



SAFETY DATA SHEET

MCK

According to the REACH etc. (Amendment etc.) (EU Exit) Regulations 2020 No. 1577, as amended.
Conforms to regulation EC 1907/2006 annex II (as amended)

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

1.1. Product identifier

Product name MCK

Product number MCK, 3D

EU REACH registration notes This product is a mixture.

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

Identified uses Cleaning agent.

1.3. Details of the supplier of the safety data sheet

Supplier

OQEMA LIMITED

Oxford office: Winstons House, Carterton, Oxfordshire, OX18 3EZ

Phone: +44 (0) 1993 843081

London office: Neptune House, 2a Alexandra Grove, North Finchley, N12 8NU

Phone: +44 (0) 208 346 5946

Belfast office: Units 4-6 Ashbank, Channel Commercial Park, Queens Road, BT3 9DT

Phone: +44 (0) 28 90 461742

OQEMA ROTTERDAM B.V.

Rivium Quadrant 1, 2909 LC Capelle aan den IJssel, The Netherlands

Phone: + 31 (0) 10 2351040

OQEMA LIMITED IRELAND

Millenium House, Athlone Road, Ballymahon, Co Longford, Ireland

regulatory.affairs@oqema.co.uk

Contact person Technical Department: +44 (0) 1993 843081

1.4. Emergency telephone number

Emergency telephone EMERGENCY INFORMATION OUT OF OFFICE HOURS CONTACT CARECHEM 24: +44 (0)1270 502891

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (SI 2019 No. 720)

Physical hazards Flam. Liq. 2 - H225

Health hazards Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Carc. 2 - H351 STOT SE 3 - H336

Environmental hazards Not Classified

2.2. Label elements

MCK**Hazard pictograms****Signal word**

Danger

Hazard statements

H225 Highly flammable liquid and vapour.
 H315 Causes skin irritation.
 H319 Causes serious eye irritation.
 H351 Suspected of causing cancer.
 H336 May cause drowsiness or dizziness.

Precautionary statements

P201 Obtain special instructions before use.
 P202 Do not handle until all safety precautions have been read and understood.
 P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 P240 Ground and bond container and receiving equipment.
 P241 Use explosion-proof electrical equipment.
 P242 Use non-sparking tools.
 P243 Take action to prevent static discharges.
 P261 Avoid breathing vapour/ spray.
 P264 Wash contaminated skin thoroughly after handling.
 P271 Use only outdoors or in a well-ventilated area.
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
 P302+P352 IF ON SKIN: Wash with plenty of water.
 P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
 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.
 P308+P313 IF exposed or concerned: Get medical advice/ attention.
 P312 Call a POISON CENTRE/doctor if you feel unwell.
 P403+P233 Store in a well-ventilated place. Keep container tightly closed.
 P403+P235 Store in a well-ventilated place. Keep cool.
 P405 Store locked up.
 P501 Dispose of contents/ container in accordance with national regulations.

Contains

METHYLENE CHLORIDE, METHYL ETHYL KETONE

2.3. Other hazards**SECTION 3: Composition/information on ingredients****3.2. Mixtures**

METHYLENE CHLORIDE		60-100%
CAS number: 75-09-2		EC number: 200-838-9
Classification Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Carc. 2 - H351 STOT SE 3 - H336		

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METHYL ETHYL KETONE	10-30%
CAS number: 78-93-3	EC number: 201-159-0
Classification Flam. Liq. 2 - H225 Eye Irrit. 2 - H319 STOT SE 3 - H336	

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information	Get medical attention immediately. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. If breathing stops, provide artificial respiration. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Adrenaline and similar sympathomimetic drugs should be avoided following exposure, as cardiac arrhythmia may result with possible subsequent cardiac arrest.
Inhalation	Move affected person to fresh air at once. If breathing stops, provide artificial respiration. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Keep affected person warm and at rest. Get medical attention immediately.
Ingestion	Do not induce vomiting. Rinse mouth thoroughly with water. Give plenty of water to drink. Never give anything by mouth to an unconscious person. Get medical attention.
Skin contact	Remove affected person from source of contamination. Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if irritation persists after washing.
Eye contact	Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes and get medical attention.
Protection of first aiders	First aid personnel should wear appropriate protective equipment during any rescue.

