2K CLEARCOAT SPRAY

SAFETY DATA SHEET

Compiled in accordance with REACH Regulation (EC) No 1907/2006, as retained and amended in UK law

ISSUE DATE: 17.09.2014
REVISION DATE: 27.03.2025
SUPERSEDES: 25.09.2023
VERSION: 6.0

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

1.1. Product identifier

Product form	:	Mixture
Trade name	:	2K Clearcoat Spray
Product code	:	Ford Int. Ref.No.: 184380
SDS Number	:	7763
Unique Formula Identifier (UFI)	:	8VMF-KHFN-P00D-1NYN
Vaporizer	:	Aerosol
Product use	:	Professional use

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

1.2.1. Relevant identified uses

Function or use category	:	Paints, lacquers and varnishes

1.2.2. Uses advised against

Restrictions on use	:	None known

1.3. Details of the supplier of the safety data sheet

Supplier
Ford-Werke GmbH
Edsel-Ford-Str. 2-14
50769 Cologne
Germany
+49 221 90-33333
sdseu@ford.com

Distributor
Ford Motor Company Ltd.
Parts Distribution Centre
Royal Oak Way South
NN11 8NT Daventry, Northants
United Kingdom
+44 1327 305 198

1.4. Emergency telephone number

+49 (0) 6132-84463 (GBK GmbH – 24/7)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations

Physical hazards	Aerosol, Category 1	H222;H229	Extremely flammable aerosol. Pressurised container: May burst if heated.
Health hazards	Serious eye damage/eye irritation, Category 2	H319	Causes serious eye irritation.
	Skin sensitisation, Category 1	H317	May cause an allergic skin reaction.
	Specific target organ toxicity – Single exposure, Category 3, Narcosis	H336	May cause drowsiness or dizziness.

Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations

Hazard pictograms

Signal word	Danger
Contains	acetone; n-butyl acetate; Hydrocarbons, C9, aromatic; TINUVIN 1130; Hexamethylene diisocyanate, oligomers, isocyanurate

Hazard statements

H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.

Precautionary statements

Prevention

P210	Keep away from heat, hot surfaces, sparks, open flames. No smoking.
P211	Do not spray on an open flame or other ignition source.
P251	Do not pierce or burn, even after use.
P261	Avoid breathing spray, vapours.

Response

P312	Call a doctor, a POISON CENTER if you feel unwell.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Storage

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

EUH-statements	EUH211 - Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist. EUH204 - Contains isocyanates. May produce an allergic reaction.
Extra phrases	Without adequate ventilation formation of explosive mixtures may be possible.

2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII.
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII.

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical name	CAS- No EC- No Index No RRN	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Notes
dimethyl ether	115-10-6 204-065-8 603-019-00-8 01-2119472128-37-XXXX	25 - < 50	Flam. Gas 1A, H220 Press. Gas (Comp.), H280	substance with a Community workplace exposure limit (Note U)
acetone	67-64-1 200-662-2	10 - < 25	Flam. Liq. 2, H225 Eye Irrit. 2, H319	substance with a Community workplace exposure limit

