Safety Data Sheet
RAXON UHS RAPID CLEAR

Safety Data Sheet dated 22/01/2020 version 8.0 dated 5/7/2023
This safety data sheet has been completely updated in compliance to Regulation 2020/878.

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

1.1. Product identifier

Mixture identification:

Trade name: RAXON UHS RAPID CLEAR
Trade code: RAX0722

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

Recommended use:
Paint / Varnish
IS - Industrial uses
PW - Professional uses

1.3. Details of the supplier of the safety data sheet

Company: Shop Bodyshop Direct, unit 17a Mullaghboy IND EST Navan Ireland

1.4. Emergency telephone number

046-9093800

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP)

Flam. Liq. 3, H226 Flammable liquid and vapour.
Skin Sens. 1A, H317 May cause an allergic skin reaction.
STOT SE 3, H336 May cause drowsiness or dizziness.
Aquatic Chronic 2, H411 Toxic to aquatic life with long lasting effects.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard pictograms:

Warning

Hazard statements:

H226 Flammable liquid and vapour. H317 May cause an allergic skin reaction. H336 May cause drowsiness or dizziness. H411 Toxic 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.
P273 Avoid release to the environment.
P280 Wear protective gloves/clothing and eye/face protection.
P370+P378 In case of fire, use a foam fire extinguisher to extinguish.
P391 Collect spillage.
P403+P235 Store in a well-ventilated place. Keep cool.

Special Provisions:
None
Contains
n-butyl acetate
Hydrocarbons, C9, aromatics
Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate
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.
Phosphorous acid, triisotridecyl ester: May produce an allergic reaction.
Pentaerythritol tetrakis(3-mercaptopropionate): May produce an allergic reaction.
dibutyltin dilaurate: May produce an allergic reaction.

Special provisions according to Annex XVII of REACH and subsequent amendments:
None

2.3. Other hazards
No PBT, vPvB or endocrine disruptor substances present in concentration >= 0.1%
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:
>= 30% - < 40% n-butyl acetate
REACH No.: 01-2119485493-29-XXXX, Index number: 607-025-00-1, CAS: 123-86-4, EC: 204-658-1
Flam. Liq. 3 H226 Flammable liquid and vapour.
STOT SE 3 H336 May cause drowsiness or dizziness.
EUH066 Repeated exposure may cause skin dryness or cracking.

>= 5% - < 7% Hydrocarbons, C9, aromatics
REACH No.: 01-2119455851-35-XXXX, EC: 918-668-5
Flam. Liq. 3 H226 Flammable liquid and vapour.
STOT SE 3 H335 May cause respiratory irritation.
Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.
STOT SE 3 H336 May cause drowsiness or dizziness.
Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.
EUH066 Repeated exposure may cause skin dryness or cracking.

>= 1% - < 2.5% ethyl 3-ethoxypropionate
REACH No.: 01-2119463267-34-XXXX, CAS: 763-69-9, EC: 212-112-9
Flam. Liq. 3 H226 Flammable liquid and vapour.
EUH066 Repeated exposure may cause skin dryness or cracking.

>= 1% - < 2.5% xylene (mixed isomers)
REACH No.: 01-2119488216-32-XXXX, Index number: 601-022-00-9, CAS: 1330-20-7, EC: 215-535-7
Flam. Liq. 3 H226 Flammable liquid and vapour.
Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.
Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.
Eye Irrit. 2 H319 Causes serious eye irritation.

STOT SE 3 H335 May cause respiratory irritation.
STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.
Skin Irrit. 2 H315 Causes skin irritation.
Acute Tox. 4 H312 Harmful in contact with skin.
Acute Tox. 4 H332 Harmful if inhaled.

>= 1% - < 2.5% 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)

REACH No.: 01-0000015075-76-XXXX, Index number: 607-176-00-3, CAS: 104810-48-2, EC: 400-830-7
Skin Sens. 1 H317 May cause an allergic skin reaction.
Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.

>= 0.25% - < 0.5% Phosphorous acid, triisotridecyl ester

REACH No.: 01-2119487302-40-XXXX, CAS: 77745-66-5, EC: 278-758-9
Skin Sens. 1 H317 May cause an allergic skin reaction.
Aquatic Chronic 4 H413 May cause long lasting harmful effects to aquatic life.

Specific Concentration Limits:
C >= 92,1%: Skin Sens. 1 H317

>= 0.25% - < 0.5% Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate

REACH No.: 01-2119491304-40-XXXX, CAS: 1065336-91-5, EC: 915-687-0
Skin Sens. 1A H317 May cause an allergic skin reaction.
Repr. 2 H361f Suspected of damaging fertility.
Aquatic Acute 1 H400 Very toxic to aquatic life. M=1.
Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects. M=1.

>= 0.25% - < 0.5% acetone; propan-2-one; propanone

REACH No.: 01-2119471330-49-XXXX, Index number: 606-001-00-8, CAS: 67-64-1, EC: 200-662-2
Flam. Liq. 2 H225 Highly flammable liquid and vapour.
Eye Irrit. 2 H319 Causes serious eye irritation.
STOT SE 3 H336 May cause drowsiness or dizziness.
EUH066 Repeated exposure may cause skin dryness or cracking.

>= 0.25% - < 0.5% Pentaerythritol tetrakis(3-mercaptopropionate)

REACH No.: 01-2119486981-23-XXXX, CAS: 7575-23-7, EC: 231-472-8
Acute Tox. 4 H302 Harmful if swallowed.
Skin Sens. 1 H317 May cause an allergic skin reaction.
Aquatic Acute 1 H400 Very toxic to aquatic life. M=10.
Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects. M=10.

>= 0.1% - < 0.25% dibutyltin dilaurate

REACH No.: 01-2119496068-27-XXXX, Index number: 050-030-00-3, CAS: 77-58-7, EC: 201-039-8
Eye Irrit. 2 H319 Causes serious eye irritation.
STOT SE 1 H370 Causes damage to organs.
Muta. 2 H341 Suspected of causing genetic defects.
Repr. 1B H360FD May damage fertility. May damage the unborn child.
Skin Sens. 1 H317 May cause an allergic skin reaction.
STOT RE 1 H372 Causes damage to organs through prolonged or repeated exposure.
Aquatic Acute 1 H400 Very toxic to aquatic life. M=1.

Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects. M=1.

5 ppm Cumene
Index number: 601-024-00-X, CAS: 98-82-8, EC: 202-704-5
Flam. Liq. 3 H226 Flammable liquid and vapour.
Carc. 1B H350 May cause cancer.
Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.
STOT SE 3 H335 May cause respiratory irritation.
Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.

Other information

acetone; propan-2-one; propanone - CAS: 67-64-1
Substance listed in Annex II - Regulation (EU) 2019/1148 of 20 June 2019 on the marketing and use of explosives precursors, amending Regulation (EC) No 1907/2006 and repealing Regulation (EU) No 98/2013

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:
Immediately take off all contaminated clothing.
Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.
Wash thoroughly the body (shower or bath).
Remove contaminated clothing immediatley and dispose off safely.

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
In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).
Treatment:
None

SECTION 5: Firefighting measures

5.1. Extinguishing media
Suitable extinguishing media:
In case of fire, use a foam fire extinguisher to extinguish.
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 drains.
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.
See also section 8 for recommended protective equipment.
Advice on general occupational hygiene:
Contamined clothing should be changed before entering eating areas.
Do not eat or drink while working.

7.2. Conditions for safe storage, including any incompatibilities
Always keep in a well ventilated place.
Store at below 20 °C. Keep away from unguarded flame 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.
Provisions related to directive EU 2012/18 (Seveso III):
Seveso III category according to Annex 1, part 1

Product belongs to

category:	Lower-tier threshold (tonnes)	Upper-tier threshold (tonnes)
P5c	5000	50000
E2	200	500

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 - TWA(8h): 50 ppm - STEL: 150 ppm - Notes: Eye and URT irr
GVI - TWA(8h): 724 mg/m3, 150 ppm - STEL(15min): 966 mg/m3, 200 ppm - Notes: HR

- CROAZIA
  VLA - TWA(8h): 724 mg/m3, 150 ppm - STEL(15min): 965 mg/m3, 200 ppm - Notes: ES - SPAGNA
  TLV - TWA(8h): 950 mg/m3 - STEL(15min): 1200 mg/m3 - Notes: CZ - REP. CECA
  MAK - TWA(8h): 480 mg/m3, 100 ppm - STEL(15min): 960 mg/m3, 200 ppm - Notes: DE - GERMANIA
  VLEP - TWA(8h): 710 mg/m3, 150 ppm - STEL(15min): 940 mg/m3, 200 ppm - Notes: FR - FRANCIA
  National - TWA(8h): 724 mg/m3, 150 ppm - STEL(15min): 966 mg/m3, 200 ppm - Notes: UK - REGNO UNITO
  EU - TWA(8h): 241 mg/m3, 50 ppm - STEL: 723 mg/m3, 150 ppm
  MAK - TWA(8h): 480 mg/m3, 100 ppm - STEL(15min): 960 mg/m3, 200 ppm - Notes: CH - SUVA (Svizzera), SSc

Hydrocarbons, C9, aromatics
  ACGIH - TWA(8h): 100 mg/m3, 19 ppm

ethyl 3-ethoxypropionate - CAS: 763-69-9
  ACGIH - TWA: 50 ppm - STEL: 100 ppm

xylene (mixed isomers) - CAS: 1330-20-7
  EU - TWA(8h): 221 mg/m3, 50 ppm - STEL: 442 mg/m3, 100 ppm - Notes: Skin
  MAK - TWA(8h): 435 mg/m3, 100 ppm - STEL: 870 mg/m3, 200 ppm - Notes: CH - SUVA (Svizzera), H (Skin) B
  ACGIH - TWA(8h): 20 ppm - Notes: A4, BEI - URT and eye irr; hematologic eff; CNS impair

acetone; propan-2-one; propanone - CAS: 67-64-1
EU - TWA(8h): 1210 mg/m3, 500 ppm
National - TWA(8h): 1210 mg/m3, 500 ppm - STEL: 3620 mg/m3, 1500 ppm - Notes: HR - CROAZIA
ACGIH - TWA(8h): 250 ppm - STEL: 500 ppm - Notes: A4, BEI - URT and eye irr, CNS impair

dibutyltin dilaurate - CAS: 77-58-7
  ACGIH - TWA(8h): 0.1 mg/m3 - STEL(15min): 0.2 mg/m3 - Notes: misurato come stagno (Sn)

Cumene - CAS: 98-82-8
  EU - TWA(8h): 50 mg/m3, 10 ppm - STEL: 250 mg/m3, 50 ppm - Notes: Skin
  ACGIH - TWA(8h): 5 ppm - Notes: A3 - URT adenoma, neurological eff

DNEL Exposure Limit Values

n-butyl acetate - CAS: 123-86-4
  Worker Industry: 600 mg/m3 - Worker Professional: 600 mg/m3 - Consumer: 300 mg/m3 - Exposure: Human Inhalation - Frequency: Short Term, systemic effects
  Worker Industry: 300 mg/m3 - Worker Professional: 300 mg/m3 - Consumer: 35.7 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects
  Worker Industry: 11 mg/kg bw/d - Worker Professional: 11 mg/kg bw/d - Consumer: 6 mg/kg bw/d - Exposure: Human Dermal - Frequency: Long Term, systemic effects
  Consumer: 2 mg/kg bw/d - Exposure: Human Oral - Frequency: Long Term, systemic effects

Hydrocarbons, C9, aromatics
  Consumer: 11 mg/kg bw/d - Exposure: Human Oral - Frequency: Long Term, systemic effects
  Worker Industry: 150 mg/m3 - Worker Professional: 150 mg/m3 - Consumer: 32 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects
  Worker Industry: 25 mg/kg bw/d - Worker Professional: 25 mg/kg bw/d - Consumer: 11 mg/kg bw/d - Exposure: Human Dermal - Frequency: Long Term, systemic effects

ethyl 3-ethoxypropionate - CAS: 763-69-9
  Worker Industry: 8.85 mg/kg bw/d - Worker Professional: 8.85 mg/kg bw/d - Consumer: 3.1 mg/kg bw/d - Exposure: Human Dermal - Frequency: Long Term, systemic effects
  Worker Industry: 610 mg/m3 - Worker Professional: 610 mg/m3 - Consumer: 72.6 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects
  Worker Industry: 610 mg/m3 - Worker Professional: 610 mg/m3 - Consumer: 76.2 mg/m3

- Exposure: Human Inhalation - Frequency: Long Term, local effects
Consumer: 1.2 mg/kg bw/d - Exposure: Human Oral - Frequency: Long Term, systemic effects

xylene (mixed isomers) - CAS: 1330-20-7

Worker Industry: 442 mg/m3 - Worker Professional: 442 mg/m3 - Consumer: 260 mg/m3 - Exposure: Human Inhalation - Frequency: Short Term, systemic effects
Worker Industry: 221 mg/m3 - Worker Professional: 221 mg/m3 - Consumer: 65.3 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects
Worker Industry: 212 mg/kg bw/d - Worker Professional: 212 mg/kg bw/d - Consumer: 125 mg/kg bw/d - Exposure: Human Dermal - Frequency: Long Term, systemic effects
Consumer: 12.5 mg/kg bw/d - Exposure: Human Oral - Frequency: Long Term, systemic effects

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) - CAS: 104810-48-2

Worker Industry: 0.35 mg/m3 - Worker Professional: 0.35 mg/m3 - Consumer: 0.085 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects
Worker Industry: 0.5 mg/kg - 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 effects

Phosphorous acid, triisotridecyl ester - CAS: 77745-66-5

Worker Industry: 35.26 mg/m3 - Worker Professional: 35.26 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects
Worker Industry: 50 mg/kg bw/d - Worker Professional: 50 mg/kg bw/d - Consumer: 25 mg/kg bw/d - Exposure: Human Dermal - Frequency: Long Term, systemic effects
Consumer: 5 mg/kg bw/d - Exposure: Human Oral - Frequency: Long Term, systemic effects

Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate - CAS: 1065336-91-5

Worker Industry: 1.27 mg/m3 - Worker Professional: 1.27 mg/m3 - Consumer: 0.31 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects
Worker Industry: 1.8 mg/kg bw/d - Worker Professional: 1.8 mg/kg bw/d - Consumer: 0.9 mg/kg bw/d - Exposure: Human Dermal - Frequency: Long Term, systemic effects
Consumer: 0.18 mg/kg bw/d - Exposure: Human Oral - Frequency: Long Term, systemic effects

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

Consumer: 62 mg/kg bw/d - Exposure: Human Oral - Frequency: Long Term, systemic effects
Worker Industry: 1210 mg/m3 - Worker Professional: 1210 mg/m3 - Consumer: 200 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects
Worker Industry: 2420 mg/m3 - Worker Professional: 2420 mg/m3 - Exposure: Human Inhalation - Frequency: Short Term, systemic effects
Worker Industry: 186 mg/kg bw/d - Worker Professional: 186 mg/kg bw/d - Consumer: 62 mg/kg bw/d - Exposure: Human Dermal - Frequency: Long Term, systemic effects

Pentaerythritol tetrakis(3-mercaptopropionate) - CAS: 7575-23-7

Worker Industry: 1.74 mg/m3 - Worker Professional: 1.74 mg/m3 - Consumer: 0.43 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects
Worker Industry: 40.13 mg/m3 - Worker Professional: 40.13 mg/m3 - Consumer: 20.07 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, local effects
Worker Industry: 40.13 mg/m3 - Worker Professional: 40.13 mg/m3 - Consumer: 20.07 mg/m3 - Exposure: Human Inhalation - Frequency: Short Term, local effects
Worker Industry: 5 mg/kg bw/d - Worker Professional: 5 mg/kg bw/d - Consumer: 2.5 mg/kg bw/d - Exposure: Human Dermal - Frequency: Long Term, systemic effects
Consumer: 0.25 mg/kg bw/d - Exposure: Human Oral - Frequency: Long Term, systemic

effects
dibutyltin dilaurate - CAS: 77-58-7
Worker Industry: 0.02 mg/m3 - Worker Professional: 0.02 mg/m3 - Consumer: 0.0046 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects
Worker Industry: 0.059 mg/m3 - Worker Professional: 0.059 mg/m3 - Consumer: 0.04 mg/m3 - Exposure: Human Inhalation - Frequency: Short Term, systemic effects
Worker Industry: 0.43 mg/kg bw/d - Worker Professional: 0.43 mg/kg bw/d - Consumer: 0.16 mg/kg bw/d - Exposure: Human Dermal - Frequency: Long Term, systemic effects
Worker Industry: 2.08 mg/kg bw/d - Worker Professional: 2.08 mg/kg bw/d - Consumer: 0.5 mg/kg bw/d - Exposure: Human Dermal - Frequency: Short Term, systemic effects
Consumer: 0.02 mg/kg bw/d - Exposure: Human Oral - Frequency: Short Term, systemic effects

PNEC Exposure Limit Values
n-butyl acetate - CAS: 123-86-4
Target: Soil (agricultural) - Value: 0.09 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: 0.098 mg/kg

ethyl 3-ethoxypropionate - CAS: 763-69-9
Target: Fresh Water - Value: 60.9 03
Target: Marine water - Value: 6.09 03
Target: Freshwater sediments - Value: 0.419 mg/kg
Target: Marine water sediments - Value: 0.0419 mg/kg
Target: Soil (agricultural) - Value: 0.048 mg/kg

xylene (mixed isomers) - 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

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) - CAS: 104810-48-2
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 - CAS: 1065336-91-5
Target: Fresh Water - Value: 2.2 03
Target: Marine water - Value: 0.22 03
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

acetone; propan-2-one; propanone - CAS: 67-64-1
Target: Fresh Water - Value: 10.6 mg/l
Target: Marine water - Value: 1.06 mg/l
Target: Freshwater sediments - Value: 30.4 mg/kg
Target: Marine water sediments - Value: 3.04 mg/kg
Target: Soil (agricultural) - Value: 33.3 mg/kg

Pentaerythritol tetrakis(3-mercaptopropionate) - CAS: 7575-23-7
Target: Fresh Water - Value: 0.03 03
Target: Marine water - Value: 0.0034 03

Target: Microorganisms in sewage treatments - Value: 2.39 mg/l
Target: Freshwater sediments - Value: 1.02 03
Target: Soil (agricultural) - Value: 0.184 03

dibutyltin dilaurate - CAS: 77-58-7
Target: Fresh Water - Value: 0.005 mg/l
Target: Freshwater sediments - Value: 0.05 mg/kg
Target: Marine water - Value: 0.005 mg/l
Target: Marine water sediments - Value: 0.005 mg/kg
Target: Microorganisms in sewage treatments - Value: 100 mg/l

8.2. Exposure controls

Eye protection:

Eye glasses with side protection.

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Use chemical resistant protective gloves (for chemicals and micro-organisms) complying with EN 374 regulation, which guarantee total protection. For the definitive choice of material for work gloves, consider compatibility, degradation, breaking time and permeation. The gloves have a wear time that depends on the length and on the use. There is no material or combination of gloves materials that guarantees unlimited resistance to any single chemical or chemical compound. Observe the instructions and information provided by the gloves manufacturer regarding use, storage, maintenance and replacement. Gloves should be replaced regularly and whenever there are signs of damage. Always make sure that the gloves are free from defects and that they are properly preserved and used. Performance or effectiveness of glove can be reduced by physical/chemical damage and by poor maintenance. Protective creams can increase the protective screen on the exposed areas of the skin, but should not be applied once the skin has already been exposed. After contact, rinse the skin thoroughly. When frequent or prolonged contact is to be expected, the use of class 6 protective gloves (permeation time > 480 minutes according to EN3740-3) is recommended. In case of occasional contact it is recommend the use of class 2 protective gloves (permeation time > 30 minutes according to EN 3740-3). The user is required to evaluate which type of gloves best suits, basing on their use conditions and on the corresponding combination of risks. NB: The choice of gloves must also take into account other specific job-related work, such as the presence of other chemicals, physical hazards and possible allergic reactions to the material used to manufacture the glove, so consult your supplier.

Respiratory protection:

Use an adequate respiratory device.
The choice of respirator must be based on known or expected exposure levels, on product risks and on safe operating limits of the selected respirator.
If the employees are exposed to concentrations above the exposure limit, we recommend wearing a Type A filter mask, whose class (1, 2 or 3) should be chosen in relation to the limit concentration of use (standard EN 14387).
In the case of gases or vapors of different nature, combine type filters (DIN EN 141) should be provided.
The use of respiratory protection means is necessary if the technical measures taken are not sufficient to limit the exposure of workers to the threshold values taken into account.

Thermal Hazards:

None

Environmental exposure controls:

Emissions from production processes, including those from ventilation equipment, should be checked for compliance with environmental protection regulations.

Appropriate engineering controls:
None

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes
Physical state:	Liquid	-	-
Colour:	Colourless	-	-
Odour:	Characteristic	-	-
Melting point/freezing point:	N.A.	- -	- -
Boiling point or initial boiling point and boiling range:	>35°C	-- - -	-- - -
Flammability:	Flammable	--	-
Lower and upper explosion limit:	LEL 1.2% - UEL 7.5% v/v (n-butyl acetate)	Extrapolation from Raw Material SDS	- - -
Flash point:	26 °C	EN ISO 3679	-
Auto-ignition temperature:	N.A.	--	-
Decomposition temperature:	N.A.	--	- -
pH:	Not Relevant	-	- -
Kinematic viscosity:	ca. 40 mm2/s (40°C)	- -	- - -
Solubility in water:	insoluble	- -	- -
Solubility in oil:	N.A.	-	-
Partition coefficient n-octanol/water (log value):	N.A.	- -	- -
Vapour pressure:	N.A.	-- -	- -
Density and/or relative density:	0.990 g/cm3 - 20°C	ISO 2811 -	- - -
Relative vapour density:	N.A.	--	-- -
Particle characteristics:			
Particle size:	N.A.	--	--

9.2. Other information

Properties	Value	Method:	Notes
Viscosity:	28 - 32'' FC 4	ASTM D 1200	--

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 hazard classes as defined in Regulation (EC) No 1272/2008
Toxicological information of the product:
ACRIGLASS FAST UHS 420
a) acute toxicity
Not classified
Based on available data, the classification criteria are not met
b) skin corrosion/irritation
Not classified
Based on available data, the classification criteria are not met
c) serious eye damage/irritation
Not classified
Based on available data, the classification criteria are not met
d) respiratory or skin sensitisation
The product is classified: Skin Sens. 1A H317
e) germ cell mutagenicity
Not classified
Based on available data, the classification criteria are not met
f) carcinogenicity
Not classified
Based on available data, the classification criteria are not met
g) reproductive toxicity
Not classified
Based on available data, the classification criteria are not met
h) STOT-single exposure
The product is classified: STOT SE 3 H336
i) STOT-repeated exposure
Not classified
Based on available data, the classification criteria are not met
j) aspiration hazard
Not classified
Based on available data, the classification criteria are not met
Toxicological information of the main substances found in the product:
n-butyl acetate - CAS: 123-86-4
a) acute toxicity:
Test: LC50 - Route: Inhalation Vapour - Species: Rat > 21 mg/l - Duration: 4h

