keep away from unguarded flame, sparks, and heat sources. Avoid direct exposure to sunlight. Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Cool and adequately ventilated.

7.3. Specific end use(s)

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

n-butyl acetate - CAS: 123-86-4

ACGIH - LTE(8h): 150 ppm - STE: 200 ppm - Notes: Eye and URT irr

Solvent naphtha (petroleum), light arom.; Low boiling point naphtha - unspecified - CAS: 64742-95-6

TLV TWA - 1760 mg/m3

Xylene [Reaction mass of ethylbenzene and m-xylene and p-xylene] (Benzene < 0,01%)

EU - LTE(8h): 221 mg/m3, 50 ppm - STE: 442 mg/m3, 100 ppm - Notes: Bold-type: Indicative Occupational Exposure Limit Values [2,3] and Limit Values for Occupational Exposure [4] (for references see bibliography)

ACGIH - LTE(8h): 100 ppm - STE: 150 ppm - Notes: A4, BEI - URT and eye irr, CNS impair

2-methoxy-1-methylethyl acetate - CAS: 108-65-6

EU - LTE(8h): 275 mg/m3, 50 ppm - STE: 550 mg/m3, 100 ppm - Notes: Indicative Occupational Exposure Limit Values [2,3] and Limit Values for Occupational Exposure [4] (for references see bibliography)

Reaction mass of ethylbenzene and xylene

EU - LTE(8h): 221 mg/m3, 50 ppm - STE: 442 mg/m3, 100 ppm - Notes: Bold-type: Indicative Occupational Exposure Limit Values [2,3] and Limit Values for Occupational

```
Exposure [4] (for references see bibliography)
            ACGIH - LTE(8h): 100 ppm - STE: 150 ppm - Notes: A4, BEI - URT and eye irr, CNS
      acetone; propan-2-one; propanone - CAS: 67-64-1
            EU - LTE(8h): 1210 mg/m3, 500 ppm - Notes: Bold-type: Indicative Occupational
            Exposure Limit Values [2,3] and Limit Values for Occupational Exposure [4] (for
            references see bibliography)
            ACGIH - LTE(8h): 500 ppm - STE: 750 ppm - Notes: (A4), BEI - (URT and eye irr, CNS
            impair, hematologic eff)
      xylene - CAS: 1330-20-7
            EU - LTE(8h): 221 mg/m3, 50 ppm - STE: 442 mg/m3, 100 ppm - Notes: Bold-type:
            Indicative Occupational Exposure Limit Values [2,3] and Limit Values for Occupational
            Exposure [4] (for references see bibliography)
            ACGIH - LTE(8h): 100 ppm - STE: 150 ppm - Notes: A4, BEI - URT and eye irr, CNS
            impair
      ethylbenzene - CAS: 100-41-4
            EU - LTE(8h): 442 mg/m3, 100 ppm - STE: 884 mg/m3, 200 ppm - Notes: Bold-type:
            Indicative Occupational Exposure Limit Values [2,3] and Limit Values for Occupational
            Exposure [4] (for references see bibliography)
            ACGIH - LTE(8h): 20 ppm - Notes: A3, BEI - URT irr, kidney dam (nephropathy),
            cochlear impair
      toluene - CAS: 108-88-3
            EU - LTE(8h): 192 mg/m3, 50 ppm - STE: 384 mg/m3, 100 ppm - Notes: Bold-type:
            Indicative Occupational Exposure Limit Values [2.3] and Limit Values for Occupational
            Exposure [4] (for references see bibliography)
            ACGIH - LTE(8h): 20 ppm - Notes: A4, BEI - Visual impair, female repro, pregnancy loss
DNEL Exposure Limit Values
      n-butyl acetate - CAS: 123-86-4
            Worker Professional: 960 ppm - Consumer: 859.7 ppm - Exposure: Human Inhalation -
            Frequency: Short Term, systemic effects
            Worker Professional: 960 ppm - Consumer: 859.7 ppm - Exposure: Human Inhalation -
            Frequency: Short Term, local effects
            Worker Professional: 480 ppm - Consumer: 102.34 ppm - Exposure: Human Inhalation -
            Frequency: Long Term, systemic effects
            Worker Professional: 480 ppm - Consumer: 102.34 ppm - Exposure: Human Inhalation -
            Frequency: Long Term, local effects
      Xylene [Reaction mass of ethylbenzene and m-xylene and p-xylene] (Benzene < 0,01%)
            Consumer: 260 ppm - Exposure: Human Inhalation - Frequency: Short Term (acute)
            Consumer: 65.3 ppm - Exposure: Human Inhalation - Frequency: Long Term (repeated)
      2-methoxy-1-methylethyl acetate - CAS: 108-65-6
            Consumer: 1.67 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic
            effects
            Worker Professional: 275 ppm - Consumer: 33 ppm - Exposure: Human Inhalation -
            Frequency: Long Term, systemic effects
            Worker Professional: 153.5 mg/kg - Consumer: 54.8 mg/kg - Exposure: Human Dermal -
            Frequency: Long Term, systemic effects
      Reaction mass of ethylbenzene and xylene
            Consumer: 260 ppm - Exposure: Human Inhalation - Frequency: Short Term (acute)
            Consumer: 65.3 ppm - Exposure: Human Inhalation - Frequency: Long Term (repeated)
      reaction mass of
      alfa-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-omega-
      hydroxypoly(oxyethylene) and
      alfa-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-omega-3-(3-(2H-
      benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyloxypoly(oxyethylene) - Index number:
      607-176-00-3
            Worker Professional: 0.35 ppm - Consumer: 0.085 ppm - Exposure: Human Inhalation -
            Frequency: Long Term, systemic effects
```