	606-001-00-8 01-2119471330-49-XXXX		STOT SE 3, H336	
n-butyl acetate	123-86-4 204-658-1 607-025-00-1 01-2119485493-29-XXXX	10 - < 25	Flam. Liq. 3, H226 STOT SE 3, H336	substance with a Community workplace exposure limit
Hexamethylene diisocyanate, oligomers, isocyanurate	28182-81-2 931-274-8 01-2119485796-17-XXXX	5 – < 10	Acute Tox. 4 (Inhalation), H332 (ATE=1.5 mg/l/4h) Skin Sens. 1, H317 STOT SE 3, H335	
Mixture of Xylenes	- 905-588-0 601-022-00-9 01-2119488216-32-XXXX	2.5 – < 5	Flam. Liq. 3, H226 Acute Tox. 4 (Dermal), H312 (ATE=1100 mg/kg bodyweight) Acute Tox. 4 (Inhalation), H332 (ATE=11 mg/l/4h) Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Asp. Tox. 1, H304	substance with a Community workplace exposure limit (Note C)
2-methoxy-1-methylethyl acetate	108-65-6 203-603-9 607-195-00-7 01-2119475791-29-XXXX	1 - < 2.5	Flam. Liq. 3, H226 STOT SE 3, H336	substance with a Community workplace exposure limit
2-butoxyethyl acetate	112-07-2 203-933-3 607-038-00-2 01-2119475112-47-XXXX	1 – < 2.5	Acute Tox. 4 (Oral), H302 (ATE=500 mg/kg) Acute Tox. 4 (Dermal), H312 (ATE=1100 mg/kg) Acute Tox. 4 (Inhalation), H332 (ATE=11 mg/l/4h)	substance with a Community workplace exposure limit
Hydrocarbons, C9, aromatic	64742-95-6 918-668-5 01-2119455851-35-XXXX	1 - < 2.5	Flam. Liq. 3, H226 STOT SE 3, H336 STOT SE 3, H335 Asp. Tox. 1, H304 Aquatic Chronic 2, H411	
TINUVIN 1130	400-830-7 607-176-00-3 01-0000015075-76-XXXX	0.1 - < 1	Skin Sens. 1, H317 Aquatic Chronic 2, H411	

Note C - Some organic substances may be marketed either in a specific isomeric form or as a mixture of several isomers. In this case the supplier must state on the label whether the substance is a specific isomer or a mixture of isomers.
Note U - When put on the market gases have to be classified as 'Gases under pressure', in one of the groups compressed gas, liquefied gas, refrigerated liquefied gas or dissolved gas. The group depends on the physical state in which the gas is packaged and therefore has to be assigned case by case. The following codes are assigned:. Press. Gas (Comp.), Press. Gas (Liq.), Press. Gas (Ref. Liq.), Press. Gas (Diss.). Aerosols shall not be classified as gases under pressure (See Annex I, Part 2, Section 2.3.2.1, Note 2).
Product subject to CLP Annex I, item 1.1.3.7. The disclosure rules of the components is modified in this case.
Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : If you feel unwell, seek medical advice (show the label where possible). Call a poison center or a doctor if you feel unwell.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. If you feel unwell, seek medical advice.

First-aid measures after skin contact : Wash skin with plenty of water and soap. Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.

First-aid measures after eye contact	:	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	:	If you feel unwell, seek medical advice. Never give anything by mouth to an unconscious person. Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects:	:	May cause drowsiness or dizziness.
Symptoms/effects after skin contact	:	May cause an allergic skin reaction.
Symptoms/effects after eye contact	:	Causes serious eye irritation. Eye irritation.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	:	carbon dioxide (CO_2), powder, water spray. Alcohol resistant foam.
Unsuitable extinguishing media	:	Do not use a water jet since it may cause the fire to spread.

5.2. Special hazards arising from the substance or mixture

Fire hazard	:	Extremely flammable aerosol.
Explosion hazard	:	Contains gas under pressure; may explode if heated. May form flammable/explosive vapour-air mixture. Pressurised container: May burst if heated.
Hazardous decomposition products in case of fire	:	Toxic fumes may be released.

5.3. Advice for firefighters

Precautionary measures fire	:	Cool containers exposed to heat with water spray and remove container, if no risk is involved. Keep away from combustible materials.
Firefighting instructions	:	Do not enter fire area without proper protective equipment, including respiratory protection. Do not fight fire when fire reaches explosives.
Protection during firefighting	:	Do not enter fire area without proper protective equipment, including respiratory protection. Complete protective clothing. Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	:	Eliminate every possible source of ignition. Keep unnecessary personnel away.

6.1.1. For non-emergency personnel

Emergency procedures	:	Ventilate spillage area. No flames, no sparks. Eliminate all sources of ignition. Avoid breathing dust, mist or spray. Avoid contact with skin, eyes and clothing. No open flames, no sparks, and no smoking. Avoid breathing dust, fume, gas, mist, vapours, spray.

6.1.2. For emergency responders

Protective equipment	:	Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment. Contact local authorities in case of spillage to drain/aquatic environment.

