NMC-Fix

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Reference number: 100001003
Revision date: 25/07/2022 Supersedes version of: 18/10/2021 Version: 2.0

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

1.1. Product identifier

Product form : Mixture
Trade name : NMC-Fix

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

1.2.1. Relevant identified uses

Main use category : Professional use
Function or use category : Adhesives, binding agents

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

NMC sa S.A.
Gert-Noël-Strasse
4731 Eynatten
Belgium
T +32 87 85 85 00 - F +32 87 85 85 11
info@nmc.eu

1.4. Emergency telephone number

Emergency number : +32 14 58 45 45 (BIG)
24h/24h

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flammable liquids, Category 2	H225
Skin corrosion/irritation, Category 2	H315
Serious eye damage/eye irritation, Category 2	H319
Specific target organ toxicity – Single exposure, Category 3, Narcosis	H336
Hazardous to the aquatic environment – Chronic Hazard, Category 2	H411

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

Adverse physicochemical, human health and environmental effects

Highly flammable liquid and vapour. May cause drowsiness or dizziness. Causes skin irritation. Causes serious eye irritation. Toxic to aquatic life with long lasting effects.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :

GHS02 GHS07 GHS09

Signal word (CLP) : Danger
Contains : hydrocarbons, C6, isoalkanes, < 5% n-hexane, hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane, aceton, butanone
Hazard statements (CLP) : H225 - Highly flammable liquid and vapour.
H315 - Causes skin irritation.
H319 - Causes serious eye irritation.

Precautionary statements (CLP)	:	H336 - May cause drowsiness or dizziness. H411 - Toxic to aquatic life with long lasting effects. P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P261 - Avoid breathing spray, vapours. P271 - Use only outdoors or in a well-ventilated area. P273 - Avoid release to the environment. P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. P403+P233 - Store in a well-ventilated place. Keep container tightly closed. P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards

Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

Component	
butanone (78-93-3)	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
aceton (67-64-1)	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
xylene (1330-20-7)	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 is 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

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	EC-No.: 927-510-4 REACH-no: 01-2119475515-33	< 50	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Asp. Tox. 1, H304 STOT SE 3, H336 Aquatic Chronic 2, H411
hydrocarbons, C6, isoalkanes, < 5% n-hexane	EC-No.: 931-254-9 REACH-no: 01-2119484651-34	< 50	Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411
hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane	EC-No.: 921-024-6 REACH-no: 01-2119475514-35	< 50	Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane	EC-No.: 926-605-8 REACH-no: 01-2119486291-36	< 50	Flam. Liq. 2, H225 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411
butanone substance with national workplace exposure limit(s) (BE); substance with a Community workplace exposure limit	CAS-No.: 78-93-3 EC-No.: 201-159-0 EC Index-No.: 606-002-00-3 REACH-no: 01-2119457290-43	≥ 25 – < 50	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336
aceton substance with national workplace exposure limit(s) (BE); substance with a Community workplace exposure limit	CAS-No.: 67-64-1 EC-No.: 200-662-2 EC Index-No.: 606-001-00-8	≥ 10 – < 25	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336
4-tert-butylphenol-formaldehyde copolymer	CAS-No.: 25085-50-1 EC-No.: 472-160-3	≥ 1 – < 5	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
xylene substance with national workplace exposure limit(s) (BE); substance with a Community workplace exposure limit	CAS-No.: 1330-20-7 EC-No.: 215-535-7 EC Index-No.: 601-022-00-9 REACH-no: 01-2119488216-32	≥ 1 – < 5	Flam. Liq. 3, H226 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315

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 : 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.

First-aid measures after skin contact : Rinse skin with water/shower. Take off immediately all contaminated clothing. If skin irritation occurs: Get medical advice/attention.

First-aid measures after eye contact : 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 : Rinse mouth out with water. Call a physician immediately.

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

Symptoms/effects : May cause drowsiness or dizziness.

Symptoms/effects after skin contact : Irritation. Repeated exposure may cause skin dryness or cracking.

Symptoms/effects after eye contact : 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 : Water spray. Dry powder. Foam. Carbon dioxide.

Unsuitable extinguishing media : Do not use a solid water stream as it may scatter and spread fire.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Highly flammable liquid and vapour.

Explosion hazard	:	May form flammable/explosive vapour-air mixture. Heating may cause a fire or explosion. Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.
Hazardous decomposition products in case of fire	:	Toxic fumes may be released. Carbon monoxide. Carbon dioxide.

5.3. Advice for firefighters

Precautionary measures fire	:	Fight fire remotely due to the risk of explosion.
Firefighting instructions	:	Cool laterally with water containers exposed to flames, even after the fire is extinguished.
Protection during firefighting	:	Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	:	Remove ignition sources. No open flames. No smoking. Use special care to avoid static electric charges.