Worker Professional: 0.5 mg/kg - Consumer: 0.25 mg/kg - Exposure: Human Dermal -

Frequency: Long Term, systemic effects Consumer: 0.025 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate Worker Professional: 2.5 mg/kg - Consumer: 1.25 mg/kg - Exposure: Human Dermal -Frequency: Short Term. systemic effects Worker Professional: 2.35 ppm - Consumer: 0.58 ppm - Exposure: Human Inhalation -Frequency: Short Term, systemic effects Worker Professional: 2.35 ppm - Consumer: 0.58 ppm - Exposure: Human Inhalation -Frequency: Long Term, systemic effects Worker Professional: 2.5 mg/kg - Consumer: 1.25 mg/kg - Exposure: Human Dermal -Frequency: Long Term, systemic effects Consumer: 1.25 mg/kg - Exposure: Human Oral - Frequency: Short Term, systemic effects 3-aminopropyltriethoxysilane - CAS: 919-30-2 Worker Professional: 8.3 mg/kg - Consumer: 5 mg/kg - Exposure: Human Dermal -Frequency: Short Term, systemic effects Worker Professional: 59 ppm - Consumer: 17.4 ppm - Exposure: Human Inhalation -Frequency: Short Term, systemic effects Worker Professional: 8.3 mg/kg - Consumer: 5 mg/kg - Exposure: Human Dermal -Frequency: Long Term, systemic effects Worker Professional: 59 ppm - Exposure: Human Inhalation - Frequency: Long Term, systemic effects Consumer: 17 ppm - Exposure: Human Inhalation - Frequency: Long Term, local effects xylene - CAS: 1330-20-7 Consumer: 260 ppm - Exposure: Human Inhalation - Frequency: Short Term (acute) Consumer: 65.3 ppm - Exposure: Human Inhalation - Frequency: Long Term (repeated) **PNEC Exposure Limit Values** n-butyl acetate - CAS: 123-86-4 Target: Soil (agricultural) - Value: 0.0903 mg/kg Target: Fresh Water - Value: 0.18 mg/l Target: Marine water - Value: 0.018 mg/l Target: Freshwater sediments - Value: 0.981 mg/kg Target: Marine water sediments - Value: 0.0981 mg/kg Xylene [Reaction mass of ethylbenzene and m-xylene and p-xylene] (Benzene < 0,01%) Target: Fresh Water - Value: 0.327 mg/l Target: Marine water - Value: 0.327 mg/l Target: Freshwater sediments - Value: 12.46 mg/kg Target: Marine water - Value: 12.46 mg/kg Target: Soil (agricultural) - Value: 2.31 mg/kg 2-methoxy-1-methylethyl acetate - CAS: 108-65-6 Target: Fresh Water - Value: 0.635 mg/l Target: Freshwater sediments - Value: 3.29 mg/kg Target: Marine water sediments - Value: 0.329 mg/kg Target: Microorganisms in sewage treatments - Value: 100 mg/l Reaction mass of ethylbenzene and xylene Target: Fresh Water - Value: 0.327 mg/l Target: Marine water - Value: 0.327 mg/l Target: Freshwater sediments - Value: 12.46 mg/kg Target: Marine water - Value: 12.46 mg/kg Target: Soil (agricultural) - Value: 2.31 mg/kg reaction mass of alfa-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-omegahydroxypoly(oxyethylene) and alfa-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-omega-3-(3-(2Hbenzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyloxypoly(oxyethylene) - Index number: 607-176-00-3