6.3. Methods and material for containment and cleaning up

For containment	:	Prevent entry into waterways, sewer, basements or confined areas.
Methods for cleaning up	:	This material and its container must be disposed of in a safe way, and as per local legislation. Mechanically recover the product.
Other information	:	Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For disposal of residues refer to section 13 :" Disposal considerations".

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Do not pierce or burn, even after use. Do not breathe vapour/aerosol. Do not handle, store or open near an open flame, sources of heat or sources of ignition. Do not spray on an open flame or other ignition source. Ensure adequate ventilation, especially in confined areas. Avoid contact with skin, eyes and clothing. Wear personal protective equipment. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use only outdoors or in a well-ventilated area. Avoid breathing dust, fume, gas, mist, vapours, spray. Wear personal protective equipment.

Hygiene measures : Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep cool. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F. Store locked up. Store in a well-ventilated place. Keep container tightly closed.

7.3. Specific end use(s)

Paints, lacquers and varnishes.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1. National occupational exposure and biological limit values

dimethyl ether (115-10-6)

United Kingdom - Occupational Exposure Limits

Local name	Dimethyl ether
WEL TWA (OEL TWA)	766 mg/m³
	400 ppm
WEL STEL (OEL STEL)	958 mg/m³
	500 ppm
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

acetone (67-64-1)

United Kingdom - Occupational Exposure Limits

Local name	Acetone
WEL TWA (OEL TWA)	1210 mg/m³
	500 ppm
WEL STEL (OEL STEL)	3620 mg/m³
	1500 ppm
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

n-butyl acetate (123-86-4)

United Kingdom - Occupational Exposure Limits

Local name	Butyl acetate
WEL TWA (OEL TWA)	724 mg/m³
	150 ppm
WEL STEL (OEL STEL)	966 mg/m³

	200 ppm
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

2-methoxy-1-methylethyl acetate (108-65-6)

United Kingdom - Occupational Exposure Limits

Local name	1-Methoxypropyl acetate
WEL TWA (OEL TWA)	274 mg/m³
	50 ppm
WEL STEL (OEL STEL)	548 mg/m³
	100 ppm
Remark	Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity)
Regulatory reference	EH40. HSE

Mixture of Xylenes (-)

United Kingdom - Occupational Exposure Limits

Local name	Xylene
WEL TWA (OEL TWA)	220 mg/m³ o-,m-,p- or mixed isomers
	50 ppm o-,m-,p- or mixed isomers
WEL STEL (OEL STEL)	441 mg/m³ o-,m-,p- or mixed isomers
	100 ppm o-,m-,p- or mixed isomers
Remark	Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity)
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

United Kingdom - Biological limit values

Local name	Xylene, o-, m-, p- or mixed isomers
BMGV	650 mmol/mol Creatinine Parameter: methyl hippuric acid - Medium: urine - Sampling time: Post shift
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

2-butoxyethyl acetate (112-07-2)

United Kingdom - Occupational Exposure Limits

Local name	2-Butoxyethyl acetate
WEL TWA (OEL TWA)	133 mg/m³
	20 ppm
WEL STEL (OEL STEL)	332 mg/m³
	50 ppm
Remark	Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity)
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

dimethyl ether (115-10-6)

DNEL/DMEL (Workers)	
Long-term - systemic effects, inhalation	1894 mg/m³
DNEL/DMEL (General population)	
Long-term - systemic effects, inhalation	471 mg/m³
PNEC (Water)	
PNEC aqua (freshwater)	0.155 mg/l
PNEC aqua (marine water)	0.016 mg/l
PNEC aqua (intermittent, freshwater)	1.549 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	0.681 mg/kg dwt
PNEC sediment (marine water)	0.069 mg/kg dwt
PNEC (Soil)	
PNEC soil	0.045 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	160 mg/l

acetone (67-64-1)

DNEL/DMEL (Workers)	
Acute - local effects, inhalation	2420 mg/m³
Long-term - systemic effects, dermal	186 mg/kg bw/day
Long-term - systemic effects, inhalation	1210 mg/m³
DNEL/DMEL (General population)	
Long-term - systemic effects,oral	62 mg/kg bw/day
Long-term - systemic effects, inhalation	200 mg/m³
Long-term - systemic effects, dermal	62 mg/kg bw/day
PNEC (Water)	
PNEC aqua (freshwater)	10.6 mg/l
PNEC aqua (marine water)	1.06 mg/l
PNEC aqua (intermittent, freshwater)	21 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	30.4 mg/kg dwt
PNEC sediment (marine water)	3.04 mg/kg dwt
PNEC (Soil)	
PNEC soil	29.5 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	100 mg/l

n-butyl acetate (123-86-4)

DNEL/DMEL (Workers)	
Acute - systemic effects, dermal	11 mg/kg bw/day
Acute - systemic effects, inhalation	600 mg/m³
Acute - local effects, inhalation	600 mg/m³

Long-term - systemic effects, dermal	11 mg/kg bw/day
Long-term - systemic effects, inhalation	300 mg/m³
Long-term - local effects, inhalation	300 mg/m³

DNEL/DMEL (General population)

Acute - systemic effects, dermal	6 mg/kg bw/day
Acute - systemic effects, inhalation	300 mg/m³
Acute - systemic effects, oral	2 mg/kg bw/day
Acute - local effects, inhalation	300 mg/m³
Long-term - systemic effects,oral	2 mg/kg bw/day
Long-term - systemic effects, inhalation	35.7 mg/m³
Long-term - systemic effects, dermal	6 mg/kg bw/day
Long-term - local effects, inhalation	35.7 mg/m³

PNEC (Water)

PNEC aqua (freshwater)	0.18 mg/l
PNEC aqua (marine water)	0.018 mg/l
PNEC aqua (intermittent, freshwater)	0.36 mg/l

PNEC (Sediment)

PNEC sediment (freshwater)	0.981 mg/kg dwt
PNEC sediment (marine water)	0.098 mg/kg dwt

PNEC (Soil)

PNEC soil	0.09 mg/kg dwt

PNEC (STP)

PNEC sewage treatment plant	35.6 mg/l

Hydrocarbons, C9, aromatic (64742-95-6)

DNEL/DMEL (Workers)

Long-term - systemic effects, dermal	25 mg/kg bw/day
Long-term - systemic effects, inhalation	150 mg/m³

DNEL/DMEL (General population)

Long-term - systemic effects,oral	11 mg/kg bw/day
Long-term - systemic effects, inhalation	32 mg/m³
Long-term - systemic effects, dermal	11 mg/kg bw/day

2-methoxy-1-methylethyl acetate (108-65-6)

DNEL/DMEL (Workers)

Acute - local effects, inhalation	550 mg/m³
Long-term - systemic effects, dermal	796 mg/kg bw/day
Long-term - systemic effects, inhalation	275 mg/m³

DNEL/DMEL (General population)

Long-term - systemic effects,oral	36 mg/kg bw/day
Long-term - systemic effects, inhalation	33 mg/m³
Long-term - systemic effects, dermal	320 mg/kg bw/day
Long-term - local effects, inhalation	33 mg/m³

PNEC (Water)

PNEC aqua (freshwater)	0.635 mg/l
PNEC aqua (marine water)	0.064 mg/l
PNEC aqua (intermittent, freshwater)	6.35 mg/l

PNEC (Sediment)

PNEC sediment (freshwater)	3.29 mg/kg dwt
PNEC sediment (marine water)	0.329 mg/kg dwt

PNEC (Soil)

PNEC soil	0.29 mg/kg dwt

PNEC (STP)

PNEC sewage treatment plant	100 mg/l

TINUVIN 1130

DNEL/DMEL (Workers)

Long-term - systemic effects, dermal	0.5 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	0.35 mg/m³

DNEL/DMEL (General population)

Long-term - systemic effects,oral	0.025 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	0.085 mg/m³
Long-term - systemic effects, dermal	0.25 mg/kg bodyweight/day

PNEC (Water)

PNEC aqua (freshwater)	0.002 mg/l
PNEC aqua (marine water)	0 mg/l

PNEC (Sediment)

