

SAFETY DATA SHEET

C.A.R.FIT 2K Clear Coat Spray

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

1.1. Product identifier

Trade name

C.A.R.FIT 2K Clear Coat Spray

Other names / Synonyms

C.A.R.FIT 2K High Speed Clear Coat Spray

Product no.

7-204-0200

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

Relevant identified uses of the substance or mixture

Paint, Sealant

Restricted to professional users.

Use descriptors (REACH)

Sectors of use	Description
LCS "PW"	Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
Product category	Description
PC 9a	Coatings and Paints, Fillers, Putties, Thinners
Process category	Description
PROC 7	Industrial spraying
PROC 11	Non industrial spraying

Uses advised against

None known.

1.3. Details of the supplier of the safety data sheet

Company and address

August Handel GmbH

Ahornstraße 12

14959 Trebbin

Germany

+49 (0)33731 70 79 60

www.augusthandel.com

E-mail

info@augusthandel.com

Revision

07/07/2024

SDS Version

1.0

1.4. Emergency telephone number

Healthcare professionals: Dial 0344 892 0111 to reach The National Poisons Information Service (NPIS) (24 hour service)

General public:

England - Dial 111 to reach NHS 111 (24 hour service)

Scotland - Dial 112 to reach NHS 24 (24 hour service)

Wales - Dial 111 or 0845 4647 to reach NHS Direct (24 hour service)

See section 4 "First aid measures".

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Aerosol 1; H222, H229, Extremely flammable aerosol. Pressurised container: May burst if heated.
 Skin Sens. 1; H317, May cause an allergic skin reaction.
 Eye Irrit. 2; H319, Causes serious eye irritation.
 STOT SE 3; H336, May cause drowsiness or dizziness.
 Carc. 2; H351, Suspected of causing cancer.
 Aquatic Chronic 3; H412, Harmful to aquatic life with long lasting effects.

2.2. Label elements

Hazard pictogram(s)



Signal word

Danger

Hazard statement(s)

Extremely flammable aerosol. Pressurised container: May burst if heated. (H222, H229)
 May cause an allergic skin reaction. (H317)
 Causes serious eye irritation. (H319)
 May cause drowsiness or dizziness. (H336)
 Suspected of causing cancer. (H351)
 Harmful to aquatic life with long lasting effects. (H412)

Precautionary statement(s)

General

If medical advice is needed, have product container or label at hand. (P101)
 Keep out of reach of children. (P102)

Prevention

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. (P210)
 Do not spray on an open flame or other ignition source. (P211)
 Do not pierce or burn, even after use. (P251)
 Do not breathe spray. (P260)
 Wear eye protection/protective gloves/protective clothing. (P280)
 [In case of inadequate ventilation] wear respiratory protection. (P284)

Response

IF ON SKIN: Wash with plenty of water and soap. (P302+P352)
 Call a POISON CENTER/doctor if you feel unwell. (P312)

Storage

Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122°F. (P410+P412)

Disposal

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

Hazardous substances

acetone propan-2-one propanone
 n-butyl acetate
 HDI oligomers, isocyanurate
 4-methylpentan-2-one;
 isobutyl methyl ketone
 Reaction mass of pentamethyl-piperidyl sebacate

Additional labelling

EUH066, Repeated exposure may cause skin dryness or cracking.
 EUH204, Contains isocyanates. May produce an allergic reaction.
 Contains isocyanates. May produce an allergic reaction.

VOC

VOC content: 660,2 g/L
 MAXIMUM VOC CONTENT (Phase II, category B/a1: 850 g/L)

2.3. Other hazards

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Additional warnings

In the event of leaks, high concentrations of gases can quickly form. They can be toxic, asphyxiating, or explosive. May form combustible dust concentrations in air.

Take action to prevent static discharges.

This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.

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

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable. This product is a mixture.