Test: LD50 - Route: Oral - Species: Rat = 10760 mg/kg bw
Test: LD50 - Route: Skin - Species: Rabbit = 14112 mg/kg bw

Hydrocarbons, C9, aromatics
a) acute toxicity:
Test: LC50 - Route: Inhalation - Species: Rat > 6193 mg/m3 - Duration: 4h
Test: LD50 - Route: Oral - Species: Rat = 3592 mg/kg bw/day
Test: LD50 - Route: Skin - Species: Rabbit > 3160 mg/kg bw/day

ethyl 3-ethoxypropionate - CAS: 763-69-9
a) acute toxicity:
Test: LD50 - Route: Oral - Species: Rat = 4309 mg/kg bw
Test: LD50 - Route: Skin - Species: Rabbit = 4080 mg/kg - Duration: 24h
Test: LC50 - Route: Inhalation Vapour - Species: Rat > 998 ppm - Duration: 6h

xylene (mixed isomers) - CAS: 1330-20-7
a) acute toxicity:
Test: LC50 - Route: Inhalation Vapour - Species: Rat = 27.124 mg/l - Duration: 4h
Test: LD50 - Route: Skin - Species: Rabbit > 12126 mg/kg bw
Test: LD50 - Route: Oral - Species: Rat = 3523 mg/kg bw

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) - CAS: 104810-48-2
a) acute toxicity:
Test: LC50 - Route: Inhalation - Species: Rat > 5.8 mg/l - Duration: 4h
Test: LD50 - Route: Oral - Species: Rat > 5.000 mg/kg Test: LD50 - Route: Skin - Species: Rat > 2.000 mg/kg
b) skin corrosion/irritation:
Negative
c) serious eye damage/irritation:
Negative

Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate - CAS: 1065336-91-5
a) acute toxicity:
Test: LD50 - Route: Oral - Species: Rat = 3230 mg/kg bw
Test: LD50 - Route: Skin - Species: Rat > 3170 mg/kg bw
b) skin corrosion/irritation:
Test: Skin Irritant - Route: Skin - Species: Rabbit Negative
c) serious eye damage/irritation:
Test: Eye Irritant Negative

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
Test: LC50 - Route: Inhalation - Species: Rat = 76 mg/l - Duration: 4h
b) skin corrosion/irritation:
Test: Skin Irritant Positive

dibutyltin dilaurate - CAS: 77-58-7
a) acute toxicity:
Test: LD50 - Route: Oral - Species: Rat = 2071 mg/kg
Test: LD50 - Route: Skin - Species: Rat > 2.000 mg/kg bw - Duration: 24h

11.2. Information on other hazards
Endocrine disrupting properties:
No endocrine disruptor substances present in concentration >= 0.1%

12.1. Toxicity

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

ACRIGLASS FAST UHS 420

The product is classified: Aquatic Chronic 2 - H411

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

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish = 18 mg/l - Duration h: 96 - Notes: Metodo: OECD 203
Endpoint: EC50 - Species: Algae = 675 mg/l - Duration h: 72
Endpoint: EC50 - Species: Daphnia = 44 mg/l - Duration h: 48

b) Aquatic chronic toxicity:

Endpoint: NOEC - Species: Algae = 200 mg/l - Duration h: 72 - Notes: Acqua dolce (non salina) Valore sperimentale

Hydrocarbons, C9, aromatics

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish = 9.2 mg/l - Duration h: 96
Endpoint: EC50 - Species: Daphnia = 3.2 mg/l - Duration h: 48
Endpoint: EC50 - Species: Algae = 2.9 mg/l - Duration h: 72

ethyl 3-ethoxypropionate - CAS: 763-69-9

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish = 60.9 mg/l - Duration h: 96
Endpoint: EC50 - Species: Daphnia = 873 mg/l - Duration h: 48
Endpoint: EC50 - Species: Algae > 114.86 mg/l - Duration h: 72

xylene (mixed isomers) - CAS: 1330-20-7

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish = 2.6 mg/l - Duration h: 96
Endpoint: EC50 - Species: Daphnia = 1 mg/l - Duration h: 24
Endpoint: EC50 - Species: Algae = 1.3 mg/l - Duration h: 72

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) - CAS: 104810-48-2

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish = 2.8 mg/l - Duration h: 96
Endpoint: EC50 - Species: Daphnia = 4 mg/l - Duration h: 48
Endpoint: EC50 - Species: Algae > 100 mg/l - Duration h: 72

b) Aquatic chronic toxicity:

Endpoint: NOEC - Species: Daphnia = 0.78 mg/l - Notes: 21 d

Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate - CAS: 1065336-91-5

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish = 0.9 mg/l - Duration h: 96
Endpoint: EC50 - Species: Algae = 1.68 mg/l - Duration h: 72

b) Aquatic chronic toxicity:

Endpoint: NOEC - Species: Daphnia = 1 mg/l - Notes: 21 d

c) Bacteria toxicity:

Endpoint: EC50 > 100 mg/l

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

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish = 8120 mg/l - Duration h: 96
Endpoint: LC50 - Species: Daphnia = 8800 mg/l - Duration h: 48
Endpoint: EC50 - Species: Algae = 530 mg/l - Notes: 8 d

b) Aquatic chronic toxicity:

Endpoint: NOEC - Species: Daphnia = 2212 mg/l - Notes: 28 d

Pentaerythritol tetrakis(3-mercaptopropionate) - CAS: 7575-23-7

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish = 0.034 mg/l - Duration h: 96
Endpoint: EC50 - Species: Daphnia > 0.35 mg/l - Duration h: 48

Endpoint: EC50 - Species: Algae > 0.12 mg/l - Duration h: 72
Endpoint: NOEC - Species: Algae > 0.12 mg/l - Duration h: 72

dibutyltin dilaurate - CAS: 77-58-7

a) Aquatic acute toxicity:
Endpoint: EC50 - Species: Daphnia = 0.463 mg/l - Duration h: 48
Endpoint: EC50 - Species: Algae = 1 mg/l - Duration h: 72
Endpoint: LC50 - Species: Fish = 21.2 mg/l - Duration h: 96

12.2. Persistence and degradability

None

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

Biodegradability: Readily biodegradable

ethyl 3-ethoxypropionate - CAS: 763-69-9

Biodegradability: Readily biodegradable

Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate - CAS: 1065336-91-5

Biodegradability: Non-readily biodegradable

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

Biodegradability: Readily biodegradable

dibutyltin dilaurate - CAS: 77-58-7

Biodegradability: Non-readily biodegradable

12.3. Bioaccumulative potential

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

Test: BCF - Bioconcentrantion factor 15.3
Test: Kow - Partition coefficient 2.3 - Notes: n-ottanolo/acqua

Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate - CAS: 1065336-91-5

Test: BCF - Bioconcentrantion factor

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

Bioaccumulation: Not bioaccumulative - Test: BCF - Bioconcentrantion factor 3
Bioaccumulation: Not bioaccumulative - Test: Kow - Partition coefficient -0.24

dibutyltin dilaurate - CAS: 77-58-7

Test: BCF - Bioconcentrantion factor 2.91 - Notes: Specie: Pesce

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None

12.6. Endocrine disrupting properties

No endocrine disruptor substances present in concentration >= 0.1%

12.7. 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.

WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS:
According to the European Waste Catalogue (EWC) the product at the time of its disposal is classified:
08 01 11* - waste paint and varnish containing organic solvents or other hazardous substances

WASTE PACKAGING

EWC code
15 01 10* - packaging containing residues of or contaminated by hazardous substances

SECTION 14: Transport information

14.1. UN number or ID number

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

14.2. UN proper shipping name

	PAINT
ADR-Shipping Name:	PAINT
IATA-Shipping Name:	PAINT
IMDG-Shipping Name:	3

14.3. Transport hazard class(es)

ADR-Class:	
ADR - Hazard identification number:	30
IATA-Class:	3 3 3 III III III
IATA-Label:	Yes Marine
IMDG-Class:	Pollutant

14.4. Packing group

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

14.5. Environmental hazards

ADR-Enviromental Pollutant:	
IMDG-Marine pollutant:	
Most important toxic component:	Pentaerythritol tetrakis(3-mercaptopropionate)
IMDG-EmS:	F-E , S-E

14.6. Special precautions for user -

ADR-Subsidiary hazards:	163 367 650
ADR-S.P.:	
ADR-Transport category (Tunnel restriction code):	3 (D/E)
IATA-Passenger Aircraft:	355
IATA-Subsidiary hazards:	-
IATA-Cargo Aircraft:	366
IATA-S.P.:	A3 A72 A192
IATA-ERG:	3L
IMDG-Subsidiary hazards:	-
IMDG-Stowage and handling:	Category A
IMDG-Segregation:	-

14.7. Maritime transport in bulk according to IMO instruments
N.A.

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) n. 2020/878
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)
Regulation (EU) n. 2015/1221 (ATP 7 CLP)
Regulation (EU) n. 2016/918 (ATP 8 CLP)
Regulation (EU) n. 2016/1179 (ATP 9 CLP)
Regulation (EU) n. 2017/776 (ATP 10 CLP)
Regulation (EU) n. 2018/669 (ATP 11 CLP)
Regulation (EU) n. 2018/1480 (ATP 13 CLP)
Regulation (EU) n. 2019/521 (ATP 12 CLP)
Regulation (EU) n. 2020/217 (ATP 14 CLP)
Regulation (EU) n. 2020/1182 (ATP 15 CLP)
Regulation (EU) n. 2021/643 (ATP 16 CLP)
Regulation (EU) n. 2021/849 (ATP 17 CLP)
Regulation (EU) n. 2022/692 (ATP 18 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 30
Restriction 75

Volatile Organic compounds - VOCs = 43.78 %
Volatile Organic compounds - VOCs = 437.18 g/l
Volatile CMR substances = 0.00 %
Halogenated VOCs which are assigned the risk phrase R40 = 0.00 %
Organic Carbon - C = 0.29

Where applicable, refer to the following regulatory provisions :

Regulation (EU) 2019/1148 on the marketing and use of explosives precursors
Directive 2012/18/EU (Seveso III)
Regulation (EC) nr 648/2004 (detergents).
Dir. 2004/42/EC (VOC directive)

Provisions related to directive EU 2012/18 (Seveso III):

Seveso III category according to Annex 1, part 1

Product belongs to category: P5c, E2

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.
Substances for which a Chemical Safety Assessment has been carried out:

n-butyl acetate

SECTION 16: Other information

Full text of phrases referred to in Section 3:

H317 May cause an allergic skin reaction.

Hazard class and hazard category	Code	Description
Flam. Liq. 2	2.6/2	Flammable liquid, Category 2
Flam. Liq. 3	2.6/3	Flammable liquid, Category 3 Acute
Acute Tox. 4	3.1/4/Dermal	toxicity (dermal), Category 4 Acute
Acute Tox. 4	3.1/4/Inhal	toxicity (inhalation), Category 4

Acute Tox. 4	3.1/4/Ora	Acute toxicity (oral), Category 4 Aspiration
Asp. Tox. 1	l 3.10/1	hazard, Category 1 Skin irritation, Category 2 Eye
Skin Irrit. 2	3.2/2	irritation, Category 2 Skin Sensitisation, Category
Eye Irrit. 2	3.3/2	1 Skin Sensitisation, Category 1A Germ cell
Skin Sens. 1	3.4.2/1	mutagenicity, Category 2 Carcinogenicity,
Skin Sens. 1A	3.4.2/1A	Category 1B Reproductive toxicity, Category 1B
Muta. 2 Carc.	3.5/2	Reproductive toxicity, Category 2 Specific target
1B Repr. 1B	3.6/1B	organ toxicity - single exposure, Category 1
Repr. 2 STOT	3.7/1B	Specific target organ toxicity - single exposure,
SE 1	3.7/2	Category 3
	3.8/1	Specific target organ toxicity - repeated exposure, Category 1
STOT SE 3	3.8/3	Specific target organ toxicity - repeated exposure, Category 2
STOT RE 1	3.9/1	Acute aquatic hazard, category 1
STOT RE 2	3.9/2	Chronic (long term) aquatic hazard, category 1
		Chronic (long term) aquatic hazard, category 2
		Chronic (long term) aquatic hazard, category 3
Aquatic Acute 1	4.1/A1	Chronic (long term) aquatic hazard, category 4
Aquatic Chronic 1	4.1/C1	
Aquatic Chronic 2	4.1/C2	
Aquatic Chronic 3	4.1/C3	
Aquatic Chronic 4	4.1/C4	

This safety data sheet has been completely updated in compliance to Regulation 2020/878.
Paragraphs modified from the previous revision:

SECTION 3: Composition/information on ingredients
SECTION 8: Exposure controls/personal protection
SECTION 11: Toxicological information
SECTION 12: Ecological information
SECTION 15: Regulatory information
SECTION 16: Other information

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
Flam. Liq. 3, H226	On basis of test data
Skin Sens. 1A, H317	Calculation method
STOT SE 3, H336	Calculation method
Aquatic Chronic 2, H411	Calculation method

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

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.
ATE:	Acute Toxicity Estimate
ATEmix:	Acute toxicity Estimate (Mixtures)
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.
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 Aviation 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.
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWA:	Time-weighted average
WGK:	German Water Hazard Class.

Exposure Scenario, 24/10/2019

Substance identity	
Chemical name	acetato di n-butile
CAS No.	123-86-4
INDEX No.	607-025-00-1
EINECS No.	204-658-1

Table of contents

1. ES 1 Use at industrial site; Coatings and paints, thinners, paint removers (PC9a)

1.1 TITLE SECTION

Exposure Scenario name	Industrial manufacture of coatings and inks
Date - Version	01/07/2019 - 1.0
Life Cycle Stage	Use at industrial site
Main user group	Industrial uses
Sector(s) of use	Industrial uses (SU3)
Product Categories	Coatings and paints, thinners, paint removers (PC9a)

Environment Contributing Scenario

CS1 Solvent-based process	ERC4

Worker Contributing Scenario

CS2 Spraying CS3 Rolling, Brushing CS4 Rolling, Brushing CS5 Dipping, immersion and	PROC7
pouring	PROC10
	PROC10
	PROC13

1.2. CS1: Environment Contributing Scenario: Solvent-based process (ERC4)

Environmental release categories

Amount used, frequency and duration of use (or from service life)

	Use of non-reactive processing aid at industrial site (no inclusion into or onto article) (ERC4)

Amounts used:

Application rate = 5000 t(onnes)/year

Maximum allowable site tonnage (MSafe): 1080.7 kg/day

Critical compartment for Msafe: soil

Emission days: 225 days per year

Technical and organisational conditions and measures

Control measures to prevent releases

Waste gas treatment by thermal oxidation

Conditions and measures related to sewage treatment plant

STP type:

Municipal Sewage Treatment Plant

STP effluent (m^3/day): 2000

Other conditions affecting environmental exposure

Local marine water dilution factor: 100

Local freshwater dilution factor: 10

Receiving surface water flow: 18000 m^3/day

1.2. CS2: Worker Contributing Scenario: Spraying (PROC7)

Process Categories	Industrial spraying (PROC7)

Product (article) characteristics

Physical form of product:

Liquid

Vapour pressure:

= 1120 Pa

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:

= 480 min

Frequency:

= 5 days per week

Technical and organisational conditions and measures

Technical and organisational measures

Ensure that direct skin contact is avoided.
Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed.
Ensure regular inspection, cleaning and maintenance of equipment and machines.

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

Wear suitable gloves tested to EN374.	Dermal - minimum efficiency of: = 90 %
Wear an impervious suit.	

Other conditions affecting worker exposure

Indoor use
Industrial use

Temperature: Covers use at ambient temperatures.

Additional good practice advice. Obligations according to Article 37(4) of REACH do not apply.

Additional Good Practice Advice:

Ensure segregation of worker from the source. Ensure that a spraying booth is used.

1.2. CS3: Worker Contributing Scenario: Rolling, Brushing (PROC10)

Process Categories	Roller application or brushing (PROC10)

Product (article) characteristics

Physical form of product:

Liquid

Vapour pressure:

= 1120 Pa

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Technical and organisational conditions and measures

Technical and organisational measures

Ensure that direct skin contact is avoided.
Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed.
Ensure regular inspection, cleaning and maintenance of equipment and machines.

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

Wear suitable gloves tested to EN374.	Dermal - minimum efficiency of: = 90 %
Wear an impervious suit.	

Other conditions affecting worker exposure

Indoor use
Industrial use
Temperature: Covers use at ambient temperatures.

Additional good practice advice. Obligations according to Article 37(4) of REACH do not apply.

Additional Good Practice Advice:

Ensure segregation of worker from the source. Ensure that a spraying booth is used.

1.2. CS4: Worker Contributing Scenario: Rolling, Brushing (PROC10)

Process Categories	Roller application or brushing (PROC10)

Product (article) characteristics

Physical form of product:

Liquid

Vapour pressure:

= 1120 Pa

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:

= 480 min

Frequency:

= 5 days per week

Technical and organisational conditions and measures

Technical and organisational measures

Local exhaust ventilation	Inhalation - minimum efficiency of: = 90 %
Ensure operatives are trained to minimise exposures.	

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

Wear suitable gloves tested to EN374.	Dermal - minimum efficiency of: = 90 %

Other conditions affecting worker exposure

Indoor use
Industrial use
Temperature: Covers use at ambient temperatures.

1.2. CS5: Worker Contributing Scenario: Dipping, immersion and pouring (PROC13)

Process Categories	Treatment of articles by dipping and pouring (PROC13)

Product (article) characteristics

Physical form of product:

Liquid

Vapour pressure:

= 1120 Pa

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:

= 480 min

Frequency:

= 5 days per week

Technical and organisational conditions and measures

Technical and organisational measures

Local exhaust ventilation	Inhalation - minimum efficiency of: = 90 %
Ensure operatives are trained to minimise exposures.	

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

Wear suitable gloves tested to EN374.	Dermal - minimum efficiency of: = 90 %

Other conditions affecting worker exposure

Indoor use

Industrial use

Temperature: Covers use at ambient temperatures.

1.3 Exposure estimation and reference to its source

1.3. CS1: Environment Contributing Scenario: Solvent-based process (ERC4)

Release route	Release rate	Release estimation method
Air	0.8 %	N/A
Water	2 %	N/A
soil	0 %	N/A

protection target	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
soil	N/A	EASY TRA v4.1	= 0.925355

1.3. CS2: Worker Contributing Scenario: Spraying (PROC7)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
dermal, systemic, long-term	= 4.2857 mg/kg bw/day	EASY TRA v4.1	= 0.38961
inhalative, systemic, long-term	= 0.0001 mg/m³	EASY TRA v4.1	= 1E-06

1.3. CS3: Worker Contributing Scenario: Rolling, Brushing (PROC10)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
dermal, systemic, long-term	= 4.2857 mg/kg bw/day	EASY TRA v4.1	= 0.38961
inhalative, systemic, long-term	= 0.0001 mg/m³	EASY TRA v4.1	= 1E-06

1.3. CS4: Worker Contributing Scenario: Rolling, Brushing (PROC10)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
dermal, systemic, long-term	= 2.7429 mg/kg bw/day	EASY TRA v4.1	= 0.249351
inhalative, systemic, long-term	= 24.1996 mg/m³	EASY TRA v4.1	= 0.080665

1.3. CS5: Worker Contributing Scenario: Dipping, immersion and pouring (PROC13)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
dermal, systemic, long-term	= 1.3714 mg/kg bw/day	EASY TRA v4.1	= 0.124675
inhalative, systemic, long-term	= 24.1996 mg/m³	EASY TRA v4.1	= 0.080665

1.4 Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Guidance to check compliance with the exposure scenario:

Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

2. ES 2	Widespread use by professional workers; Coatings and paints, thinners, paint removers (PC9a)

2.1 TITLE SECTION

Exposure Scenario name	Professional application of coatings and inks
Date - Version	01/07/2019 - 1.0
Life Cycle Stage	Widespread use by professional workers
Main user group	Professional uses
Sector(s) of use	Professional uses (SU22)
Product Categories	Coatings and paints, thinners, paint removers (PC9a)

Environment Contributing Scenario	
CS1 Solvent-based process	ERC8a
Worker Contributing Scenario	
CS2 Rolling, Brushing CS3 Spraying CS4 Spraying CS5 Spraying CS6 Dipping, immersion	PROC10
and pouring	PROC11
	PROC11
2.2. CS1: Environment Contributing Scenario: Solvent-based process (ERC8a)	PROC11
	PROC13

Environmental release categories	Widespread release non-reactive processing aid (no inclusion into or onto article, indoor) (ERC8a)

Amount used, frequency and duration of use (or from service life)

Amounts used:

Application rate = 2000 t(onnes)/year

Maximum allowable site tonnage (MSafe): 1934.6 kg/day

Critical compartment for Msafe: freshwater sediment

Emission days: 225 days per year

Conditions and measures related to sewage treatment plant

STP type:

Municipal Sewage Treatment Plant

STP effluent (m^3/day): 2000

Other conditions affecting environmental exposure

Local marine water dilution factor: 100
Local freshwater dilution factor: 10
Receiving surface water flow: 18000 m^3/day

2.2. CS2: Worker Contributing Scenario: Rolling, Brushing (PROC10)	
Process Categories	Roller application or brushing (PROC10)

Product (article) characteristics

Physical form of product:

Liquid

Vapour pressure:

= 1120 Pa

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:

= 480 min

Frequency:

= 5 days per week

Technical and organisational conditions and measures

Technical and organisational measures

Ensure operatives are trained to minimise exposures.	
Provide a good standard of controlled ventilation (5 to 10 air changes per hour).	Inhalation - minimum efficiency of: = 70 %

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

Wear suitable gloves tested to EN374.	Dermal - minimum efficiency of: = 90 %

Other conditions affecting worker exposure

Indoor use
Professional use
Temperature: Covers use at ambient temperatures.

2.2. CS3: Worker Contributing Scenario: Spraying (PROC11)

Process Categories	Non industrial spraying (PROC11)

Product (article) characteristics

Physical form of product:

Liquid

Vapour pressure:

= 1120 Pa

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:

= 480 min

Frequency:

= 5 days per week

Technical and organisational conditions and measures

Technical and organisational measures

Ensure operatives are trained to minimise exposures.
Ensure regular inspection, cleaning and maintenance of equipment and machines.

Ensure that direct skin contact is avoided.
Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed.
Ensure segregation of worker from the source.
Ensure that a spraying booth is used.

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

Wear suitable gloves tested to EN374.	Dermal - minimum efficiency of: = 90 %
Wear an impervious suit.	

Other conditions affecting worker exposure

Indoor use
Professional use
Temperature: Covers use at ambient temperatures.

Additional good practice advice. Obligations according to Article 37(4) of REACH do not apply.

Additional Good Practice Advice:

Ensure that a spraying booth is used.

2.2. CS4: Worker Contributing Scenario: Spraying (PROC11)

Process Categories	Non industrial spraying (PROC11)

Product (article) characteristics

Physical form of product:

Liquid

Vapour pressure:

= 1120 Pa

Concentration of substance in product:

Covers concentrations up to 45 %

Amount used, frequency and duration of use/exposure

Duration:

= 480 min

Frequency:

= 5 days per week

Technical and organisational conditions and measures

Technical and organisational measures

Ensure operatives are trained to minimise exposures.
Ensure regular inspection, cleaning and maintenance of equipment and machines.
Ensure that direct skin contact is avoided.
Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed.
Open doors and windows.
Local exhaust ventilation

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

Wear suitable gloves tested to EN374.	Dermal - minimum efficiency of: = 90 %
Wear an impervious suit.	

Other conditions affecting worker exposure

Indoor use
Professional use
Temperature: Covers use at ambient temperatures.

2.2. CS5: Worker Contributing Scenario: Spraying (PROC11)

Process Categories	Non industrial spraying (PROC11)

Product (article) characteristics

Physical form of product:

Liquid

Vapour pressure:

= 1120 Pa

Concentration of substance in product:

Covers concentrations up to 45 %

Amount used, frequency and duration of use/exposure

Duration:

= 480 min

Frequency:

= 5 days per week

Technical and organisational conditions and measures

Technical and organisational measures

Ensure operatives are trained to minimise exposures.
Ensure regular inspection, cleaning and maintenance of equipment and machines.
Ensure that direct skin contact is avoided.
Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed.
Open doors and windows.

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

Wear suitable gloves tested to EN374.	Dermal - minimum efficiency of: = 90 %
Wear an impervious suit.	
Wear suitable respiratory protection.	

Other conditions affecting worker exposure

Indoor use
Professional use
Temperature: Covers use at ambient temperatures.

2.2. CS6: Worker Contributing Scenario: Dipping, immersion and pouring (PROC13)

Process Categories	Treatment of articles by dipping and pouring (PROC13)

Product (article) characteristics

Physical form of product:

Liquid

Vapour pressure:

= 1120 Pa

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:

= 480 min

Frequency:

= 5 days per week

Technical and organisational conditions and measures

Technical and organisational measures

Ensure operatives are trained to minimise exposures.	
Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed.	
Provide a good standard of controlled ventilation (5 to 10 air changes per hour).	Inhalation - minimum efficiency of: = 70 %

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

Wear suitable gloves tested to EN374.	Dermal - minimum efficiency of: = 90 %

Other conditions affecting worker exposure

Indoor use
Professional use
Temperature: Covers use at ambient temperatures.

2.3 Exposure estimation and reference to its source

2.3. CS1: Environment Contributing Scenario: Solvent-based process (ERC8a)

Release route	Release rate	Release estimation method
Air	99 %	N/A
Water	1 %	N/A
soil	0 %	N/A

protection target	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
freshwater sediment	N/A	EASY TRA v4.1	= 0.012923

2.3. CS2: Worker Contributing Scenario: Rolling, Brushing (PROC10)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
dermal, systemic, long-term	= 2.7429 mg/kg bw/day	EASY TRA v4.1	= 0.249351
inhalative, systemic, long-term	= 145.1979 mg/m³	EASY TRA v4.1	= 0.483993

2.3. CS3: Worker Contributing Scenario: Spraying (PROC11)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
dermal, systemic, long-term	= 10.7143 mg/kg bw/day	EASY TRA v4.1	= 0.974026
inhalative, systemic, long-term	= 0.0001 mg/m³	EASY TRA v4.1	= 1E-06

2.3. CS4: Worker Contributing Scenario: Spraying (PROC11)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
dermal, systemic, long-term	= 4.8214 mg/kg bw/day	EASY TRA v4.1	= 0.438312
inhalative, systemic, long-term	= 153 mg/m³	EASY TRA v4.1	= 0.51

2.3. CS5: Worker Contributing Scenario: Spraying (PROC11)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
dermal, systemic, long-term	= 4.8214 mg/kg bw/day	EASY TRA v4.1	= 0.438312
inhalative, systemic, long-term	= 116 mg/m³	EASY TRA v4.1	= 0.386667

2.3. CS6: Worker Contributing Scenario: Dipping, immersion and pouring (PROC13)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
dermal, systemic, long-term	= 1.3714 mg/kg bw/day	EASY TRA v4.1	= 0.124675
inhalative, systemic, long-term	= 145.1979 mg/m³	EASY TRA v4.1	= 0.483993

2.4 Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Guidance to check compliance with the exposure scenario:

Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

3. ES 3	Consumer use; Coatings and paints, thinners, paint removers (PC9a)

3.1 TITLE SECTION

Exposure Scenario name	Consumer application of coatings
Date - Version	01/07/2019 - 1.0
Life Cycle Stage	Consumer use
Main user group	Consumer uses
Sector(s) of use	Consumer uses (SU21)
Product Categories	Coatings and paints, thinners, paint removers (PC9a)

Environment Contributing Scenario	
CS1 Solvent-based process	ERC8a

Consumer Contributing Scenario	
CS2 Consumer CS3 Consumer CS4 Consumer CS5 Consumer CS6 Consumer CS7	PC9a
Consumer CS8 Consumer CS9 Consumer CS10 Consumer CS11 Consumer	PC9a
	PC9a
3.2. CS1: Environment Contributing Scenario: Solvent-based process (ERC8a)	PC9a
	PC9a
	PC9a
	PC9a
	PC9a
	PC9a
	PC9a

Environmental release categories	Non-reactive processing aid (no inclusion into or onto article, indoor) (ERC8a)

Amount used, frequency and duration of use (or from service life)

Amounts used:

Application rate = 1000 t(onnes)/year

Maximum allowable site tonnage (MSafe): 111.9 kg/day

Critical compartment for Msafe: freshwater sediment

Emission days: 365 days per year

Other conditions affecting environmental exposure

Local marine water dilution factor: 100
Local freshwater dilution factor: 10
Receiving surface water flow: 18000 m^3/day

3.2. CS2: Consumer Contributing Scenario: Consumer (PC9a)

Product Categories	Coatings and paints, thinners, paint removers (PC9a)

Product (article) characteristics

Vapour pressure:

= 1120 Pa

Concentration of substance in product:

Covers concentrations up to 2 %

Amount used, frequency and duration of use/exposure

Amounts used:

Amount per use = 1E-05 mg

Other conditions affecting consumers exposure

Temperature: Covers use at ambient temperatures.

3.2. CS3: Consumer Contributing Scenario: Consumer (PC9a)

Product Categories	Coatings and paints, thinners, paint removers (PC9a)

Product (article) characteristics

Vapour pressure:

= 1120 Pa

Concentration of substance in product:

Covers concentrations up to 1.3 %

Amount used, frequency and duration of use/exposure

Amounts used:

Amount per use = 0.0005 mg

Duration:

Exposure duration = 60 min

Duration:

Application interval = 60 min

Other conditions affecting consumers exposure

Room size: Release area = 2 m^2
Temperature: Covers use at ambient temperatures.

3.2. CS4: Consumer Contributing Scenario: Consumer (PC9a)

Product Categories	Coatings and paints, thinners, paint removers (PC9a)

Product (article) characteristics

Vapour pressure:

= 1120 Pa

Concentration of substance in product:

Covers concentrations up to 1.3 %

Amount used, frequency and duration of use/exposure

Amounts used:

= 3E-05 kg/min

Duration:

Exposure duration = 132 min

Duration:

Application interval = 120 min

Other conditions affecting consumers exposure

Room size: Release area = 10 m^2
Temperature: Covers use at ambient temperatures.

3.2. CS5: Consumer Contributing Scenario: Consumer (PC9a)

Product Categories	Coatings and paints, thinners, paint removers (PC9a)

Product (article) characteristics

Vapour pressure:

= 1120 Pa

Concentration of substance in product:

Covers concentrations up to 18 %

Amount used, frequency and duration of use/exposure

Amounts used:

= 0.0001 kg/min

Duration:

Spray duration = 900 sec

Duration:

Exposure duration = 20 min

Information and behavioural advice for consumers

Information and behavioural advice for consumers:

Ensure spraying away from persons.

Other conditions affecting consumers exposure

Room size: = 34 m^3
Temperature: Covers use at ambient temperatures.
Ventilation rate: Open doors and windows. = 1.5

3.2. CS6: Consumer Contributing Scenario: Consumer (PC9a)

Product Categories	Coatings and paints, thinners, paint removers (PC9a)

Product (article) characteristics

Vapour pressure:

= 1120 Pa

Concentration of substance in product:

Covers concentrations up to 1.3999 %

Amount used, frequency and duration of use/exposure

Amounts used:

= 3E-05 kg/min

Duration:

Exposure duration = 132 min

Duration:

Application interval = 120 min

Other conditions affecting consumers exposure

Room size: Release area = 10 m^2
Temperature: Covers use at ambient temperatures.

3.2. CS7: Consumer Contributing Scenario: Consumer (PC9a)

Product Categories	Coatings and paints, thinners, paint removers (PC9a)

Product (article) characteristics

Vapour pressure:

= 1120 Pa

Concentration of substance in product:

Covers concentrations up to 17 %

Amount used, frequency and duration of use/exposure

Amounts used:

Amount per use = 0.0001 kg

Duration:

Exposure duration = 180 min

Duration:

Application interval = 120 min

Other conditions affecting consumers exposure

Room size: Release area = 0.025 m^2
Temperature: Covers use at ambient temperatures.

3.2. CS8: Consumer Contributing Scenario: Consumer (PC9a)

Product Categories	Coatings and paints, thinners, paint removers (PC9a)

Product (article) characteristics

Vapour pressure:

= 1120 Pa

Concentration of substance in product:

Covers concentrations up to 1.1 %

Amount used, frequency and duration of use/exposure

Amounts used:

= 3E-05 kg/min

Duration:

Exposure duration = 132 min

Duration:

Application interval = 120 min

Other conditions affecting consumers exposure

Room size: Release area = 10 m^2
Temperature: Covers use at ambient temperatures.

3.2. CS9: Consumer Contributing Scenario: Consumer (PC9a)

Product Categories	Coatings and paints, thinners, paint removers (PC9a)

Product (article) characteristics

Vapour pressure:

= 1120 Pa

Concentration of substance in product:

Covers concentrations up to 2 %

Amount used, frequency and duration of use/exposure

Amounts used:

Amount per use = 0.019 kg

Other conditions affecting consumers exposure

Temperature: Covers use at ambient temperatures.

3.2. CS10: Consumer Contributing Scenario: Consumer (PC9a)

Product Categories	Coatings and paints, thinners, paint removers (PC9a)

Product (article) characteristics

Vapour pressure:

= 1120 Pa

Concentration of substance in product:

Covers concentrations up to 2 %

Amount used, frequency and duration of use/exposure

Amounts used:

= 3E-05 kg/min

Duration:

Exposure duration = 240 min

Duration:

Application interval = 240 min

Other conditions affecting consumers exposure

Room size: Release area = 5 m^2
Temperature: Covers use at ambient temperatures.

3.2. CS11: Consumer Contributing Scenario: Consumer (PC9a)

Product Categories	Coatings and paints, thinners, paint removers (PC9a)

Product (article) characteristics

Vapour pressure:

= 1120 Pa

Concentration of substance in product:

Covers concentrations up to 0.5999 %

Amount used, frequency and duration of use/exposure

Amounts used:

= 3E-05 kg/min

Duration:

Exposure duration = 132 min

Duration:

Application interval = 120 min

Other conditions affecting consumers exposure

Room size: Release area = 15 m^2
Temperature: Covers use at ambient temperatures.

3.3 Exposure estimation and reference to its source

3.3. CS1: Environment Contributing Scenario: Solvent-based process (ERC8a)

Release route	Release rate	Release estimation method

Air	99 %	N/A
Water	1 %	N/A
soil	0 %	N/A

protection target	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
freshwater sediment	N/A	EASY TRA v4.1	= 0.004497

3.2. CS2: Consumer Contributing Scenario: Consumer (PC9a)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
dermal, systemic, short-term	= 0.0031 mg/kg bw/day	EASY TRA v4.1	= 0.000513

Additional information on exposure estimation:

Dermal model: instant application

3.2. CS3: Consumer Contributing Scenario: Consumer (PC9a)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
dermal, systemic, short-term	= 0.1 mg/kg bw/day	EASY TRA v4.1	= 0.016667
inhalative, systemic, short-term	= 268.3666 mg/m³	EASY TRA v4.1	= 0.894555

Additional information on exposure estimation:

Dermal model: instant application
Inhalation model: exposure to vapour - evaporation

3.2. CS4: Consumer Contributing Scenario: Consumer (PC9a)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
dermal, systemic, short-term	= 0.72 mg/kg bw/day	EASY TRA v4.1	= 0.12
inhalative, systemic, short-term	= 237.9923 mg/m³	EASY TRA v4.1	= 0.793308

Additional information on exposure estimation:

Dermal model: constant application rate
Inhalation model: exposure to vapour - evaporation

3.2. CS5: Consumer Contributing Scenario: Consumer (PC9a)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
dermal, systemic, short-term	= 4.1538 mg/kg bw/day	EASY TRA v4.1	= 0.692308

inhalative, systemic, short-term	= 67.715 mg/m³	EASY TRA v4.1	= 0.225717

Additional information on exposure estimation:

Dermal model: constant application rate
Inhalation model: exposure to spray/dust

3.2. CS6: Consumer Contributing Scenario: Consumer (PC9a)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
dermal, systemic, short-term	= 0.7754 mg/kg bw/day	EASY TRA v4.1	= 0.129231
inhalative, systemic, short-term	= 240.316 mg/m³	EASY TRA v4.1	= 0.801053

Additional information on exposure estimation:

Dermal model: constant application rate
Inhalation model: exposure to vapour - evaporation

3.2. CS7: Consumer Contributing Scenario: Consumer (PC9a)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
dermal, systemic, short-term	= 0.2429 mg/kg bw/day	EASY TRA v4.1	= 0.040476
inhalative, systemic, short-term	= 273.8832 mg/m³	EASY TRA v4.1	= 0.912944

Additional information on exposure estimation:

Dermal model: instant application
Inhalation model: exposure to vapour - evaporation

3.2. CS8: Consumer Contributing Scenario: Consumer (PC9a)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
dermal, systemic, short-term	= 0.6092 mg/kg bw/day	EASY TRA v4.1	= 0.101538
inhalative, systemic, short-term	= 261.7915 mg/m³	EASY TRA v4.1	= 0.872638

Additional information on exposure estimation:

Dermal model: constant application rate
Inhalation model: exposure to vapour - evaporation

3.2. CS9: Consumer Contributing Scenario: Consumer (PC9a)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
dermal, systemic, short-term	= 5.8462 mg/kg bw/day	EASY TRA v4.1	= 0.974359

Additional information on exposure estimation:

Dermal model: instant application

3.2. CS10: Consumer Contributing Scenario: Consumer (PC9a)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
dermal, systemic, short-term	= 2.2154 mg/kg bw/day	EASY TRA v4.1	= 0.369231
inhalative, systemic, short-term	= 185.2461 mg/m³	EASY TRA v4.1	= 0.617487

Additional information on exposure estimation:

Dermal model: constant application rate
Inhalation model: exposure to vapour - evaporation

3.2. CS11: Consumer Contributing Scenario: Consumer (PC9a)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
dermal, systemic, short-term	= 0.3323 mg/kg bw/day	EASY TRA v4.1	= 0.055385
inhalative, systemic, short-term	= 280.4306 mg/m³	EASY TRA v4.1	= 0.934769

Additional information on exposure estimation:

Dermal model: constant application rate
Inhalation model: exposure to vapour - evaporation

3.4 Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Guidance to check compliance with the exposure scenario:

Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.