Target: Fresh Water - Value: 0.0023 mg/l
Target: Marine water - Value: 0.00023 mg/l
Target: Freshwater sediments - Value: 3.06 mg/kg
Target: Marine water sediments - Value: 0.306 mg/kg

Target: Soil (agricultural) - Value: 2 mg/kg

Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl

1,2,2,6,6-pentamethyl-4-piperidyl sebacate
Target: Fresh Water - Value: 0.0022 mg/l
Target: Marine water - Value: 0.00022 mg/l

Target: Freshwater sediments - Value: 1.05 mg/kg Target: Marine water sediments - Value: 0.11 mg/kg

Target: Soil (agricultural) - Value: 0.21 mg/kg

3-aminopropyltriethoxysilane - CAS: 919-30-2

Target: Fresh Water - Value: 0.33 mg/l Target: Marine water - Value: 0.033 mg/l

Target: Freshwater sediments - Value: 0.26 mg/kg Target: Soil (agricultural) - Value: 0.04 mg/kg

xylene - CAS: 1330-20-7

Target: Fresh Water - Value: 0.327 mg/l Target: Marine water - Value: 0.327 mg/l

Target: Freshwater sediments - Value: 12.46 mg/kg

Target: Marine water - Value: 12.46 mg/kg Target: Soil (agricultural) - Value: 2.31 mg/kg

8.2. Exposure controls

Eye protection:

Not needed for normal use. Anyway, operate according good working practices.

Protection for skin:

No special precaution must be adopted for normal use.

Protection for hands:

Not needed for normal use.

Respiratory protection:

Not needed for normal use.

Thermal Hazards:

None

Environmental exposure controls:

None

Appropriate engineering controls:

None

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes:
Appearance and colour:	liquid		
Odour:	Characteristic		
Odour threshold:	N.A.		
pH:	N.A.		
Melting point / freezing point:	N.A.		
Initial boiling point and boiling range:	137℃		

Flash point:	25 ℃	
Evaporation rate:	N.A.	
Solid/gas flammability:	N.A.	
Upper/lower flammability or explosive limits:	N.A.	
Vapour pressure:	N.A.	
Vapour density:	> 1	
Relative density:	1.200 g/cm3 - 20℃	
Solubility in water:	insoluble	
Solubility in oil:	N.A.	
Partition coefficient (n-octanol/water):	N.A.	
Auto-ignition temperature:	> 450℃	
Decomposition temperature:	N.A.	
Viscosity:	N.A.	
Explosive properties:	N.A.	
Oxidizing properties:	N.A.	

9.2. Other information

Properties	Value	Method:	Notes:
Miscibility:	N.A.		
Fat Solubility:	N.A.		
Conductivity:	N.A.		
Substance Groups relevant properties	N.A.		

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions

10.2. Chemical stability

Stable under normal conditions

10.3. Possibility of hazardous reactions None

10.4. Conditions to avoid

Stable under normal conditions.

10.5. Incompatible materials

Avoid contact with combustible materials. The product could catch fire.

10.6. Hazardous decomposition products

None.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological information of the mixture:

N.A.