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

General information	Suspected of causing cancer. The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	Irritating to respiratory system. Drowsiness, dizziness, disorientation, vertigo. Headache. Nausea
Ingestion	May cause discomfort if swallowed. May cause stomach pain or vomiting.
Skin contact	Causes skin irritation. Prolonged skin contact may cause redness and irritation.
Eye contact	Causes serious eye irritation. May cause temporary eye irritation.

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

Notes for the doctor	Treat symptomatically. Do not administer catecholamines (because of the cardiac effect caused by the product). If in doubt, get medical attention promptly.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.
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Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards Fire or high temperatures create: Toxic gases/vapours/fumes of: Phosgene (COCl₂). Hydrogen chloride (HCl). Chlorine. Oxides of carbon.

Hazardous combustion products Thermal decomposition or combustion products may include the following substances: Very toxic or corrosive gases or vapours. May form explosive or toxic mixtures with air.

5.3. Advice for firefighters

Protective actions during firefighting Avoid breathing fire gases or vapours. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Control run-off water by containing and keeping it out of sewers and watercourses.

Special protective equipment for firefighters Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Wear chemical protective suit.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Wear protective clothing as described in Section 8 of this safety data sheet. Do not touch or walk into spilled material. Avoid inhalation of vapours and contact with skin and eyes. Provide adequate ventilation. Use suitable respiratory protection if ventilation is inadequate. No smoking, sparks, flames or other sources of ignition near spillage. Take precautionary measures against static discharges.

6.2. Environmental precautions

Environmental precautions Avoid discharge into drains or watercourses or onto the ground. Inform the relevant authorities if environmental pollution occurs (sewers, waterways, soil or air).

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Eliminate all sources of ignition. No smoking, sparks, flames or other sources of ignition near spillage. Absorb spillage with non-combustible, absorbent material. Contain larger amounts and pump up into suitable containers. Containers with collected spillage must be properly labelled with correct contents and hazard symbol. After cleaning, flush away traces with water. Recover waste water for processing later.

6.4. Reference to other sections

Reference to other sections For information regarding safe handling, see section 7. For personal protection, see Section 8. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Wear protective clothing as described in Section 8 of this safety data sheet. Avoid inhalation of vapours and contact with skin and eyes. Provide adequate ventilation. Use suitable respiratory protection if ventilation is inadequate. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Vapours are heavier than air and may travel along the floor and accumulate in the bottom of containers. Take precautionary measures against static discharges.

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Advice on general occupational hygiene

Good personal hygiene procedures should be implemented. Provide eyewash station and safety shower. Do not eat, drink or smoke when using this product. Remove contaminated clothing and protective equipment before entering eating areas. Take off immediately all contaminated clothing and wash it before reuse. Wash at the end of each work shift and before eating, smoking and using the toilet.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions

Store in tightly-closed, original container in a dry, cool and well-ventilated place. Keep away from food, drink and animal feeding stuffs. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharges. Use explosion-proof electrical equipment. Provide impermeable floor. Provide a catch-tank in a bunded area. Protect from light. Protect from moisture. Do not store with: Acids. Bases. Oxygen. Oxidising agents. Suitable container materials: Steel/iron. Galvanised steel. Unsuitable container materials: Light metals and their alloys. Glass. Plastics

Storage class

Flammable liquid storage.

7.3. Specific end use(s)

Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

Occupational exposure limits

METHYLENE CHLORIDE

Long-term exposure limit (8-hour TWA): WEL 100 ppm 353 mg/m³ Sk, BMGV

Short-term exposure limit (15-minute): WEL 200 ppm 706 mg/m³ Sk, BMGV

METHYL ETHYL KETONE

Short-term exposure limit (15-minute): WEL 899 mg/m³ 300 ppm

Long-term exposure limit (8-hour TWA): WEL 600 mg/m³ 200 ppm

WEL = Workplace Exposure Limit.