PNEC sediment (freshwater)	3.37 mg/kg dwt
PNEC sediment (marine water)	0.337 mg/kg dwt

PNEC (Soil)

PNEC soil	2 mg/kg dwt

PNEC (STP)

PNEC sewage treatment plant	10 mg/l

Mixture of Xylenes (-)

DNEL/DMEL (Workers)

Acute - systemic effects, inhalation	442 mg/m³
Acute - local effects, inhalation	442
Long-term - systemic effects, dermal	212 mg/kg bw/day
Long-term - systemic effects, inhalation	221 mg/m³
Long-term - local effects, inhalation	221 mg/m³

DNEL/DMEL (General population)

Acute - systemic effects, inhalation	260 mg/m³
Acute - local effects, inhalation	260 mg/m³
Long-term - systemic effects,oral	12.5 mg/kg bw/day
Long-term - systemic effects, inhalation	65.3 mg/m³
Long-term - systemic effects, dermal	125 mg/kg bw/day

Long-term - local effects, inhalation	65.3 µg/m³

PNEC (Water)

PNEC aqua (freshwater)	0.327 mg/l
PNEC aqua (marine water)	0.327 mg/l
PNEC aqua (intermittent, freshwater)	0.327 mg/l

PNEC (Sediment)

PNEC sediment (freshwater)	12.46 mg/kg dwt
PNEC sediment (marine water)	12.46 mg/kg dwt

PNEC (Soil)

PNEC soil	2.31 mg/kg dwt

PNEC (STP)

PNEC sewage treatment plant	6.58 mg/l

Hexamethylene diisocyanate, oligomers, isocyanurate (28182-81-2)

DNEL/DMEL (Workers)

Acute - local effects, inhalation	1 mg/m³
Long-term - local effects, inhalation	0.5 mg/m³

PNEC (Water)

PNEC aqua (freshwater)	0.127 mg/l
PNEC aqua (marine water)	0.013 mg/l
PNEC aqua (intermittent, freshwater)	1.27 mg/l

PNEC (Sediment)

PNEC sediment (freshwater)	266701 mg/kg dwt
PNEC sediment (marine water)	26670 mg/kg dwt

PNEC (Soil)

PNEC soil	53183 mg/kg dwt

PNEC (STP)

PNEC sewage treatment plant	88 mg/l

2-butoxyethyl acetate (112-07-2)

DNEL/DMEL (Workers)

Acute - systemic effects, dermal	120 mg/kg bw/day
Acute - local effects, inhalation	333 mg/m³
Long-term - systemic effects, dermal	169 mg/kg bw/day
Long-term - systemic effects, inhalation	133 mg/m³

DNEL/DMEL (General population)

Acute - systemic effects, dermal	72 mg/kg bw/day
Acute - systemic effects, oral	36 mg/kg bodyweight
Long-term - systemic effects,oral	8.6 mg/kg bw/day
Long-term - systemic effects, inhalation	80 mg/m³
Long-term - systemic effects, dermal	102 mg/kg bw/day
Long-term - local effects, inhalation	200 mg/m³

PNEC (Water)

PNEC aqua (freshwater)	0.304 mg/l

PNEC aqua (marine water)	0.03 mg/l
PNEC aqua (intermittent, freshwater)	0.56 mg/l

PNEC (Sediment)

PNEC sediment (freshwater)	2.03 mg/kg dwt
PNEC sediment (marine water)	0.203 mg/kg dwt

PNEC (Soil)

PNEC soil	0.415 mg/kg dwt

PNEC (Oral)

PNEC oral (secondary poisoning)	60 mg/kg food

PNEC (STP)

PNEC sewage treatment plant	90 mg/l

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:
Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Personal protective equipment should be chosen according to the CEN standards and in discussion with the supplier of the protective equipment.

8.2.2. Personal protection equipment

8.2.2.1. Eye and face protection

Eye protection:
Safety glasses

8.2.2.2. Skin protection

Skin and body protection:
Wear suitable protective clothing.

Hand protection:
protective gloves. DIN ISO 374. The recommendation is only valid for the supplied product and the stated application. Special working conditions, like heat or mechanical strain, which deviate from the test conditions, can reduce the protective effect provided by the recommended glove

Material	Permeation	Thickness (mm)	Comments
Butyl rubber	60 - 119 min	0,7 mm	Glove recommendation: Butoject® 898 (Kächele-Cama GmbH, source of supply see www.kcl.de) or comparable product.
In case of splash contact: Butyl rubber	60 - 119 min	0,7 mm	Glove recommendation: Butoject® 898 (Kächele-Cama GmbH, source of supply see www.kcl.de) or comparable product.

8.2.2.3. Respiratory protection

Respiratory protection:
[In case of inadequate ventilation] wear respiratory protection. If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. If the occupational exposure limit is exceeded: Extra personal protection: A/P2 filter respirator for organic vapour and harmful dust

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:
Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Colour	:	According to product specification.
Appearance	:	Aerosol.
Odour	:	Characteristics.
Odour threshold	:	Not available
Melting point	:	Not applicable
Freezing point	:	Not available
Boiling point	:	-24.9 °C
Flammability	:	Extremely flammable aerosol
Explosive properties	:	In use, may form flammable/explosive vapour-air mixture. Pressurised container: May burst if heated.
Explosive limits	:	Not available
Lower explosive limit (LEL)	:	1.2 vol %
Upper explosive limit (UEL)	:	18.6 vol %
Flash point	:	< 0 °C Without propellant gas
Auto-ignition temperature	:	Not self-igniting
Decomposition temperature	:	Not available
Ignition temperature	:	235 °C
pH	:	Not available
Viscosity, kinematic	:	Not available
Solubility	:	Insoluble. Moderately soluble in water.
Log Kow	:	Not available
Vapour pressure	:	3400 hPa @ 20°C
Vapour pressure at 50°C	:	Not available
Density	:	0.838 g/cm³ @ 20°C
Relative density	:	Not available
Relative vapour density at 20°C	:	Not available
Particle size	:	Not applicable
Particle size distribution	:	Not applicable
Particle shape	:	Not applicable
Particle aspect ratio	:	Not applicable
Particle aggregation state	:	Not applicable
Particle agglomeration state	:	Not applicable
Particle specific surface area	:	Not applicable
Particle dustiness	:	Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

VOC content	:	80.52 %

SECTION 10: Stability and reactivity

10.1. Reactivity

Extremely flammable aerosol. Pressurised container: May burst if heated.

10.2. Chemical stability

The product is stable and non reactive under normal conditions of use, storage and transport.

10.3. Possibility of hazardous reactions

Alkali metals. Acids. Oxidizing agent.

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

Acids. Alkalines. Oxidising agents.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

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

Acute toxicity (oral) : Based on available data, the classification criteria are not met
Acute toxicity (dermal) : Based on available data, the classification criteria are not met
Acute toxicity (inhalation) : Based on available data, the classification criteria are not met

2K Clearcoat Spray	
ATE CLP (oral)	> 2000 mg/kg
ATE CLP (dermal)	> 2000 mg/kg bodyweight
ATE CLP (vapours)	> 20 mg/l/4h

Hexamethylene diisocyanate, oligomers, isocyanurate (28182-81-2)	
LC50 Inhalation - Rat (Dust/Mist)	1.5 mg/l/4h

2-butoxyethyl acetate (112-07-2)	
LD50 oral rat	1880 mg/kg
LD50 dermal rabbit	1500 mg/kg

Skin corrosion/irritation : Based on available data, the classification criteria are not met
Serious eye damage/irritation : Causes serious eye irritation.
Respiratory or skin sensitisation : May cause an allergic skin reaction.
Germ cell mutagenicity : Based on available data, the classification criteria are not met
Carcinogenicity : Based on available data, the classification criteria are not met
Reproductive toxicity : Based on available data, the classification criteria are not met
STOT-single exposure : May cause drowsiness or dizziness.

acetone (67-64-1)	
STOT-single exposure	May cause drowsiness or dizziness.

n-butyl acetate (123-86-4)	
STOT-single exposure	May cause drowsiness or dizziness.

Hydrocarbons, C9, aromatic (64742-95-6)	
STOT-single exposure	May cause drowsiness or dizziness. May cause respiratory irritation.

2-methoxy-1-methylethyl acetate (108-65-6)	
STOT-single exposure	May cause drowsiness or dizziness.

Mixture of Xylenes (-)	
STOT-single exposure	May cause respiratory irritation.

Hexamethylene diisocyanate, oligomers, isocyanurate (28182-81-2)	
STOT-single exposure	May cause respiratory irritation.

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

2K Clearcoat Spray	
Vaporizer	Aerosol

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Hazardous to the aquatic environment, short–term (acute) : Based on available data, the classification criteria are not met

Hazardous to the aquatic environment, long–term (chronic) : Based on available data, the classification criteria are not met

12.2. Persistence and degradability

2K Clearcoat Spray

Persistence and degradability	No data available.

Mixture of Xylenes (-)

Persistence and degradability	Readily biodegradable, according to appropriate OECD test.
Biodegradation	> 60 % (OECD 301A-F method)

12.3. Bioaccumulative potential

n-butyl acetate (123-86-4)

Log Pow	1.78

Mixture of Xylenes (-)

Bioconcentration factor (BCF REACH)	8.5 7days; Oncorhynchus mykiss (Rainbow trout)
Log Pow	3.12

12.4. Mobility in soil

2K Clearcoat Spray

Ecology - soil Not available.

12.5. Results of PBT and vPvB assessment

2K Clearcoat Spray

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII.

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII.

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

Other adverse effects : No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this product

Additional information : No other effects known

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with local/regional/national/international regulations. Dispose of contents/container in accordance with licensed collector's sorting instructions.

Product/Packaging disposal recommendations : Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied. Container under pressure. Do not drill or burn even after use.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

14.1. UN number or ID number

UN-No. (ADR)	:	UN 1950
UN-No. (IMDG)	:	UN 1950
UN-No. (IATA)	:	UN 1950
UN-No. (ADN)	:	UN 1950
UN-No. (RID)	:	UN 1950

14.2. UN proper shipping name

Proper Shipping Name (ADR)	:	AEROSOLS
Proper Shipping Name (IMDG)	:	AEROSOLS
Proper Shipping Name (IATA)	:	Aerosols, flammable
Proper Shipping Name (ADN)	:	AEROSOLS
Proper Shipping Name (RID)	:	AEROSOLS

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR)	:	2.1
Danger labels (ADR)	:	2.1

IMDG

Transport hazard class(es) (IMDG)	:	2.1
Danger labels (IMDG)	:	2.1

IATA

Transport hazard class(es) (IATA)	:	2.1
Hazard labels (IATA)	:	2.1

ADN

Transport hazard class(es) (ADN)	:	2.1
Danger labels (ADN)	:	2.1

RID

Transport hazard class(es) (RID)	:	2.1
Danger labels (RID)	:	2.1

14.4. Packing group

Packing group (ADR)	:	Not applicable
Packing group (IMDG)	:	Not applicable
Packing group (IATA)	:	Not applicable
Packing group (ADN)	:	Not applicable
Packing group (RID)	:	Not applicable

14.5. Environmental hazards

Dangerous for the environment	:	No
Marine pollutant	:	No
Other information	:	No supplementary information available.

14.6. Special precautions for user

Overland transport

Classification code (ADR)	:	5F
Special provisions (ADR)	:	190, 327, 344, 625
Limited quantities (ADR)	:	1l
Packing instructions (ADR)	:	P207, LP200
Tunnel restriction code (ADR)	:	D

Transport by sea

Special provisions (IMDG)	:	63, 190, 277, 327, 344, 381, 959
Limited quantities (IMDG)	:	SP277
Packing instructions (IMDG)	:	P207, LP200
EmS-No. (Fire)	:	F-D