Toxicological information of the main substances found in the mixture:

n-butyl acetate - CAS: 123-86-4

a) acute toxicity:

Test: LC50 - Route: Inhalation - Species: Rat > 21.1 mg/l - Duration: 4h

Test: LD50 - Route: Oral - Species: Rat = 10760 mg/kg
Test: LD50 - Route: Skin - Species: Rabbit > 14000 mg/kg

2-methoxy-1-methylethyl acetate - CAS: 108-65-6

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat = 8530 mg/kg

acetone; propan-2-one; propanone - CAS: 67-64-1

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat = 5800 mg/kg Test: LD50 - Route: Skin - Species: Rabbit = 7400 mg/kg

Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl

1,2,2,6,6-pentamethyl-4-piperidyl sebacate

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat = 3230 mg/kg

3-aminopropyltriethoxysilane - CAS: 919-30-2

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat = 1490 mg/kg Test: LD50 - Route: Skin - Species: Rabbit = 4076 mg/kg

If not differently specified, the information required in Regulation (EU)2015/830 listed below must be considered as N.A.:

- a) acute toxicity;
- b) skin corrosion/irritation;
- c) serious eye damage/irritation;
- d) respiratory or skin sensitisation;
- e) germ cell mutagenicity;
- f) carcinogenicity;
- g) reproductive toxicity;
- h) STOT-single exposure;
- i) STOT-repeated exposure;
- j) aspiration hazard.

SECTION 12:Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

n-butyl acetate - CAS: 123-86-4

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish = 18 mg/l - Duration h: 96 Endpoint: EC50 - Species: Algae = 648 mg/l - Duration h: 72 Endpoint: EC50 - Species: Daphnia = 44 mg/l - Duration h: 48

2-methoxy-1-methylethyl acetate - CAS: 108-65-6

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish > 100 mg/l - Duration h: 96

acetone; propan-2-one; propanone - CAS: 67-64-1

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish = 8300 mg/l - Duration h: 96

Endpoint: LC50 - Species: Daphnia = 12700 mg/l - Duration h: 48

reaction mass of

alfa-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-omega-

hydroxypoly(oxyethylene) and

alfa-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-omega-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyloxypoly(oxyethylene) - Index number:

607-176-00-3

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish = 2.8 mg/l - Duration h: 96

b) Aquatic chronic toxicity:

Endpoint: NOEC - Species: Daphnia = 0.78 mg/l

Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl

1,2,2,6,6-pentamethyl-4-piperidyl sebacate

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish = 0.9 mg/l - Duration h: 96

3-aminopropyltriethoxysilane - CAS: 919-30-2

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish > 934 mg/l - Duration h: 96 Endpoint: EC50 - Species: Daphnia = 331 mg/l - Duration h: 48 Endpoint: NOEC - Species: Algae = 1.3 mg/l - Duration h: 72

12.2. Persistence and degradability

None

n-butyl acetate - CAS: 123-86-4

Biodegradability: Readily biodegradable - Test: N.A. - Duration: N.A. - %: N.A. - Notes:

N.A.

2-methoxy-1-methylethyl acetate - CAS: 108-65-6

Biodegradability: Readily biodegradable - Test: N.A. - Duration: N.A. - %: N.A. - Notes:

N.A.

12.3. Bioaccumulative potential

2-methoxy-1-methylethyl acetate - CAS: 108-65-6

Bioaccumulation: Not bioaccumulative - Test: N.A. N.A. - Duration: N.A. - Notes: N.A.

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None

12.6. Other adverse effects

None

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

SECTION 14: Transport information



14.1. UN number

ADR-UN Number: 1263 IATA-UN Number: 1263 IMDG-UN Number: 1263

14.2. UN proper shipping name

ADR-Shipping Name: PAINT IATA-Shipping Name: PAINT

Page n. 11 of 14

IMDG-Shipping Name: PAINT

14.3. Transport hazard class(es)

ADR-Class: 3

ADR - Hazard identification number: 30

IATA-Class: 3 IATA-Label: 3 IMDG-Class: 3

Sea (IMO): Classe 3, P.G. III - EmS F-E, S-E

14.4. Packing group

ADR-Packing Group: III IATA-Packing group: III IMDG-Packing group: III

14.5. Environmental hazards

ADR-Enviromental Pollutant: No IMDG-Marine pollutant: No

14.6. Special precautions for user

ADR-Subsidiary risks: -

ADR-S.P.: 163 640E 650

ADR-Tunnel Restriction Code: (D/E)
IATA-Passenger Aircraft: 355
IATA-Subsidiary risks: IATA-Cargo Aircraft: 366
IATA-S.P.: A3 A72
IATA-ERG: 3L