METHYLENE CHLORIDE (CAS: 75-09-2)

DNEL

Workers - Inhalation; Long term systemic effects: 176 mg/m³

Workers - Dermal; Long term systemic effects: 12 mg/kg/day

General population - Inhalation; Long term systemic effects: 44 mg/m³

General population - Dermal; Long term systemic effects: 5.82 mg/kg/day

General population - Oral; Long term systemic effects: 0.06 mg/kg/day

PNEC

Fresh water; 0.31 mg/l

marine water; 0.031 mg/l

Sediment (Freshwater); 2.57 mg/kg

Sediment (Marinewater); 0.26 mg/kg

STP; 26 mg/l

Soil; 0.33 mg/kg

METHYL ETHYL KETONE (CAS: 78-93-3)

DNEL

Workers - Dermal; Long term systemic effects: 1161 mg/kg/day

Workers - Inhalation; Long term systemic effects: 600 mg/m³

Consumer - Dermal; Long term systemic effects: 412 mg/kg/day

Consumer - Inhalation; Long term systemic effects: 106 mg/m³

Consumer - Oral; Long term systemic effects: 31 mg/kg/day

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PNEC

- Fresh water; 55.8 mg/l
- marine water; 55.8 mg/l
- Intermittent release; 55.8 mg/l
- STP; 709 mg/l
- Sediment (Marinewater); 284.7 mg/kg
- Sediment (Freshwater); 284.74 mg/kg/day
- Soil; 22.5 mg/kg

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate general and local exhaust ventilation. Use process enclosures, local exhaust ventilation or other engineering controls as the primary means to minimise worker exposure. Personal protective equipment should only be used if worker exposure cannot be controlled adequately by the engineering control measures.

Personal protection

Eye wash facilities and emergency shower must be available when handling this product.

Eye/face protection

Wear chemical splash goggles. Personal protective equipment for eye and face protection should comply with European standard EN166

Hand protection

It is recommended that chemical-resistant, impervious gloves are worn. To protect hands from chemicals, gloves should comply with European standard EN374. It is recommended that gloves are made of the following material: Nitrile rubber. It should be noted that liquid may penetrate the gloves. Frequent changes are recommended. The breakthrough time for any glove material may be different for different glove manufacturers. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material.

Other skin and body protection

Use engineering controls to reduce air contamination to permissible exposure level. Provide eyewash station and safety shower. Wear appropriate clothing to prevent any possibility of skin contact. Wear apron or protective clothing in case of contact. Chemical resistant boots should comply with European standard EN345.

Hygiene measures

Do not eat, drink or smoke when using this product. Remove contaminated clothing and protective equipment before entering eating areas. Take off immediately all contaminated clothing and wash it before reuse. Contaminated clothing should be placed in a closed container for disposal or decontamination. Wash at the end of each work shift and before eating, smoking and using the toilet.

Respiratory protection

Respiratory protection must be used if the airborne contamination exceeds the recommended occupational exposure limit. Wear self-contained breathing apparatus. Wear a respirator fitted with the following cartridge: ABEK2-P3 Particulate filter, type P3.

Environmental exposure controls

Do not discharge into drains or watercourses or onto the ground. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Clear liquid.

Colour

Colourless.

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Initial boiling point and range	Estimated Value 39°C
Partition coefficient	METHYLENE CHLORIDE (CAS: 75-09-2; EC: 200-838-9) K _{oc} : 46.8 METHYL ETHYL KETONE (CAS: 201-159-0; EC: 201-159-0) K _{oc} : 15 Expected to have a low potential for adsorption.

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	Stable at normal ambient temperatures and when used as recommended.
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10.2. Chemical stability

Stability	Stable under the prescribed storage conditions.
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	None under normal processing.
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10.4. Conditions to avoid

Conditions to avoid	Avoid heat, flames and other sources of ignition. Protect from light. Protect from moisture.
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10.5. Incompatible materials

Materials to avoid	Acids. Bases. Alkali metals. Strong oxidising agents.
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10.6. Hazardous decomposition products

Hazardous decomposition products	Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Hydrogen chloride (HCl). Phosgene (COCl ₂). Chlorine.
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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological effects	Information given is based on data of the components and of similar products.
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Acute toxicity - oral

Notes (oral LD₅₀)	METHYLENE CHLORIDE (CAS: 75-09-2; EC: 200-838-9) LD ₅₀ > 2000 mg/kg bw, Oral, Rat KLIMISCH RATING 1 1988 OECD 401 Not Classified METHYL ETHYL KETONE (CAS: 201-159-0; EC: 201-159-0) LD ₅₀ 2054 mg/kg, Oral, Rat LD ₅₀ 2328 mg/kg, Oral, Rat LD ₅₀ 2193 mg/kg, Oral, Rat KLIMISCH RATING 2 1986 GHS Criteria not met.
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Acute toxicity - dermal

Notes (dermal LD₅₀)	METHYLENE CHLORIDE (CAS: 75-09-2; EC: 200-838-9) LD ₅₀ > 2000 mg/kg bw, Dermal, Rat KLIMISCH RATING 1 1988 OECD 402 GHS Criteria not met. METHYL ETHYL KETONE (CAS: 201-159-0; EC: 201-159-0) LD ₅₀ > 10 mL/kg bw, Dermal, Rabbit Klimisch Rating 2 1962 OECD 402 GHS Criteria not met.
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Acute toxicity - inhalation

Notes (inhalation LC₅₀)	METHYLENE CHLORIDE (CAS: 75-09-2; EC: 200-838-9) LC ₅₀ 49000 mg/m ³ , 7 hours, Vapour, Inhalation Mouse Klimisch Rating 2 1947 GHS Criteria not met.
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Skin corrosion/irritation

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Skin corrosion/irritation	METHYLENE CHLORIDE (CAS: 75-09-2; EC: 200-838-9) Rabbit Not corrosive to skin. Irritating to skin. Category 2 (irritant) based on GHS criteria. Klimisch Rating 2 1990 OECD 404 METHYL ETHYL KETONE (CAS: 201-159-0; EC: 201-159-0) Rabbit Not irritating. Klimisch Rating 2 1986 OECD 404 GHS Criteria not met.
<u>Serious eye damage/irritation</u>	
Serious eye damage/irritation	METHYLENE CHLORIDE (CAS: 75-09-2; EC: 200-838-9) Rabbit Category 2 (Irritating to eyes) based on GHS criteria. Klimisch Rating 2 1976 METHYL ETHYL KETONE (CAS: 201-159-0; EC: 201-159-0) Rabbit Category 2 (Irritating to eyes) based on GHS criteria. Klimisch Rating 2 1970 OECD 405
<u>Skin sensitisation</u>	
Skin sensitisation	METHYLENE CHLORIDE (CAS: 75-09-2; EC: 200-838-9) Mouse Not considered to be a skin sensitizer. GHS Criteria not met. KLIMISCH RATING 1 2010 OECD 429 METHYL ETHYL KETONE (CAS: 201-159-0; EC: 201-159-0) Guinea pig Not considered to be a skin sensitizer. GHS Criteria not met. KLIMISCH RATING 1 1996 OECD 406 EU Method B.6
<u>Germ cell mutagenicity</u>	
Genotoxicity - in vitro	METHYLENE CHLORIDE (CAS: 75-09-2; EC: 200-838-9) Bacterial Reverse Mutation Assay: Positive with and without metabolic activation. KLIMISCH RATING 2 1981 OECD 471 In vitro mammalian chromosome aberration test: Positive with and without metabolic activation. KLIMISCH RATING 2 1983 OECD 473 Gene mutation: Negative. METHYL ETHYL KETONE (CAS: 201-159-0; EC: 201-159-0) Bacterial Reverse Mutation Assay: Negative with and without metabolic activation. KLIMISCH RATING 2 1984 OECD 471 Chromosome aberration: Negative. KLIMISCH RATING 2 1982 OECD 473 Mammalian cell gene mutation assay.: Negative with and without metabolic activation. KLIMISCH RATING 1 1984 OECD 476
Genotoxicity - in vivo	METHYLENE CHLORIDE (CAS: 75-09-2; EC: 200-838-9) Mammalian Erythrocyte Micronucleus Test: Negative. KLIMISCH RATING 1 1986 1987 OECD 474 METHYL ETHYL KETONE (CAS: 201-159-0; EC: 201-159-0) Mammalian Erythrocyte Micronucleus Test: Negative. Klimisch Rating 2 1984 OECD 474
<u>Carcinogenicity</u>	
Summary	METHYL ETHYL KETONE (CAS: 201-159-0; EC: 201-159-0) In accordance with column 2 of REACH Annex X, the carcinogenicity study (required in section 8.9.1.) does not need to be conducted as negative results were reported in all genotoxicity studies and the repeated dose study does not indicate that the test substance induces hyperplasia or pre-neoplastic lesions.
Carcinogenicity	METHYLENE CHLORIDE (CAS: 75-09-2; EC: 200-838-9) LOAEC 1000 ppm, Inhalation, Rat LOAEC 2000 ppm, Inhalation, Mouse NOAEC 2000 ppm, Inhalation, Rat Klimisch Rating 2 1986 1988 OECD 451 The results of these human studies cannot completely rule out the possibility of carcinogenic effects caused by dichloromethane and there is some evidence from animal studies that it may cause cancer, based either on a metabolism less relevant for humans or by a non-genotoxic, threshold-mediated mode of action.
<u>Reproductive toxicity</u>	
Reproductive toxicity - fertility	METHYLENE CHLORIDE (CAS: 75-09-2; EC: 200-838-9) Two-generation study - NOAEC >= 1500 ppm, Inhalation, Rat P0, F1, F2 KLIMISCH RATING 1 1985 1988 OECD 416 METHYL ETHYL KETONE (CAS: 201-159-0; EC: 201-159-0) Two-generation study - NOAEC 2000 ppm, Inhalation, Rat P0, P1, F1, F2 KLIMISCH RATING 1 2000 2004 OECD 416

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Reproductive toxicity - development

METHYLENE CHLORIDE (CAS: 75-09-2; EC: 200-838-9) Maternal toxicity: - LOAEC: 1226 ppm, Inhalation, Rat, Mouse Developmental toxicity: - LOAEC: 1226 ppm, Inhalation, Rat, Mouse Teratogenicity: - NOAEC: 4300 mg/m³ air, Inhalation, Rat, Mouse Klimisch Rating 2 1974 1975 OECD 414

METHYL ETHYL KETONE (CAS: 201-159-0; EC: 201-159-0) Maternal toxicity: - NOAEC: 1002 ppm, Inhalation, Rat Teratogenicity: - NOAEC: 1002 ppm, Inhalation, Rat KLIMISCH RATING 1 1979 OECD 414 Maternal toxicity: - NOAEC: 1000 ppm, Inhalation, Mouse Fetotoxicity: - NOAEC: 1000 ppm, Inhalation, Mouse KLIMISCH RATING 1 1989

Specific target organ toxicity - repeated exposure

STOT - repeated exposure

METHYLENE CHLORIDE (CAS: 75-09-2; EC: 200-838-9) NOAEL 6 mg/kg bw/day, Oral, Rat Klimisch Rating 2 1986 OECD 453 NOAEC 200 ppm, Inhalation, Rat KLIMISCH RATING 1 1988 OECD 453 NOAEC 500 ppm, Inhalation, Mouse Klimisch Rating 2 2017 OECD 413 METHYL ETHYL KETONE (CAS: 201-159-0; EC: 201-159-0) NOAEC 5041 ppm, Inhalation, Rat KLIMISCH RATING 1 OECD 413 1981

SECTION 12: Ecological information

Ecotoxicity

The information given is based on data available for the material, the components of the material and similar materials.

12.1. Toxicity

Acute aquatic toxicity

Acute toxicity - fish

METHYLENE CHLORIDE (CAS: 75-09-2; EC: 200-838-9)
 LC₅₀, 96 hours: 193 mg/l, Pimephales promelas (Fat-head Minnow)
 Klimisch Rating 2
 1978
 LC₅₀, 48 hours: 97 mg/l, Fundulus heteroclitus
 Klimisch Rating 2
 1990
 ASTM E729 - 96(1980)
 METHYL ETHYL KETONE (CAS: 201-159-0; EC: 201-159-0)
 LC₅₀, 96 hours: 2973 mg/l, Pimephales promelas (Fat-head Minnow)
 NOEC, 96 hours: 1170 mg/l, Pimephales promelas (Fat-head Minnow)
 EC₀, 96 hours: 1836 mg/l, Pimephales promelas (Fat-head Minnow)
 LC₅₀, 24 hours: 2973 mg/l, Pimephales promelas (Fat-head Minnow)
 LC₅₀, 48 hours: 2973 mg/l, Pimephales promelas (Fat-head Minnow)
 LC₅₀, 72 hours: 2973 mg/l, Pimephales promelas (Fat-head Minnow)
 KLIMISCH RATING 1
 1998
 OECD 203

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Acute toxicity - aquatic invertebrates

METHYLENE CHLORIDE (CAS: 75-09-2; EC: 200-838-9)
 LC₅₀, 48 hours: 27 mg/l, *Daphnia magna*
 Klimisch Rating 2
 1979
 LC₅₀, 48 hours: 109 mg/l, *Palaemonetes pugio*
 Klimisch Rating 2
 1990
 METHYL ETHYL KETONE (CAS: 201-159-0; EC: 201-159-0)
 EC₅₀, 48 hours: 308 mg/l, *Daphnia magna*
 EC₀, 48 hours: 136 mg/l, *Daphnia magna*
 NOEC, 48 hours: 68 mg/l, *Daphnia magna*
 EC₅₀, 24 hours: > 345 mg/l, *Daphnia magna*
 KLIMISCH RATING 1
 1998
 OECD 202

Acute toxicity - aquatic plants

METHYL ETHYL KETONE (CAS: 201-159-0; EC: 201-159-0)
 EC₅₀, 72 hours: 1220 mg/l, *Raphidocelis subcapitata* (freshwater green algae)
 EC₁₀, 72 hours: 1050 mg/l, *Raphidocelis subcapitata* (freshwater green algae)
 NOEC, 72 hours: 566 mg/l, *Raphidocelis subcapitata* (freshwater green algae)
 EC₅₀, 96 hours: 1240 mg/l, *Raphidocelis subcapitata* (freshwater green algae)
 EC₁₀, 96 hours: 1010 mg/l, *Raphidocelis subcapitata* (freshwater green algae)
 NOEC, 96 hours: 566 mg/l, *Raphidocelis subcapitata* (freshwater green algae)
 KLIMISCH RATING 1
 1998
 OECD 201

Acute toxicity - microorganisms

METHYLENE CHLORIDE (CAS: 75-09-2; EC: 200-838-9)
 EC₅₀, 40 min: 2590- mg/l, Activated sludge, domestic
 Klimisch Rating 2
 2004
 OECD 209

Chronic aquatic toxicity

Chronic toxicity - fish early life stage

METHYLENE CHLORIDE (CAS: 75-09-2; EC: 200-838-9)
 LC₅₀, 8 days: 471 mg/l, *Pimephales promelas* (Fat-head Minnow)
 NOEC, 8 days: 357 mg/l, *Pimephales promelas* (Fat-head Minnow)
 NOEC, 28 days: 142 mg/l, *Pimephales promelas* (Fat-head Minnow)
 NOEC, 28 days: 83 mg/l, *Pimephales promelas* (Fat-head Minnow)
 NOEC, 28 days: 321 mg/l, *Pimephales promelas* (Fat-head Minnow)
 Klimisch Rating 2
 1985
 1987
 ASTM E729-80

Toxicity to soil

METHYLENE CHLORIDE (CAS: 75-09-2; EC: 200-838-9)
 NOEC, 28 days: 0.1 mg/kg soil dw, Soil micro-organisms
 Klimisch Rating 2
 1986

12.2. Persistence and degradability

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Phototransformation

METHYLENE CHLORIDE (CAS: 75-09-2; EC: 200-838-9)
 QSAR
 Air - DT₅₀ : 79.31 days
 Klimisch Rating 2
 1987
 1988
 1991
 1993
 2000
 Water - DT₅₀ : 1 year
 Klimisch Rating 2
 1975

Stability (hydrolysis)

METHYLENE CHLORIDE (CAS: 75-09-2; EC: 200-838-9)
 pH7 - DT₅₀ : 1.5 years @ 25°C
 Klimisch Rating 2
 1975
 METHYL ETHYL KETONE (CAS: 201-159-0; EC: 201-159-0)
 Scientifically unjustified.

Biodegradation

METHYLENE CHLORIDE (CAS: 75-09-2; EC: 200-838-9)
 Water - Degradation 68: 28 days
 The substance is readily biodegradable.
 KLIMISCH RATING 1
 2012
 OECD 301D
 Water and sediment - DT₅₀ : 10.9 days
 Klimisch Rating 2
 1980
 METHYL ETHYL KETONE (CAS: 201-159-0; EC: 201-159-0)
 Water - Degradation 70: 7 days
 Water - Degradation 98: 28 days
 Water - Degradation 61: 7 days
 The substance is readily biodegradable.
 KLIMISCH RATING 1
 1998
 OECD 301D
 EU Method C.4-E
 EPA OTS 796.3200

12.3. Bioaccumulative potential

Bioaccumulative potential

METHYLENE CHLORIDE (CAS: 75-09-2; EC: 200-838-9) BCF: is 4.75 L/Kg for higher concentration (250 ug/L) and 39 L/Kg for lower concentration (25 ug/L)., Cyprinus carpio (Common carp) Klimisch Rating 2 1986 OECD 305
 METHYL ETHYL KETONE (CAS: 201-159-0; EC: 201-159-0) Study scientifically not necessary

Partition coefficient

METHYLENE CHLORIDE (CAS: 75-09-2; EC: 200-838-9) Koc: 46.8
 METHYL ETHYL KETONE (CAS: 201-159-0; EC: 201-159-0) Koc: 15 Expected to have a low potential for adsorption.