3.2. Mixtures

Product/substance	Identifiers	% w/w	Classification	Note
dimethyl ether	CAS No.: 115-10-6 EC No.: 204-065-8 UK-REACH: Index No.: 603-019-00-8	25 - <50%	Flam. Gas 1A, H220 Press. Gas (Comp.) H280	[1]
acetone propan-2-one propanone	CAS No.: 67-64-1 EC No.: 200-662-2 UK-REACH: Index No.: 606-001-00-8	12,5 - <20%	EUH066 Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336	[1]
reaction mass of ethylbenzene and xylene	CAS No.: EC No.: 905-588-0 UK-REACH: Index No.:	5 - <10%	Flam. Liq. 3, H226 Asp. Tox. 1, H304 Acute Tox. 4, H312 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Acute Tox. 4, H332 STOT SE 3, H335 STOT RE 2, H373	
n-butyl acetate	CAS No.: 123-86-4 EC No.: 204-658-1 UK-REACH: Index No.: 607-025-00-1	5 - <10%	EUH066 Flam. Liq. 3, H226 STOT SE 3, H336	[1]
HDI oligomers, isocyanurate	CAS No.: EC No.: 931-274-8 UK-REACH: Index No.:	2,5 - <5%	EUH204 Skin Sens. 1, H317 Acute Tox. 4, H332 STOT SE 3, H335	
Hydrocarbons, C9, aromatics	CAS No.: EC No.: 918-668-5 UK-REACH: Index No.:	<2,5%	EUH066 Flam. Liq. 3, H226 Asp. Tox. 1, H304 STOT SE 3, H335 STOT SE 3, H336 Aquatic Chronic 2, H411	
5-methylhexan-2-one isoamyl methyl ketone	CAS No.: 110-12-3 EC No.: 203-737-8 UK-REACH: Index No.: 606-026-00-4	<2,5%	Flam. Liq. 3, H226 Acute Tox. 4, H332	[1]
2-butoxyethyl acetate;butylglycol acetate	CAS No.: 112-07-2 EC No.: 203-933-3 UK-REACH:	<2,5%	Acute Tox. 4, H312 Acute Tox. 4, H332	[1]

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

	Index No.: 607-038-00-2			
4-methylpentan-2-one; isobutyl methyl ketone	CAS No.: 108-10-1 EC No.: 203-550-1 UK-REACH: Index No.: 606-004-00-4	<2,5%	EUH066 Flam. Liq. 2, H225 Eye Irrit. 2, H319 Acute Tox. 4, H332 STOT SE 3, H336 Carc. 2, H351	[1]
Reaction mass of pentamethyl-piperidyl sebacate	CAS No.: EC No.: 915-687-0 UK-REACH: Index No.:	≤0,5%	Skin Sens. 1A, H317 Repr. 2, H361f Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)	

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

Other information

[1] European occupational exposure limit.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

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

Inhalation

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

Skin contact

IF ON SKIN: Wash with plenty of water and soap.

Remove contaminated clothing and shoes. Ensure to wash exposed skin thoroughly with water and soap. DO NOT use solvents or thinners.

If skin irritation occurs: Get medical advice/attention.

Eye contact

If in eyes: Flush eyes immediately with plenty of water or isotonic water (20-30 °C) for at least 5 minutes and continue until irritation stops. Remove contact lenses. Make sure to flush under upper and lower eyelids. If irritation continues, contact a doctor. Continue flushing during transport.

Ingestion

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

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

Burns

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

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

Sensitisation: This product contains substances, which may trigger allergic reaction upon dermal contact.

Manifestation of allergic reactions typically takes place within 12-72 hours after exposure.

Neurotoxic effects: This product contains organic solvents, which may cause adverse effects to the nervous system.

Symptoms of neurotoxicity include: loss of appetite, headache, dizziness, ringing in ears, tingling sensations of 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 and may result in an increased absorption potential of other hazardous substances at the area of exposure.

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

IF exposed or concerned:

Get immediate medical advice/attention.

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

If skin irritation or rash occurs: Get medical advice/attention.

Information to medics

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

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: Alcohol-resistant foam, carbon dioxide, powder, water mist.

Unsuitable extinguishing media: Waterjets should not be used, since they can spread the fire.

5.2. Special hazards arising from the substance or mixture

Explosion: Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

Extremely flammable aerosol. Pressurised container. In a fire or if heated, a pressure increase will occur and the container may burst.

In use may form flammable/explosive vapour-air mixture.

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

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

Carbon oxides (CO / CO₂)

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact The National Poisons Information Service (dial 111, 24 h service) in order to obtain further advice.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Accidental releases always pose a serious risk of fire or explosion.

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

Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration.

Avoid direct contact with spilled substances.

Ensure adequate ventilation, especially in confined areas.

Avoid inhalation of vapours from spilled material.

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

Limit spillage and collect using granular absorbent or similar materials, and dispose of it in accordance with the regulations on dangerous waste.

Collect spills carefully. Moist the material with water in order to prevent the formation and propagation of dust.

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

6.4. Reference to other sections

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

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

SECTION 7: Handling and storage

7.1. Precautions for safe handling

May form combustible dust concentrations in air.

Take action to prevent static discharges.

Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces.

Do not spray on an open flame or other ignition source.

Do not pierce or burn, even after use.

Avoid direct contact with the product.

Avoid contact during pregnancy and while nursing.

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

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

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed containers and store protected from moisture and light. Containers should be dated when opened and tested periodically for the presence of peroxides. Do not exceed storage time limits.

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

Pressurized gas packs (spray cans, aerosol cans) must be stored behind a wire mesh, which allows gases to escape and holds back packs flying around.

Avoid the suspension of dust in the air.

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

Use non-sparking tools.

Recommended storage material

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

Storage conditions

Room temperature 18 to 23°C

Incompatible materials

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

7.3. Specific end use(s)

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

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

dimethyl ether

Long term exposure limit (8 hours) (ppm): 400

Long term exposure limit (8 hours) (mg/m³): 766

Short term exposure limit (15 minutes) (ppm): 500

Short term exposure limit (15 minutes) (mg/m³): 958

acetone propan-2-one propanone

Long term exposure limit (8 hours) (ppm): 500

Long term exposure limit (8 hours) (mg/m³): 1210

Short term exposure limit (15 minutes) (ppm): 1500

Short term exposure limit (15 minutes) (mg/m³): 3620

n-butyl acetate

Long term exposure limit (8 hours) (ppm): 150

Long term exposure limit (8 hours) (mg/m³): 724

Short term exposure limit (15 minutes) (ppm): 200

Short term exposure limit (15 minutes) (mg/m³): 966

5-methylhexan-2-one isoamyl methyl ketone

Long term exposure limit (8 hours) (ppm): 20

Long term exposure limit (8 hours) (mg/m³): 95

Short term exposure limit (15 minutes) (ppm): 100

Short term exposure limit (15 minutes) (mg/m³): 475

Annotations:

Sk = Can be absorbed through the skin and lead to systemic toxicity.

2-butoxyethyl acetate;butylglycol acetate

Long term exposure limit (8 hours) (ppm): 20

Long term exposure limit (8 hours) (mg/m³): 133

Short term exposure limit (15 minutes) (ppm): 50

Short term exposure limit (15 minutes) (mg/m³): 332

Annotations:

Sk = Can be absorbed through the skin and lead to systemic toxicity.

4-methylpentan-2-one;

isobutyl methyl ketone

Long term exposure limit (8 hours) (ppm): 50

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Long term exposure limit (8 hours) (mg/m³): 208
 Short term exposure limit (15 minutes) (ppm): 100
 Short term exposure limit (15 minutes) (mg/m³): 416

Annotations:

BMVG = Biological Monitoring Guidance Value exists

Sk = Can be absorbed through the skin and lead to systemic toxicity.

The Control of Substances Hazardous to Health Regulations 2002. SI 2002/2677 The Stationery Office 2002.
 EH40/2005 Workplace exposure limits (Fourth Edition 2020).

DNEL

2-butoxyethyl acetate;butylglycol acetate

Duration:	Route of exposure:	DNEL:
Long term – Systemic effects - General population	Dermal	102 mg/kg bw/day
Long term – Systemic effects - Workers	Dermal	169 mg/kg bw/day
Short term – Systemic effects - General population	Dermal	72 mg/kg bw/day
Short term – Systemic effects - Workers	Dermal	120 mg/kg bw/day
Long term – Systemic effects - General population	Inhalation	80 mg/m ³
Long term – Systemic effects - Workers	Inhalation	133 mg/m ³
Short term – Local effects - General population	Inhalation	200 mg/m ³
Short term – Local effects - Workers	Inhalation	333 mg/m ³
Long term – Systemic effects - General population	Oral	8.6 mg/kg bw/day
Short term – Systemic effects - General population	Oral	36 mg/kg bw/day

4-methylpentan-2-one;
 isobutyl methyl ketone

Duration:	Route of exposure:	DNEL:
Long term – Systemic effects - General population	Dermal	4.2 mg/kg bw/day
Long term – Systemic effects - Workers	Dermal	11.8 mg/kg bw/day
Long term – Local effects - General population	Inhalation	14.7 mg/m ³
Long term – Local effects - Workers	Inhalation	83 mg/m ³
Long term – Systemic effects - General population	Inhalation	14.7 mg/m ³
Long term – Systemic effects - Workers	Inhalation	83 mg/m ³
Short term – Local effects - General population	Inhalation	155.2 mg/m ³
Short term – Local effects - Workers	Inhalation	208 mg/m ³
Short term – Systemic effects - General population	Inhalation	155.2 mg/m ³
Short term – Systemic effects - Workers	Inhalation	208 mg/m ³
Long term – Systemic effects - General population	Oral	4.2 mg/kg bw/day

5-methylhexan-2-one isoamyl methyl ketone

Duration:	Route of exposure:	DNEL:
Long term – Systemic effects - General population	Dermal	5.12 mg/kg bw/day
Long term – Systemic effects - Workers	Dermal	14.2 mg/kg bw/day
Long term – Systemic effects - General population	Inhalation	17.812 mg/m ³
Long term – Systemic effects - Workers	Inhalation	100.25 mg/m ³
Short term – Systemic effects - General population	Inhalation	146.5 mg/m ³
Short term – Systemic effects - Workers	Inhalation	196.3 mg/m ³
Long term – Systemic effects - General population	Oral	5.12 mg/kg bw/day

acetone propan-2-one propanone

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Duration:	Route of exposure:	DNEL:
Long term	-	
Short term	-	
Long term – Systemic effects - General population	Dermal	62 mg/kg bw/day
Long term – Systemic effects - Workers	Dermal	186 mg/kg bw/day
Long term – Systemic effects - General population	Inhalation	200 mg/m ³
Long term – Systemic effects - Workers	Inhalation	1210 mg/m ³
Short term – Local effects - Workers	Inhalation	2420 mg/m ³
Long term – Systemic effects - General population	Oral	62 mg/kg bw/day

dimethyl ether

Duration:	Route of exposure:	DNEL:
Long term	-	
Short term	-	
Long term – Systemic effects - General population	Inhalation	471 mg/m ³
Long term – Systemic effects - Workers	Inhalation	1894 mg/m ³

Hydrocarbons, C9, aromatics

Duration:	Route of exposure:	DNEL:
Long term – Systemic effects - General population	Dermal	
Long term – Systemic effects - Workers	Dermal	
Long term – Local effects - General population	Inhalation	178.57 mg/m ³
Long term – Local effects - Workers	Inhalation	837.5 mg/m ³
Long term – Systemic effects - General population	Inhalation	
Long term – Systemic effects - General population	Inhalation	410 µg/m ³
Long term – Systemic effects - Workers	Inhalation	
Long term – Systemic effects - Workers	Inhalation	1.9 mg/m ³
Short term – Local effects - General population	Inhalation	640 mg/m ³
Short term – Local effects - Workers	Inhalation	1066.67 mg/m ³
Short term – Systemic effects - General population	Inhalation	1152 mg/m ³
Short term – Systemic effects - Workers	Inhalation	1286.4 mg/m ³
Long term – Systemic effects - General population	Oral	

n-butyl acetate

Duration:	Route of exposure:	DNEL:
Long term	-	
Short term	-	
Long term – Systemic effects - General population	Dermal	3.4 mg/kg bw/day
Long term – Systemic effects - Workers	Dermal	7 mg/kg bw/day
Short term – Systemic effects - General population	Dermal	6 mg/kg bw/day
Short term – Systemic effects - Workers	Dermal	11 mg/kg bw/day
Long term – Local effects - General population	Inhalation	35.7 mg/m ³
Long term – Local effects - Workers	Inhalation	300 mg/m ³
Long term – Systemic effects - General population	Inhalation	12 mg/m ³
Long term – Systemic effects - Workers	Inhalation	48 mg/m ³
Short term – Local effects - General population	Inhalation	300 mg/m ³

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Short term – Local effects - Workers	Inhalation	600 mg/m ³
Short term – Systemic effects - General population	Inhalation	300 mg/m ³
Short term – Systemic effects - Workers	Inhalation	600 mg/m ³
Long term – Systemic effects - General population	Oral	2 mg/kg bw/day
Short term – Systemic effects - General population	Oral	2 mg/kg bw/day

PNEC

2-butoxyethyl acetate;butylglycol acetate

Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		304 µg/L
Freshwater sediment		2.03 mg/kg
Intermittent release (freshwater)		560 µg/L
Marine water		30.4 µg/L
Marine water sediment		203 µg/kg
Predators		60 mg/kg
Sewage treatment plant		90 mg/L
Soil		415 µg/kg

4-methylpentan-2-one;
isobutyl methyl ketone

Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		600 µg/L
Freshwater sediment		8.27 mg/kg
Intermittent release (freshwater)		1.5 mg/L
Marine water		60 µg/L
Marine water sediment		830 µg/kg
Sewage treatment plant		27.5 mg/L
Soil		1.3 mg/kg

5-methylhexan-2-one isoamyl methyl ketone

Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		100 µg/L
Freshwater sediment		589.6 µg/kg
Intermittent release (freshwater)		1 mg/L
Marine water		10 µg/L
Marine water sediment		58.96 µg/kg
Sewage treatment plant		100 mg/L
Soil		59.2 µg/kg

acetone propan-2-one propanone

Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		10.6 mg/L
Freshwater sediment		30.4 mg/kg
Intermittent release (freshwater)		21 mg/L
Marine water		1.06 mg/L
Marine water sediment		3.04 mg/kg
Sewage treatment plant		100 mg/L

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Soil		29.5 mg/kg
dimethyl ether		
Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		155 µg/L
Freshwater sediment		681 µg/kg
Intermittent release (freshwater)		1.549 mg/L
Marine water		16 µg/L
Marine water sediment		69 µg/kg
Sewage treatment plant		160 mg/L
Soil		45 µg/kg
n-butyl acetate		
Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		180 µg/L
Freshwater sediment		981 µg/kg
Intermittent release (freshwater)		360 µg/L
Marine water		18 µg/L
Marine water sediment		98.1 µg/kg
Sewage treatment plant		35.6 mg/L
Soil		90.3 µg/kg

8.2. Exposure controls

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

General recommendations

When transferring the materials, dust clouds should be kept at an absolute minimum. Handling should be slow and deliberate. The materials should be transferred from one container to another using a non-sparking, conductive metal scoop.

When mixing the material with other dry ingredients, frictional heat should be avoided. The best type of mixer for a dry mixing operation is one that contains no moving parts, but rather affects a tumbling action, such as a conical blender. Introduction of an inert atmosphere in the blender is highly recommended since dust clouds are generated. All equipment must be well grounded.

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

Exposure scenarios

There are no exposure scenarios implemented for this product.

Exposure limits

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

Appropriate technical measures

Do not recirculate outlet air that contain the substances.

Airborne gas and dust concentrations must be kept at a minimum. Provide efficient mechanical ventilation. If not possible use suitable respiratory equipment.

It is recommended that all dust control equipment such as local exhaust ventilation contain an explosion suppression system.

Hygiene measures

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

Measures to avoid environmental exposure

Provide adequate general and local exhaust ventilation.

Individual protection measures, such as personal protective equipment

Generally

Take off contaminated clothing and wash it before reuse.

Use only UKCA marked protective equipment.

Respiratory Equipment

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Type	Class	Colour	Standards
Combination filter A2P3	Class 2/3	Brown/White	EN14387



In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.



Skin protection

Recommended	Type/Category	Standards
Dedicated work clothing should be worn. Wear a protective suit in the event of prolonged periods of work with the product.	-	-



Hand protection

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards
Butyl	0.4	> 480	EN374-2, EN374-3, EN388



Eye protection

Type	Standards
Safety glasses with side shields.	EN166



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state

Aerosol

Colour

Colourless

Odour / Odour threshold

Characteristic

pH

Not applicable - water solubility < 1 mg/L @ 20°C

Density (g/cm³)

0.8 (20 °C)

Kinematic viscosity

No data available

Particle characteristics

No data available

Phase changes

Melting point/Freezing point (°C)

Not applicable

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Softening point/range (°C)

Does not apply to aerosols.

Boiling point (°C)

Not applicable - product is an aerosol

Vapour pressure

4000 hPa (20 °C)

Relative vapour density

No data available

Decomposition temperature (°C)

No data available

Data on fire and explosion hazards

Flash point (°C)

Not applicable - product is an aerosol

Flammability (°C)

The material is ignitable.

Auto-ignition temperature (°C)

240

Lower and upper explosion limit (% v/v)

2.6 - 26.2

Solubility

Solubility in water

Practically insoluble

n-octanol/water coefficient (LogKow)

No data available

Solubility in fat (g/L)

No data available

9.2. Other information

Formation of explosible dust/air mixtures

Yes

Evaporation rate (n-butylacetate = 100)

No data available

VOC (g/L)

660,2

Other physical and chemical parameters

No data available.

Oxidizing properties

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

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available.

10.2. Chemical stability

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

10.3. Possibility of hazardous reactions

None known.

10.4. Conditions to avoid

Avoid static electricity.

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

Avoid the suspension of dust in the air.

10.5. Incompatible materials

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

10.6. Hazardous decomposition products

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

SECTION 11: Toxicological information

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

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

Acute toxicity

Product/substance dimethyl ether
 Species: Rat
 Route of exposure: Inhalation
 Test: LC50
 Result: 308 mg/m³ ·

Product/substance acetone propan-2-one propanone
 Species: Rabbit
 Route of exposure: Oral
 Test: LD50
 Result: 5300 mg/kg ·

Product/substance acetone propan-2-one propanone
 Species: Rabbit
 Route of exposure: Dermal
 Test: LD50
 Result: 20000 mg/kg ·

Product/substance acetone propan-2-one propanone
 Species: Rat
 Route of exposure: Inhalation
 Test: LC50
 Result: 39 mg/m³ ·

Product/substance acetone propan-2-one propanone
 Species: Rat
 Route of exposure: Oral
 Test: LD50
 Result: 5800 mg/kg ·

Product/substance acetone propan-2-one propanone
 Species: Rat
 Route of exposure: Inhalation
 Test: LC50
 Result: 39 mg/m³ ·

Product/substance n-butyl acetate
 Species: Rat
 Route of exposure: Oral
 Test: LD50
 Result: 10768 mg/kg ·

Product/substance n-butyl acetate
 Species: Mouse
 Route of exposure: Oral
 Test: LD50
 Result: 6 mg/kg ·

Product/substance n-butyl acetate
 Species: Rat
 Route of exposure: Inhalation
 Test: LC50
 Result: 21,0 mg/l 4h ·

Product/substance n-butyl acetate
 Species: Rat
 Route of exposure: Dermal
 Test: LD50
 Result: 10760 mg/kg ·

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Product/substance n-butyl acetate
 Species: Rat
 Route of exposure: Oral
 Test: LD50
 Result: 10770 mg/kg ·

Product/substance n-butyl acetate
 Species: Rabbit
 Route of exposure: Dermal
 Test: LD50
 Result: >17600 mg/kg ·

Product/substance n-butyl acetate
 Species: Rat
 Route of exposure: Inhalation
 Test: LC50
 Result: >21,0 mg/m³ ·

Product/substance Hydrocarbons, C9, aromatics
 Species: Rat
 Route of exposure: Oral
 Test: LD50
 Result: 4 - 8 mL/kg bw ·

Product/substance Hydrocarbons, C9, aromatics
 Species: Rabbit
 Route of exposure: Dermal
 Test: LD50
 Result: 160 mg/kg bw ·

Skin corrosion/irritation

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

Serious eye damage/irritation

Causes serious eye irritation.

Respiratory sensitisation

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

Skin sensitisation

May cause an allergic skin reaction.

Germ cell mutagenicity

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

Carcinogenicity

Suspected of causing cancer.

Reproductive toxicity

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

STOT-single exposure

May cause drowsiness or dizziness.

STOT-repeated exposure

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

Aspiration hazard

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

11.2. Information on other hazards

Long term effects

Carcinogenic effects: This product contains substances considered or proven to be carcinogenic. The carcinogenic effects may be triggered subsequent to exposure through inhalation, skin contact or ingestion.

Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

Neurotoxic effects: This product contains organic solvents, which may cause adverse effects to the nervous system. Symptoms of neurotoxicity include: loss of appetite, headache, dizziness, ringing in ears, tingling sensations of 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 and may result in an increased absorption potential of other

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

hazardous substances at the area of exposure.

Endocrine disrupting properties

This mixture/product does not contain any substances known to have hormone-disrupting properties in relation to health.

Other information

4-methylpentan-2-one;
isobutyl methyl ketone has been classified by IARC as a group 2B carcinogen.

SECTION 12: Ecological information

12.1. Toxicity

Product/substance: dimethyl ether
Species: Daphnia
Duration: 48 hours
Test: EC50
Result: >4000 mg/l ·

Product/substance: acetone propan-2-one propanone
Species: Crustacean
Duration: 48 hours
Test: EC50
Result: 39 mg/l ·

Product/substance: acetone propan-2-one propanone
Species: Fish
Duration: 96 hours
Test: LC50
Result: 5000 mg/l ·

Product/substance: acetone propan-2-one propanone
Species: Fish
Duration: 14 days
Test: LC50
Result: 4042 mg/l ·

Product/substance: acetone propan-2-one propanone
Species: Fish
Duration: 96 hours
Test: LC50
Result: 5540 mg/L ·

Product/substance: acetone propan-2-one propanone
Species: Daphnia
Duration: 48 hours
Test: LC50
Result: 2262 mg/L ·

Product/substance: acetone propan-2-one propanone
Species: Daphnia
Duration: 48 hours
Test: EC50
Result: 8800 mg/L ·

Product/substance: n-butyl acetate
Species: Fish
Duration: 96 hours
Test: LC50
Result: 18 mg/L ·

Product/substance: n-butyl acetate
Species: Fish

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Duration: 96 hours
 Test: LC50
 Result: 100 mg/L ·

Product/substance n-butyl acetate
 Species: Fish
 Duration: 96 hours
 Test: LC50
 Result: 185 mg/L ·

Product/substance n-butyl acetate
 Species: Fish
 Duration: 96 hours
 Test: LC50
 Result: 62 mg/L ·

Product/substance n-butyl acetate
 Species: Crustacean
 Duration: 48 hours
 Test: EC50
 Result: 32 mg/L ·

Product/substance n-butyl acetate
 Species: Daphnia
 Duration: 48 hours
 Test: EC50
 Result: 44 mg/L ·

Product/substance n-butyl acetate
 Species: Algae
 Duration: 96 hours
 Test: EC50
 Result: 320 mg/L ·

Product/substance n-butyl acetate
 Species: Daphnia
 Duration: 24 hours
 Test: LC50
 Result: 205 mg/L ·

Product/substance Hydrocarbons, C9, aromatics
 Species: Algae
 Duration: 72 hours
 Test: EC50
 Result: 290-420 µg/L ·

Product/substance Hydrocarbons, C9, aromatics
 Species: Algae
 Duration: 72 hours
 Test: NOEC
 Result: 70 µg/L ·

Harmful to aquatic life with long lasting effects.

12.2. Persistence and degradability

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

12.3. Bioaccumulative potential

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

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.

12.6. Endocrine disrupting properties

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

This mixture/product does not contain any substances considered to have endocrine-disrupting properties in relation to the environment.

12.7. Other adverse effects

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

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

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product is covered by the regulations on hazardous waste.

To the extent the material has not been subject to regular tests of peroxide formation the waste shall be treated as explosive waste.

HP 3 - Flammable

HP 4 - Irritant (skin irritation and eye damage)

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

HP 6 - Acute toxicity

HP 7 - Carcinogenic

HP 14 - Ecotoxic

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

Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law.




EWC code

Not applicable.

Contaminated packing

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

SECTION 14: Transport information

	14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information:
ADR	UN1950	AEROSOLS	Transport hazard class: 2 Label: 2.1 Classification code: 5F 	-	No	Limited quantities: 1 L Tunnel restriction code: (D) See below for additional information.
IMDG	UN1950	AEROSOLS	Transport hazard class: 2 Label: 2.1 Classification code: 5F 	-	No	Limited quantities: 1 L EmS: F-D S-U See below for additional information.
IATA	UN1950	AEROSOLS	Transport hazard class: 2 Label: 2.1 Classification code: 5F 	-	No	See below for additional information.

* Packing group

** Environmental hazards

[Additional information](#)

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Although this product is environmentally hazardous, the environmentally hazardous substance mark has been omitted as the product is supplied in packaging with a maximum quantity of 5 L / 5 kg.

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

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

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

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

14.6. Special precautions for user

Not applicable.

14.7. Maritime transport in bulk according to IMO instruments

No data available.

SECTION 15: Regulatory information

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

Restrictions for application

Restricted to professional users.

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

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

Demands for specific education

Use of this product requires dedicated training in work with polyurethane and epoxy products.