IMDG-EmS: F-E , S-E

IMDG-Subsidiary risks: -

IMDG-Storage category: Category A

IMDG-Storage notes: -

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Nο

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture Dir. 98/24/EC (Risks related to chemical agents at work)

Dir. 2000/39/EC (Occupational exposure limit values)

Regulation (EC) n. 1907/2006 (REACH) Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013

Regulation (EU) 2015/830

Regulation (EU) n. 286/2011 (ATP 2 CLP) Regulation (EU) n. 618/2012 (ATP 3 CLP) Regulation (EU) n. 487/2013 (ATP 4 CLP) Regulation (EU) n. 944/2013 (ATP 5 CLP) Regulation (EU) n. 605/2014 (ATP 6 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product:

Restriction 3
Restriction 40

Restrictions related to the substances contained:

Restriction 28 Restriction 29

Restriction 48

Volatile Organic compounds - VOCs = 28.84 %

Volatile Organic compounds - VOCs = 347.30 g/l

Volatile CMR substances = 0.03 %

Halogenated VOCs which are assigned the risk phrase R40 = 0.00 %

Organic Carbon - C = 0.20

Where applicable, refer to the following regulatory provisions:

Directive 82/501/EEC ('Activities linked to risks of serious accidents') and subsequent amendments.

Regulation (EC) nr 648/2004 (detergents).

1999/13/EC (VOC directive)

Provisions related to directives 82/501/EC(Seveso), 96/82/EC(Seveso II):

N.A.

15.2. Chemical safety assessment

No

SECTION 16: Other information

Text of phrases referred to under heading 3:

H226 Flammable liquid and vapour.

H336 May cause drowsiness or dizziness.

EUH066 Repeated exposure may cause skin dryness or cracking.

H335 May cause respiratory irritation.

H304 May be fatal if swallowed and enters airways.

H411 Toxic to aquatic life with long lasting effects.

H319 Causes serious eye irritation.

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

H315 Causes skin irritation.

H312 Harmful in contact with skin.

H332 Harmful if inhaled.

H225 Highly flammable liquid and vapour.

H317 May cause an allergic skin reaction.

H410 Very toxic to aquatic life with long lasting effects.

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H361d Suspected of damaging the unborn child.

This document was prepared by a competent person who has received appropriate training. Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre,

Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van

Nostrand Reinold

CCNL - Appendix 1

Insert further consulted bibliography

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

ADR: European Agreement concerning the International Carriage of

Dangerous Goods by Road.

CAS: Chemical Abstracts Service (division of the American Chemical

Society).

CLP: Classification, Labeling, Packaging.

DNEL: Derived No Effect Level.

EINECS: European Inventory of Existing Commercial Chemical Substances.

Page n. 13 of 14

GefStoffVO: Ordinance on Hazardous Substances, Germany.

GHS: Globally Harmonized System of Classification and Labeling of

Chemicals.

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport

Association" (IATA).

ICAO: International Civil Áviation Organization.

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization"

(ICAO).

IMDG: International Maritime Code for Dangerous Goods. INCI: International Nomenclature of Cosmetic Ingredients.

KSt: Explosion coefficient.

LC50: Lethal concentration, for 50 percent of test population.

LD50: Lethal dose, for 50 percent of test population.

LTE: Long-term exposure.

PNEC: Predicted No Effect Concentration.

RID: Regulation Concerning the International Transport of Dangerous Goods

by Rail.

STE: Short-term exposure.

STEL: Short Term Exposure limit.

STOT: Specific Target Organ Toxicity.

TLV: Threshold Limiting Value.

TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day.

(ACGIH Standard).

WGK: German Water Hazard Class.

N.A.: N.A.

N.D.: