

# SAFETY DATA SHEET

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

## 1.1. Product identifier

#### Trade name

L19010 - UV-A1 clear coat

# Product no.

L19010

#### **REACH registration number**

Not applicable

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

#### Relevant identified uses of the substance or mixture

UV-A1clear coat for autobody use

## **Uses advised against**

•

The full text of any mentioned and identified use categories are given in section 16

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

#### **Company and address**

HBC System Smarttool Production ApS

Hobrovej 961-963

9530 Stövring

Denmark

tel:+45 70 22 70 70

#### **Contact person**

Vibeke Jørgensen

#### E-mail

info@hbc-system.com

#### **SDS** date

2016-06-15

#### **SDS Version**

1004.0

# 1.4. Emergency telephone number

Use your national or local emergency number

See section 4 "First aid measures"

# **SECTION 2: Hazards identification**

## **▼2.1. Classification of the substance or mixture**

Flam. Liq. 2; H225 Eye Dam. 1; H318 Skin Sens. 1; H317 Resp. Sens. 1; H334 Skin Irrit. 2; H315 STOT SE 3; H336 Aquatic Chronic 3; H412

See full text of H-phrases in section 2.2.

# 2.2. Label elements

**▼**Hazard pictogram(s)





## Signal word

Danger

## ▼Hazard statement(s)

Highly flammable liquid and vapour. (H225)

Causes serious eye damage. (H318)

May cause an allergic skin reaction. (H317)

May cause allergy or asthma symptoms or breathing difficulties if inhaled. (H334)

Causes skin irritation. (H315)

May cause drowsiness or dizziness. (H336)

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

General

Prevention Avoid breathing mist/vapours/fume/spray. (P261).

Wear protective gloves/protective clothing/eye protection. (P280).

**▼Safety** Immediately call a POISON CENTER/doctor. (P310). Response

statement(s) IF IN EYES: Rinse cautiously with water for several minutes. Remove

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

(P305+P351+P338).

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

Disposal Dispose of contents/container to an approved waste disposal plant. (P501).

▼Identity of the substances primarily responsible for the major health hazards

ethyl acetate, 2,4,6-trioxo-1,3,5-triazine-1,3,5,2H,4H,6H,-triyl,tri-2,1-ethanediyl,triacrylate, cyclohexanone, Ethyl phenyl(2,4,6-trimethylbenzoyl) phosphinate, Hexane-1,6-diisocyanato-,homopolymer,2hydroxyethyl, acrylate blocked

#### **▼2.3. Other hazards**

This product contains an organic solvent. Repeated exposure to organic solvents can result in damage to the nervous system and inner organs, such as the liver and kidneys.

#### VAdditional labelling

Contains hexamethylene diacrylate hexane-1,6-diol diacrylate, 2-Propenoic acid, reaction products with pentaerythritol, 1-acetyl-4-(3-dodecyl-2,5-dioxo-1-pyrrolidinyl)-2,2,6,6-tetramethylpiperidine, 2,2bis(acryloyloxymethyl)butyl acrylate trimethylolpropane triacrylate. May produce an allergic reaction.

# **▼**Additional warnings

**VOC** 

VOC-MAX: 555 g/l, MAXIMUM VOC CONTENT (B/e): 840 g/l.

## **SECTION 3: Composition/information on ingredients**

#### ▼3.1/3.2. Substances/Mixtures

NAME: ethyl acetate

**IDENTIFICATION NOS.:** CAŚ-no: 141-78-6 EC-no: 205-500-4 REACH-no: 01-2119475103-46 Index-no: 607-022-00-5 CONTENT:

40-60%

CLP CLASSIFICATION: Flam. Liq. 2, STOT SE 3, Eye Irrit. 2 H225, H319, H336, EUH066

NOTE:

NAME: (octahydro-4,7-methano-1H-indenediyl)bis(methylene) diacrylate

**IDENTIFICATION NOS.:** CAS-no: 42594-17-2 EC-no: 255-901-3

CONTENT: 5-10% CLP CLASSIFICATION: Skin Irrit. 2 H315

2,4,6-trioxo-1,3,5-triazine-1,3,5,2H,4H,6H,-triyl,tri-2,1-ethanediyl,triacrylate NAME:

**IDENTIFICATION NOS.:** CAS-no: 40220-08-4 EC-no: 254-843-6

CONTENT: 5-10% CLP CLASSIFICATION: Eye Dam. 1

#### According to EC-Regulation 1907/2006 (REACH)



H318

NAME: n-butyl acetate

IDENTIFICATION NOS.: CAS-no: 123-86-4 EC-no: 204-658-1 REACH-no: 01-2119485493-29 Index-no: 607-025-00-1

CONTENT: 3-5%

CLP CLASSIFICATION: Flam. Liq. 3, STOT SE 3 H226, H336, EUH066

NOTE:

NAME: cyclohexanone

IDENTIFICATION NOS.: CAS-no: 108-94-1 EC-no: 203-631-1 REACH-no: 01-2119453616-35 Index-no: 606-010-00-7

CONTENT: 3-5

CLP CLASSIFICATION: Flam. Liq. 3, Acute Tox. 4, Skin Irrit. 2, Eye Dam. 1

H226, H302, H312, H315, H318, H332

NOTE:

NAME: acetone propan-2-one propanone

IDENTIFICATION NOS.: CAS-no: 67-64-1 EC-no: 200-662-2 REACH-no: 01-2119471330-49 Index-no: 606-001-00-8

CONTENT: 1-3%

CLP CLASSIFICATION: Flam. Liq. 2, STOT SE 3, Eye Irrit. 2 H225, H319, H336, EUH066

NOTE:

NAME: Ethyl phenyl(2,4,6-trimethylbenzoyl) phosphinate

IDENTIFICATION NOS.: CAS-no: 84434-11-7 EC-no: 282-810-6

CONTENT: 1-39

CLP CLASSIFICATION: Skin Sens. 1, Aquatic Chronic 2

H317, H411

NAME: Hexane-1,6-diisocyanato-,homopolymer,2-hydroxyethyl,acrylate blocked

IDENTIFICATION NOS.: CAS-no: 264888-31-5

CONTENT: 1-3%

CLP CLASSIFICATION: Skin Irrit. 2, Eye Irrit. 2, Resp. Sens. 1, Skin Sens. 1

H315, H317, H319, H334

NAME: hexamethylene diacrylate hexane-1,6-diol diacrylate

IDENTIFICATION NOS.: CAS-no: 13048-33-4 EC-no: 235-921-9 REACH-no: 01-2119484737-22 Index-no: 607-109-00-8

CONTENT: <1%

CLP CLASSIFICATION: Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1, Aquatic Chronic 3

H315, H317, H319, H412

NAME: 2-Propenoic acid, reaction products with pentaerythritol

IDENTIFICATION NOS.: CAS-no: 1245638-61-2 REACH-no: 01-2119490003-49

CONTENT: <1°

CLP CLASSIFICATION: Acute Tox. 4, Skin Irrit. 2, Eye Dam. 1, Skin Sens. 1, Aquatic Chronic 2

H302, H315, H317, H318, H411

NAME: 1-acetyl-4-(3-dodecyl-2,5-dioxo-1-pyrrolidinyl)-2,2,6,6-tetramethylpiperidine

IDENTIFICATION NOS.: CAS-no: 106917-31-1 EC-no: 411-930-5 REACH-no: 01-0000015927-59 Index-no: 613-229-00-1

CONTENT: <1%

CLP CLASSIFICATION: Skin Irrit. 2, Skin Sens. 1, Aquatic Acute 1, Aquatic Chronic 1

H315, H317, H400, H410

NAME: 2,2-bis(acryloyloxymethyl)butyl acrylate trimethylolpropane triacrylate IDENTIFICATION NOS.: CAS-no: 15625-89-5 EC-no: 239-701-3 Index-no: 607-111-00-9

CONTENT: <1%

CLP CLASSIFICATION: Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1

H315, H317, H319

(\*) See full text of H-phrases in chapter 16. Occupational exposure limits are listed in section 8, if these are available. S = Organic solvent

#### Other informations

ATEmix(inhale, vapour) > 20 ATEmix(dermal) > 2000 ATEmix(oral) > 2000

Eye Cat. 1 Sum = Sum(Ci/S(G)CLi) = 2,6664 - 3,9996 Skin Cat. 2 Sum = Sum(Ci/S(G)CLi) = > 1 - 1,32

N chronic (CAT 3) Sum = Sum(Ci/M(chronic)i\*25\*0.1\*10^CATi) = 1,6 - 2,4

N acute (CAT 1) Sum = Sum(Ci/M(acute)i\*25) = 0,016 - 0,024

# **SECTION 4: First aid measures**

#### 4.1. Description of first aid measures



#### **▼**General information

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

#### **▼**Inhalation

Get the injured person into fresh air. Make sure there is always someone with the injured person. Prevent shock by keeping the injured person warm and calm. If the person stops breathing, give mouth-to-mouth resuscitation. If unconscious, roll the injured person onto side with the top leg bent at both knee and hip. Call an ambulance.