EmS-No. (Spillage) : S-U
Stowage category (IMDG) : None

Air transport

PCA Excepted quantities (IATA) : E0
PCA Limited quantities (IATA) : Y203
PCA limited quantity max net quantity (IATA) : 30kgG
PCA packing instructions (IATA) : 203
PCA max net quantity (IATA) : 75kg
CAO packing instructions (IATA) : 203
CAO max net quantity (IATA) : 150kg
Special provisions (IATA) : A145, A167, A802
ERG code (IATA) : 10L

Inland waterway transport

Classification code (ADN) : 5F
Special provisions (ADN) : 190, 327, 344, 625
Limited quantities (ADN) : 1 L

Rail transport

Classification code (RID) : 5F
Special provisions (RID) : 190, 327, 344, 625
Limited quantities (RID) : 1L
Packing instructions (RID) : P207, LP200
Hazard identification number (RID) : 23

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

EU restriction list (REACH Annex XVII)

Reference code	Applicable on
3(a)	2K Clearcoat Spray ; acetone ; n-butyl acetate ; 2-methoxy-1-methylethyl acetate ; Mixture of Xylenes
3(b)	2K Clearcoat Spray ; acetone ; n-butyl acetate ; 2-methoxy-1-methylethyl acetate ; TINUVIN 1130 ; Mixture of Xylenes ; 2-butoxyethyl acetate
3(c)	TINUVIN 1130

Contains no substance(s) listed on the REACH Candidate List
Contains no substance(s) listed on REACH Annex XIV (Authorisation List)
Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)
Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)
VOC content : 80.52 %
Other information, restriction and prohibition regulations : Directive 92/85/EEC on the safety and health of pregnant workers and workers who have recently given birth or are breastfeeding as amended. Directive 94/33/EC on the protection of young people at work, as amended. Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work, as amended. For details, refer to section 3 and 8.

Directive 2012/18/EU (SEVESO III)

Seveso Additional information : Not applicable

Seveso III Part I (Categories of dangerous substances)	Qualifying quantity (tonnes)	
	Lower-tier	Upper-tier
P3a FLAMMABLE AEROSOLS 'Flammable' aerosols Category 1 or 2, containing flammable gases Category 1 or 2 or flammable liquids Category 1	150	500

Directive 2004/42/EC 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:
EU limit value for 2K Clearcoat Spray (cat. B/e): 840 g/l.
2K Clearcoat Spray Contains max 675.00 g/l VOC.

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes:
EUH Sentence.

Abbreviations and acronyms

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC50	Median effective concentration
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
SDS	Safety Data Sheet
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
STP	Sewage treatment plant
TLM	Median Tolerance Limit
vPvB	Very Persistent and Very Bioaccumulative
SDS	Safety Data Sheet
OEL	Occupational Exposure Limit
RRN	REACH Registration no.
CAO	Cargo Aircraft Only
PCA	Passenger and Cargo Aircraft

Data sources	:	REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.
Training advice	:	Normal use of this product shall imply use in accordance with the instructions on the packaging.

Full text of H- and EUH-statements

Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aerosol 1	Aerosol, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2

Asp. Tox. 1	Aspiration hazard, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Gas 1A	Flammable gases, Category 1A
Flam. Liq. 2	Flammable liquids, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
Press. Gas (Comp.)	Gases under pressure : Compressed gas
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Narcosis
H220	Extremely flammable gas.
H222	Extremely flammable aerosol.
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H229	Pressurised container: May burst if heated.
H280	Contains gas under pressure; may explode if heated.
H302	Harmful if swallowed.
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.
H411	Toxic to aquatic life with long lasting effects.
EUH204	Contains isocyanates. May produce an allergic reaction.
EUH211	Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

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

Aerosol 1	H222;H229	On the basis of test data
Eye Irrit. 2	H319	Calculation method
Skin Sens. 1	H317	Calculation method
STOT SE 3	H336	Calculation method

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

Attachment to the Safety Data Sheet

Productname: 2K Clearcoat Spray

Ford Internal Ref.: 184380 **Revision Date:** 27.03.2025

Involved Products:

	Finiscode	Part Number	Packaging
1	2 242 254	HU7J 19L531 RG	250 ml