SEVESO - Categories / dangerous substances

P3a - FLAMMABLE AEROSOLS, Qualifying quantity (lower-tier): 150 tonnes (net) / (upper-tier): 500 tonnes (net)

Regulation on drug precursors

acetone propan-2-one propanone is included (Category 3)

Regulation on explosives precursors

acetone propan-2-one propanone (Annex II)

REACH, Annex XVII

dimethyl ether is subject to UK-REACH restrictions (entry 40).

acetone propan-2-one propanone is subject to UK-REACH restrictions (entry 40).

reaction mass of ethylbenzene and xylene is subject to UK-REACH restrictions (entry 40).

n-butyl acetate is subject to UK-REACH restrictions (entry 40).

Hydrocarbons, C9, aromatics is subject to UK-REACH restrictions (entry 40).

5-methylhexan-2-one isoamyl methyl ketone is subject to UK-REACH restrictions (entry 40).

4-methylpentan-2-one;

isobutyl methyl ketone is subject to UK-REACH restrictions (entry 40).

Additional information

Not applicable.

Sources

The Management of Health and Safety at Work Regulations 1999.

The Health and Safety at Work etc. Act 1974 Regulations 2013.

The Aerosol Dispensers Regulations 2009 No. 2824, amended in 2014 (No. 1130) and in 2018 (No. 29).

Control of Major Accident Hazards (COMAH) Regulations 2015.

2012 No. 1715 ENVIRONMENTAL PROTECTION: The Volatile Organic Compounds in Paints, Varnishes and Vehicle Refinishing Products Regulations 2012.

Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law.

The Controlled Drugs (Drug Precursors) Regulations 2008.

Council Regulation (EC) No 2019/1148 on explosives precursors as retained and amended in UK law.

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP) as retained and amended in UK law.

Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) as retained and amended in UK law.

15.2. Chemical safety assessment

No

SECTION 16: Other information

Full text of H-phrases as mentioned in section 3

EUH066, Repeated exposure may cause skin dryness or cracking.
 EUH204, Contains isocyanates. May produce an allergic reaction.
 H220, Extremely flammable gas.
 H225, Highly flammable liquid and vapour.
 H226, Flammable liquid and vapour.
 H280, Contains gas under pressure; may explode if heated.
 H304, May be fatal if swallowed and enters airways.
 H312, Harmful in contact with skin.
 H315, Causes skin irritation.
 H317, May cause an allergic skin reaction.
 H319, Causes serious eye irritation.
 H332, Harmful if inhaled.
 H335, May cause respiratory irritation.
 H336, May cause drowsiness or dizziness.
 H351, Suspected of causing cancer.
 H361f, Suspected of damaging fertility.
 H373, May cause damage to organs through prolonged or repeated exposure.
 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.

The full text of identified uses as mentioned in section 1

LCS "PW" = Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
 PROC 7 = Industrial spraying
 PROC 11 = Non industrial spraying
 PC 9a = Coatings and Paints, Fillers, Putties, Thinners

Abbreviations and acronyms

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway
 ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
 ATE = Acute Toxicity Estimate
 BCF = Bioconcentration Factor
 CAS = Chemical Abstracts Service
 CE = Conformité Européenne (European conformity)
 CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
 CSA = Chemical Safety Assessment
 CSR = Chemical Safety Report
 DMEL = Derived Minimal Effect Level
 DNEL = Derived No Effect Level
 EINECS = European Inventory of Existing Commercial chemical Substances
 ES = Exposure Scenario
 EUH statement = CLP-specific Hazard statement
 EuPCS = European Product Categorisation System
 EWC = European Waste Catalogue
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals
 GWP = Global warming potential
 IARC = International Agency for Research on Cancer (IARC)
 IATA = International Air Transport Association
 IBC = Intermediate Bulk Container
 IMDG = International Maritime Dangerous Goods
 LogPow = logarithm of the octanol/water partition coefficient
 MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
 OECD = Organisation for Economic Co-operation and Development
 PBT = Persistent, Bioaccumulative and Toxic
 PNEC = Predicted No Effect Concentration
 RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
 RRN = REACH Registration Number

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

SCL = A specific concentration limit

SVHC = Substances of Very High Concern

STOT-RE = Specific Target Organ Toxicity - Repeated Exposure

STOT-SE = Specific Target Organ Toxicity - Single Exposure

TWA = Time weighted average

UN = United Nations

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

VOC = Volatile Organic Compound

vPvB = Very Persistent and Very Bioaccumulative

Additional information

The classification of the substance/mixture in regard of health hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law.

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

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

The safety data sheet is validated by

S. Grade

Other

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

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

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

Country-language: GB-en