#### Skin contact

Remove contaminated clothing and shoes at once. Skin that has come in contact with the material must be washed thoroughly with water and soap. Skin cleanser can be used. DO NOT use solvents or thinners.

#### **▼Eye contact**

Remove contact lenses. Flush eyes with plenty of water (20-30°C) for at least 15 minutes and continue until irritation stops. Make sure you flush under the upper and lower eyelids. Contact a doctor at once.

#### **V**Ingestion

In the case of ingestion, contact a doctor immediately and take this safety data sheet or the label from the material with you. If the person is conscious, give them water. DO NOT try to induce vomiting, unless this is recommended by a doctor. Hold head facing down so that no vomit runs back into the mouth and throat. Prevent shock by keeping the injured person warm and calm. Give mouth-to-mouth resuscitation if breathing stops. If unconscious, roll the injured person onto side with the top leg bent at both knee and hip. Call an ambulance.

#### **Burns**

Rinse with water until the pain stops and continue for 30 minutes.

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

Neurotoxic effect: This product contains organic solvents, which can have an effect on the nervous system. Symptoms of neurotoxicity can be: loss of appetite, headache, dizziness, whistling in the ears, tingling sensations in the skin, sensitivity to the cold, cramps, difficulty in concentrating, tiredness, etc. Repeated exposure to solvents can result in the breaking down of the skin's natural fat layer. The skin will then be more prone to absorb dangerous substances, e.g. allergens.

Sensitivity effects: This product contains substances which can give an allergic reaction on contact with skin. The allergic reaction will typically set in 12-72 hours after exposure as the substance penetrates the skin and reacts with proteins in the outer skin. The body's immune system sees the chemically changed protein as a foreign body and will try to destroy it.

Sensitivity effects: This product contains substances which can give an allergic reaction when inhaled. The allergic reaction allergy will typically set in an hour after exposure and give an inflammatory reaction in the lungs.

Irritation effects: This product contains substances which cause irritation to skin and eyes, or when inhaled. Contact with locally irritative substances can cause the area of contact to be more prone to absorb damaging substances such as allergens.

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

IF exposed or concerned:

Get immediate medical advice/attention.

# Information to medics

Bring this safety data sheet.

# **SECTION 5: Firefighting measures**

## ▼5.1. Extinguishing media

Recommended: alcohol-resistant foam, carbonic acid, powder, water mist. Water jets should not be used, since they can spread the fire.

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

If the product is exposed to high temperatures, as in the case of fire, dangerous catabolic substances are produced. These are: Nitrogen oxides. Carbon oxides. Fire will result in thick black smoke. Exposure to catabolic products can damage your health. Fire fighters should use proper protection gear. Closed containers, which are exposed to fire, should be cooled with water. Do not let fire-extinguishing water run into sewers and other water courses.

#### **▼5.3.** Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact.



#### **SECTION 6: Accidental release measures**

## ▼ 6.1. Personal precautions, protective equipment and emergency procedures

Avoid inhalation of vapours from waste material. Avoid direct contact with spilled substances. Stores that have not ignited must be cooled by water mist. Where possible, remove flammable materials. Make sure there is sufficient ventilation.

# ▼ 6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc. In the event of a leakage to the surroundings, contact the local environmental authorities. Consider putting up waste collecting trays/basins to prevent leakage to the surroundings.

#### ▼ 6.3. Methods and material for containment and cleaning up

Use sand, sawdust, earth, vermiculite, diatomaceous earth to contain and collect non-combustible absorbent materials and place in container for disposal, according to local regulations. Cleaning should be done as far as possible using normal cleaning agents. Solvents should be avoided.

# ▼ 6.4. Reference to other sections

See section on "Disposal considerations" with regard to the handling of waste. See section on 'Exposure controls/personal protection' for protective measures.

# **SECTION 7: Handling and storage**

## ▼7.1. Precautions for safe handling

Consider putting up waste collecting trays/basins to prevent leakage to the surroundings. See section on 'Exposure controls/personal protection' for information on personal protection. Avoid direct contact with the product.

# ▼ 7.2. Conditions for safe storage, including any incompatibilities

Always store in containers of the same material as the original. Must be stored in a cool and ventilated area, away from possible sources of combustion.

## **V**Storage temperature

No data available.

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

This product should only be used for applications described in Section 1.2

## **SECTION 8: Exposure controls/personal protection**

## 8.1. Control parameters

#### VOEL

acetone propan-2-one propanone (EH40/2005)

Long-term exposure limit (8-hour TWA reference period): 500 ppm | 1210 mg/m3 Short-term exposure limit (15-minute reference period): 1500 ppm | 3620 mg/m3

cyclohexanone (EH40, 2005)

Long-term exposure limit (8-hour TWA reference period): 10 ppm | - mg/m3

Short-term exposure limit (15-minute reference period): 20 ppm | - mg/m3

Comments: Sk BMGV (Bmgv = Biological Monitoring Guidance Value. Sk = Can be absorbed through skin. )

n-butyl acetate (EH40/2005, 2005)

Long-term exposure limit (8-hour TWA reference period): 150 ppm | 724 mg/m3

Short-term exposure limit (15-minute reference period): 200 ppm | 966 mg/m3

ethyl acetate (EH40/2005, 2005)

Long-term exposure limit (8-hour TWA reference period): 200 ppm | - mg/m3

Short-term exposure limit (15-minute reference period): 400 ppm | - mg/m3

#### **VDNEL / PNEC**

DNEL (ethyl acetate): 734 mg/m3

Exposure: Inhalation

Duration of Exposure: Short term – Systemic effects - General population

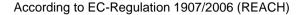
DNEL (ethyl acetate): 1468 mg/m3

Exposure: Inhalation

Duration of Exposure: Short term - Systemic effects - Workers

DNEL ( ethyl acetate ): 4,5 mg/kg

Exposure: Oral





Duration of Exposure: Long term - Systemic effects - General population

DNEL (ethyl acetate): 734 mg/m3

Exposure: Inhalation

Duration of Exposure: Long term - Local effects - Workers

DNEL (ethyl acetate): 367 mg/m3

Exposure: Inhalation

Duration of Exposure: Long term - Local effects - General population

DNEL (ethyl acetate): 1468 mg/m3

Exposure: Inhalation

Duration of Exposure: Short term - Local effects - Workers

DNEL (ethyl acetate): 734 mg/m3

Exposure: Inhalation

Duration of Exposure: Short term - Local effects - General population

DNEL (ethyl acetate): 63 mg/kg

Exposure: Dermal

Duration of Exposure: Long term - Systemic effects - Workers

DNEL (ethyl acetate): 37 mg/kg

Exposure: Dermal

Duration of Exposure: Long term - Systemic effects - General population

DNEL (ethyl acetate): 734 mg/m3

Exposure: Inhalation

Duration of Exposure: Long term - Systemic effects - Workers

DNEL ( ethyl acetate ): 367 mg/m3

Exposure: Inhalation

Duration of Exposure: Long term - Systemic effects - General population

DNEL (n-butyl acetate): 102,34 mg/m3

Exposure: Inhalation

Duration of Exposure: Long term - Systemic effects - General population

DNEL (n-butyl acetate): 960 mg/m3

Exposure: Inhalation

Duration of Exposure: Short term - Local effects - Workers

DNEL (n-butyl acetate): 960 mg/m3

Exposure: Inhalation

Duration of Exposure: Short term - Systemic effects - Workers

DNEL (n-butyl acetate): 480 mg/m3

Exposure: Inhalation

Duration of Exposure: Long term - Systemic effects - Workers

DNEL (n-butyl acetate): 480 mg/m3

Exposure: Inhalation

Duration of Exposure: Long term - Local effects - Workers

DNEL (n-butyl acetate): 859,7 mg/m3

Exposure: Inhalation

Duration of Exposure: Short term - Systemic effects - General population

DNEL (n-butyl acetate): 102,34 mg/m3

Exposure: Inhalation

Duration of Exposure: Long term – Local effects - General population

DNEL (n-butyl acetate): 859,7 mg/m3

Exposure: Inhalation

Duration of Exposure: Short term - Local effects - General population

DNEL (acetone propan-2-one propanone): 186 mg/kg

Exposure: Dermal

Duration of Exposure: Long term – Systemic effects - Workers

DNEL (acetone propan-2-one propanone): 62 mg/kg

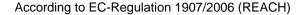
Exposure: Dermal

Duration of Exposure: Long term - Systemic effects - General population

DNEL (acetone propan-2-one propanone): 2420 mg/m3

Exposure: Inhalation

Duration of Exposure: Short term - Systemic effects - Workers





DNEL (acetone propan-2-one propanone): 1210 mg/m3

Exposure: Inhalation

Duration of Exposure: Long term - Systemic effects - Workers

DNEL (acetone propan-2-one propanone): 200 mg/m3

Exposure: Inhalation

Duration of Exposure: Long term - Systemic effects - General population

DNEL (acetone propan-2-one propanone): 62 mg/kg

Exposure: Oral

Duration of Exposure: Long term - Systemic effects - General population

DNEL (cyclohexanone): 4 mg/kg

Exposure: Dermal

Duration of Exposure: Long term - Systemic effects - Workers

DNEL (cyclohexanone): 1 mg/kg

Exposure: Dermal

Duration of Exposure: Long term – Systemic effects - General population

DNEL (cyclohexanone): 40 mg/m3

Exposure: Inhalation

Duration of Exposure: Long term - Systemic effects - Workers

DNEL (cyclohexanone): 10 mg/m3

**Exposure: Inhalation** 

Duration of Exposure: Long term - Systemic effects - General population

DNEL (cyclohexanone): 1,5 mg/kg

Exposure: Oral

Duration of Exposure: Long term – Systemic effects - General population DNEL (hexamethylene diacrylate hexane-1,6-diol diacrylate): 24,48 mg/m3

Exposure: Inhalation

Duration of Exposure: Long term - Systemic effects - Workers

DNEL (2-Propenoic acid, reaction products with pentaerythritol): 1,04 mg/kg

Exposure: Oral

Duration of Exposure: Long term - Systemic effects - Workers

DNEL (2-Propenoic acid, reaction products with pentaerythritol): 7,35 mg/m3

Exposure: Inhalation

Duration of Exposure: Long term - Systemic effects - Workers

PNEC ( ethyl acetate ): 0,26 mg/L

Exposure: Freshwater

PNEC ( ethyl acetate ): 0,026 mg/L

Exposure: Marine water

PNEC ( ethyl acetate ): 1,65 mg/L Exposure: Intermittent release

PNEC ( ethyl acetate ): 1,25 mg/kg Exposure: Freshwater sediment

PNEC ( ethyl acetate ): 0,125 mg/kg Exposure: Marine water sediment

PNEC ( ethyl acetate ): 0,24 mg/kg

Exposure: Soil

PNEC (n-butyl acetate): 35,6 mg/L Exposure: Sewage Treatment Plant

PNEC (n-butyl acetate): 0,18 mg/L

Exposure: Freshwater

PNEC (n-butyl acetate): 0,018 mg/L

Exposure: Marine water

PNEC (n-butyl acetate): 0,36 mg/L Exposure: Intermittent release

PNEC (n-butyl acetate): 0,981 mg/kg Exposure: Freshwater sediment

PNEC (n-butyl acetate): 0,0981 mg/kg

#### According to EC-Regulation 1907/2006 (REACH)



Exposure: Marine water sediment

PNEC (n-butyl acetate): 0,09903 mg/kg

Exposure: Soil

PNEC (acetone propan-2-one propanone): 21 mg/L

Exposure: Intermittent release

PNEC (acetone propan-2-one propanone): 30,4 mg/kg

Exposure: Freshwater sediment

PNEC (acetone propan-2-one propanone): 3,04 mg/kg

Exposure: Marine water sediment

PNEC (acetone propan-2-one propanone): 33,3 mg/kg

Exposure: Soil

PNEC (acetone propan-2-one propanone): 10,6 mg/kg

Exposure: Freshwater

PNEC (acetone propan-2-one propanone): 1,06 mg/kg

Exposure: Marine water

PNEC (cyclohexanone): 0,512 mg/kg Exposure: Freshwater sediment

PNEC (cyclohexanone): 0,0512 mg/kg Exposure: Marine water sediment

PNEC (cyclohexanone): 0,0435 mg/kg

Exposure: Soil

PNEC (cyclohexanone): 0,01 mg/L

Exposure: Freshwater

PNEC (cyclohexanone): 0,01 mg/L

Exposure: Marine water

PNEC (cyclohexanone): 1 mg/L Exposure: Intermittent release

PNEC (hexamethylene diacrylate hexane-1,6-diol diacrylate): 0,0015 mg/L

Exposure: Freshwater

PNEC (hexamethylene diacrylate hexane-1,6-diol diacrylate): 0,00015 mg/L

Exposure: Marine water

PNEC (hexamethylene diacrylate hexane-1,6-diol diacrylate): 0,0137 mg/kg

Exposure: Soil

PNEC (2-Propenoic acid, reaction products with pentaerythritol): 0,0032 mg/L

Exposure: Freshwater

# 8.2. Exposure controls

▼ Compliance with the stated exposure limits values should be checked on a regular basis.

## **General recommendations**

Observe general occupational hygiene.

## **Exposure scenarios**

If there is an appendix to this safety data sheet, the indicated exposure scenarios must be complied.

# **V**Exposure limits

Trade users are covered by the rules of the working environment legislation on maximum concentrations for exposure. See work hygiene threshold values below.

**V**Appropriate technical measures



Airborne gas and dust concentrations must be kept as low as possible and below the current threshold values (see below). Use for example an exhaust system if the normal air flow in the work room is not sufficient. Make sure that eyewash and emergency showers are clearly marked.

# **▼**Hygiene measures

Whenever you take a break in using this product and when you have finished using it, all exposed areas of the body must be washed. Always wash hands, forearms and face.

# **▼**Measures to avoid environmental exposure

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

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



#### **▼**Generally

Use only CE marked protective equipment.

# **V**Respiratory Equipment

Recommended: A. Class 1 (low capacity). Brown

## **▼Skin protection**

Special work clothing should be used. When working with this product for a long period of time, use a protective suit.

# **▼**Hand protection

Use protective gloves. The concrete work situation is not known. Contact the suppliers of the gloves for help on the glove type. Please note that elastic gloves stretch when used. The thickness of the gloves, and therefore their penetration time, will be reduced. Moreover, the temperature of the glove in use is about 35°C, while the standard test, EN 374-3, is done at 23°C. The penetration time is therefore reduced by a factor of 3.

## **V**Eye protection

Use safety glasses with a side shield.

# **SECTION 9: Physical and chemical properties**

#### ▼9.1. Information on basic physical and chemical properties

Form Colour Odour pH Viscosity Density (g/cm3)

Liquid Transparent Solvent - - 0,96

**▼ Phase changes** 

Melting point (°C) Boiling point (°C) Vapour pressure (mm Hg)

77,1 73,73

Data on fire and explosion hazards

Flashpoint (°C) Ignition (°C) Self ignition (°C)

2 - 427

Explosion limits (Vol %) Oxidizing properties

2,2 - 11,5

Solubility

Solubility in water n-octanol/water coefficient

Insoluble -

**▼9.2. Other information** 

Solubility in fat Additional information

N/A

# **SECTION 10: Stability and reactivity**

## ▼ 10.1. Reactivity

No data available

## ▼ 10.2. Chemical stability

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

## **▼ 10.3. Possibility of hazardous reactions**

No special

#### ▼ 10.4. Conditions to avoid

Avoid static electricity. Do not expose to heat (e.g. sunlight), because it can lead to excess pressure.



Docult

Pouts of exposure

# **▼ 10.5. Incompatible materials**

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

Chaoina

## ▼ 10.6. Hazardous decomposition products

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

# **SECTION 11: Toxicological information**

## 11.1. Information on toxicological effects

# Acute toxicity

Substance	Species	rest	Route of exposure	Result
1-acetyl-4-(3-dodecyl-2,5-diox	Rat	LD50	Oral	> 3000 mg/kg
1-acetyl-4-(3-dodecyl-2,5-diox	Rat	LC50	Inhalation	2,61 mg/L/4h
2-Propenoic acid, reaction pro	Rabbit	LD50		> 2000 mg/kg
2-Propenoic acid, reaction pro	Rat	LD50	Oral	540-1350 mg/kg
hexamethylene diacrylate hex	Rabbit	LD50		3650 mg/kg
hexamethylene diacrylate hex	Rat	LD50	Oral	> 5000 mg/kg
acetone propan-2-one propan	Rabbit	LD50		> 20 ml/kg
acetone propan-2-one propan	Rat	LD50		5500 mg/kg
acetone propan-2-one propan	Rat	LD50	Oral	5800 mg/kg
acetone propan-2-one propan	Rat	LC50	Inhalation	21,09 ppm/8H
cyclohexanone	Rabbit	LD50		1000 mg/kg
cyclohexanone	Rat	LD50	Oral	1620 mg/kg
cyclohexanone	Rat	LD50	Inhalation	8000 mg/L/4h
n-butyl acetate	Rat	LD50	Oral	10768 g/kg
n-butyl acetate	Rabbit	LD50		> 5000 mg/kg
n-butyl acetate	Rat	LD50	Oral	> 6400 mg/kg
n-butyl acetate	Rat	LC50	Inhalation	2000 ppm
n-butyl acetate	Rat	LC50	Inhalation	21.1 mg/l/4h
ethyl acetate	Rabbit	LD50	Oral	4935 mg/kg
ethyl acetate	Rat	LD50	Oral	11,3 g/kg
ethyl acetate	Guinea pig	LD50	Intraperitoneal	709 mg/kg
ethyl acetate	Rat	LC50	Inhalation	1600 mg/L

Toot

## **▼Skin corrosion/irritation**

Causes skin irritation.

Data on substance: 1-acetyl-4-(3-dodecyl-2,5-dioxo-1-pyrrolidinyl)-2,2,6,6-tetramethylpiperidine

Result: Skin irritant

#### **▼**Serious eye damage/irritation

Causes serious eye damage.

Data on substance: 2,4,6-trioxo-1,3,5-triazine-1,3,5,2H,4H,6H,-triyl,tri-2,1-ethanediyl,triacrylate

Organism: Rabbit Result: Eye irritant

#### Respiratory or skin sensitisation

May cause an allergic skin reaction. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Data on substance: 1-acetyl-4-(3-dodecyl-2,5-dioxo-1-pyrrolidinyl)-2,2,6,6-tetramethylpiperidine

Data on substance: 1-acetyl-4-(3-dodecyl-2,5-dioxo-1-pyrrolidinyl)-2,2,6,6-tetramethylpiperidine

Data on substance: 2-Propenoic acid, reaction products with pentaerythritol

Result: skin sensitizer

Data on substance: hexamethylene diacrylate hexane-1,6-diol diacrylate

Organism: Guinea pig Result: skin sensitizer

Data on substance: (octahydro-4,7-methano-1H-indenediyl)bis(methylene) diacrylate

Result: Skin Irritant

## **▼**Germ cell mutagenicity

No data available.

## **▼**Carcinogenicity

No data available.

# **V**Reproductive toxicity

No data available.



## **VSTOT-single exposure**

May cause drowsiness or dizziness.

## **▼STOT-repeated exposure**

No data available.

#### **V**Aspiration hazard

No data available.

# **▼Long term effects**

Neurotoxic effect: This product contains organic solvents, which can have an effect on the nervous system. Symptoms of neurotoxicity can be: loss of appetite, headache, dizziness, whistling in the ears, tingling sensations in the skin, sensitivity to the cold, cramps, difficulty in concentrating, tiredness, etc. Repeated exposure to solvents can result in the breaking down of the skin's natural fat layer. The skin will then be more prone to absorb dangerous substances, e.g. allergens.

Sensitivity effects: This product contains substances which can give an allergic reaction on contact with skin. The allergic reaction will typically set in 12-72 hours after exposure as the substance penetrates the skin and reacts with proteins in the outer skin. The body's immune system sees the chemically changed protein as a foreign body and will try to destroy it.

Sensitivity effects: This product contains substances which can give an allergic reaction when inhaled. The allergic reaction allergy will typically set in an hour after exposure and give an inflammatory reaction in the lungs.

Irritation effects: This product contains substances which cause irritation to skin and eyes, or when inhaled. Contact with locally irritative substances can cause the area of contact to be more prone to absorb damaging substances such as allergens.