12.4. Mobility in soil

Adsorption/desorption coefficient

METHYLENE CHLORIDE (CAS: 75-09-2; EC: 200-838-9) - Koc: 46.8 @ 20°C
 METHYL ETHYL KETONE (CAS: 201-159-0; EC: 201-159-0) - Koc: 15 @ 20°C Expected to have a low potential for adsorption

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Henry's law constant METHYLENE CHLORIDE (CAS: 75-09-2; EC: 200-838-9) 0.001 atm m³/mol @ 9.6°C 0.001 atm m³/mol @ 17.5°C 0.002 atm m³/mol @ 24.8°C 0.003 atm m³/mol @ 34.6°C Klimisch Rating 2 1987
METHYL ETHYL KETONE (CAS: 201-159-0; EC: 201-159-0) 47 Pa m³/mol @ °C

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

12.6. Other adverse effects

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Waste is classified as hazardous waste.

Disposal methods Disposal should be in accordance with applicable regional, national, and local laws and regulations. Local regulations may be more stringent than regional or national requirements and must be in compliance. Do not release into the environment.

SECTION 14: Transport information

14.1. UN number

UN No. (ADR/RID) 1992

UN No. (IMDG) 1992

UN No. (ICAO) 1992

UN No. (ADN) 1992

14.2. UN proper shipping name

Proper shipping name (ADR/RID) FLAMMABLE LIQUID, TOXIC, N.O.S (contains Methyl Ethyl Ketone & Methylene Chloride)

Proper shipping name (IMDG) FLAMMABLE LIQUID, TOXIC, N.O.S (contains Methyl Ethyl Ketone & Methylene Chloride)

Proper shipping name (ICAO) FLAMMABLE LIQUID, TOXIC, N.O.S (contains Methyl Ethyl Ketone & Methylene Chloride)

Proper shipping name (ADN) FLAMMABLE LIQUID, TOXIC, N.O.S (contains Methyl Ethyl Ketone & Methylene Chloride)

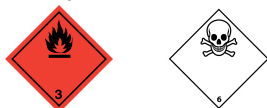
14.3. Transport hazard class(es)

ADR/RID class 3

ADR/RID subsidiary risk 6.1

ADR/RID classification code FT1

Transport labels



14.4. Packing group

ADR/RID packing group III

IMDG packing group III

ICAO packing group III

ADN packing group III

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14.5. Environmental hazards

14.6. Special precautions for user

ADR transport category	3
Emergency Action Code	2Z
Hazard Identification Number (ADR/RID)	36
Tunnel restriction code	(D/E)

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

SECTION 15: Regulatory information

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

EU legislation	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 (as amended) Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended)
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15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet	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. BOD: Biochemical Oxygen Demand. CAS: Chemical Abstracts Service. DNEL: Derived No Effect Level. EC ₅₀ : 50% of maximal Effective Concentration. IARC: International Agency for Research on Cancer. GHS: Globally Harmonized System. LC50: Lethal Concentration to 50 % of a test population. LD50: Lethal Dose to 50% of a test population (Median Lethal Dose). MARPOL 73/78: International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. NOAEL: No Observed Adverse Effect Level. NOEC: No Observed Effect Concentration. PBT: Persistent, Bioaccumulative and Toxic substance. PNEC: Predicted No Effect Concentration. SVHC: Substances of Very High Concern. UVCB - Unknown or variable composition, complex reaction products or Biological materials. UN: United Nations. vPvB: Very Persistent and Very Bioaccumulative.
Revision comments	This is the first issue.
Issued by	Technical Department.
Revision date	11/08/2023

MCK

Revision	001
SDS number	42590
Hazard statements in full	H225 Highly flammable liquid and vapour. H315 Causes skin irritation. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness. H351 Suspected of causing cancer. H351 Suspected of causing cancer by inhalation.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.