## **SECTION 12: Ecological information**

## ▼12.1. Toxicity

Substance	Species	Test	Test duration	Result
1-acetyl-4-(3-dodecyl-2,5-diox	Fish	LC50	96 h	> 0,5 mg/L
1-acetyl-4-(3-dodecyl-2,5-diox	Daphnia	EC50	48h	0,27 mg/L
Ethyl phenyl(2,4,6-trimethylbe	Daphnia	EC50	48 h	10 mg/L
acetone propan-2-one propan	Algae	EC50	120 H	14444 mg/L
acetone propan-2-one propan	Crustacean	LC50	48 H	7550 mg/L
acetone propan-2-one propan	Daphnia	EC50	48 H	13500 mg/L
n-butyl acetate	Daphnia	EC50	24 H	205 mg/L
n-butyl acetate	Fish	LC50	96 H	100 mg/L
n-butyl acetate	Crustacean	LC50	48 h	32000 ug/L
ethyl acetate	Algae	EC50	48 H	330000 ug/L
ethyl acetate	Daphnia	LC50	48 H	560000 ug/L
ethyl acetate	Fish	LC50	96 H	425300 ug/L

## ▼ 12.2. Persistence and degradability

Substance	Biodegradability	Test	Result
acetone propan-2-one propan	Yes	No data available	No data available
n-butvl acetate	Yes	No data available	No data available

## ▼ 12.3. Bioaccumulative potential

Substance	Potential bloaccumulation	LogPow	BFC
acetone propan-2-one propan	No	-0,24	No data available
n-butyl acetate	No	1,78	No data available

#### ▼ 12.4. Mobility in soil

acetone propan-2-one propan...: Log Koc= -0,111656, Calculated from LogPow (). n-butyl acetate: Log Koc= 1,487982, Calculated from LogPow (High mobility potential.).

# ▼ 12.5. Results of PBT and vPvB assessment

No data available

## ▼ 12.6. Other adverse effects

This product contains ecotoxic substances which can have damaging effects on water-organisms. This product contains substances which can cause undesirable long-term effects in the water environment, due to its poor biodegradability.

# **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods



The product is covered by the regulations on dangerous waste.

Waste

**EWC** code

**▼**Specific labelling

**▼**Contaminated packing

Packaging which contains leftovers from the product must be disposed of in the same way as the product.

## **SECTION 14: Transport information**

This product is covered by the conventions on dangerous goods.

14.1 - 14.4

**VADR/RID** 

14.1. UN number 1263
14.2. UN proper shipping name PAINT
14.3. Transport hazard class(es) 3
14.4. Packing group II
Notes Tunnel restriction code -

VIMDG

UN-no. 1263
Proper Shipping Name Paint
Class 3
PG\* II
EmS F-E, S-E
MP\*\* Hazardous constituent -

VIATA/ICAO

UN-no.

**Proper Shipping Name** 

Class PG\*

▼14.5. Environmental hazards

**▼14.6. Special precautions for user** 

▼14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

No data available (\*) Packing group

(\*\*) Marine pollutant

# **SECTION 15: Regulatory information**

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

**V**Restrictions for application

People under the age of 18 must not be exposed to this product cf. Council Directive 94/33/EC.

**▼**Demands for specific education

**Additional information** 

**Sources** 



COUNCIL DIRECTIVE 92/85/EEC on the introduction of measures to encourage improvements in the safety and health at work of pregnant workers and workers who have recently given birth or are breastfeeding.

Council Directive 94/33/EC of 22 June 1994 on the protection of young people at work.

IDirective 2004/42/CE of the European Parliament and of the Council of 21 April 2004 on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle refinishing products and amending Directive 1999/13/EC.

EC Regulation 1272/2008 (CLP).

EC regulation 1907/2006 (REACH).

## 15.2. Chemical safety assessment

## **SECTION 16: Other information**

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

H225 - Highly flammable liquid and vapour.

H226 - Flammable liquid and vapour.

H302 - Harmful if swallowed.

H312 - Harmful in contact with skin.

H315 - Causes skin irritation.

H317 - May cause an allergic skin reaction.

H318 - Causes serious eye damage.

H319 - Causes serious eye irritation.

H332 - Harmful if inhaled.

H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H336 - May cause drowsiness or dizziness.

H400 - Very toxic to aquatic life.

H410 - Very toxic to aquatic life with long lasting effects.

H411 - Toxic to aquatic life with long lasting effects.

H412 - Harmful to aquatic life with long lasting effects.

EUH066 - Repeated exposure may cause skin dryness or cracking.

## The full text of identified uses as mentioned in section 1

# Other symbols mentioned in section 2

#### Other

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

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

A change (in proportion to the last essential change (first cipher in SDS version)) is marked with a blue triangle.

The safety data sheet is validated by

Date of last essential change (First cipher in SDS version) 2016-05-27

Date of last minor change (Last cipher in SDS version)

2016-05-27

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