6.1.1. For non-emergency personnel

Emergency procedures	:	Evacuate unnecessary personnel. Ventilate spillage area. No open flames, no sparks, and no smoking.

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.

6.3. Methods and material for containment and cleaning up

For containment	:	Collect spillage.
Methods for cleaning up	:	Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.
Other information	:	Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed	:	Gas/vapour heavier than air. May accumulate in confined spaces, particularly at or below ground level. Handle empty containers with care because residual vapours are flammable.
Precautions for safe handling	:	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapours may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Use only outdoors or in a well-ventilated area.
Hygiene measures	:	Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures	:	Ground/bond container and receiving equipment.
Storage conditions	:	Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.
Incompatible products	:	Heat sources. Ignition sources.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

xylene (1330-20-7)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	Xylene, mixed isomers, pure
IOEL TWA	221 mg/m³
IOEL TWA [ppm]	50 ppm
IOEL STEL	442 mg/m³
IOEL STEL [ppm]	100 ppm
Remark	Skin
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC
Belgium - Occupational Exposure Limits	
Local name	Xylène, isomères mixtes, purs # Xyleen, mengsel van isomeren, zuiver
OEL TWA	221 mg/m³
OEL TWA [ppm]	50 ppm
OEL STEL	442 mg/m³
OEL STEL [ppm]	100 ppm
Remark	D: la mention “D” signifie que la résorption de l’agent, via la peau, les muqueuses ou les yeux, constitue une partie importante de l’exposition totale. Cette résorption peut se faire tant par contact direct que par présence de l’agent dans l’air. # D: de vermelding “D” betekent dat de opname van het agens via de huid, de slijmvliezen of de ogen een belangrijk deel van de totale blootstelling vormt. Deze opname kan het gevolg zijn van zowel direct contact als zijn aanwezigheid in de lucht.
Regulatory reference	Koninklijk besluit/Arrêté royal 19/11/2020

aceton (67-64-1)	
EU - Indicative Occupational Exposure Limit (IOEL)	
IOEL TWA	1210 mg/m³
IOEL TWA [ppm]	500 ppm
Belgium - Occupational Exposure Limits	
OEL TWA	1210 mg/m³ 594 mg/m³
OEL TWA [ppm]	500 ppm 246 ppm
OEL STEL	2420 mg/m³ 1187 mg/m³
OEL STEL [ppm]	1000 ppm 492 ppm

butanone (78-93-3)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	Butanone
IOEL TWA	600 mg/m³

butanone (78-93-3)	
IOEL TWA [ppm]	200 ppm
IOEL STEL	900 mg/m³
IOEL STEL [ppm]	300 ppm
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC
Belgium - Occupational Exposure Limits	
Local name	2-Butanone # 2-Butanon
OEL TWA	600 mg/m³
OEL TWA [ppm]	200 ppm
OEL STEL	900 mg/m³
OEL STEL [ppm]	300 ppm
Regulatory reference	Koninklijk besluit/Arrêté royal 19/11/2020

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

hydrocarbons, C6, isoalkanes, < 5% n-hexane	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	13964 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	5306 mg/m³
DNEL/DMEL (General population)	
Long-term - systemic effects,oral	1301 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	1131 mg/m³
Long-term - systemic effects, dermal	1377 mg/kg bodyweight/day

xylene (1330-20-7)	
DNEL/DMEL (Workers)	
Acute - systemic effects, inhalation	442 mg/m³
Acute - local effects, inhalation	442 mg/m³
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 mg/m³

xylene (1330-20-7)	
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

aceton (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 (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

butanone (78-93-3)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	1161 mg/kg bw/day
Long-term - systemic effects, inhalation	600 mg/m³
DNEL/DMEL (General population)	
Long-term - systemic effects,oral	31 mg/kg bw/day
Long-term - systemic effects, inhalation	106 mg/m³
Long-term - systemic effects, dermal	412 mg/kg bw/day

butanone (78-93-3)	
PNEC (Water)	
PNEC aqua (freshwater)	55,8 mg/l
PNEC aqua (marine water)	55,8 mg/l
PNEC aqua (intermittent, freshwater)	55,8 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	284,74 mg/kg dwt
PNEC sediment (marine water)	284,7 mg/kg dwt
PNEC (Soil)	
PNEC soil	22,5 mg/kg dwt
PNEC (Oral)	
PNEC oral (secondary poisoning)	1000 mg/kg food
PNEC (STP)	
PNEC sewage treatment plant	709 mg/l

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:
Ensure good ventilation of the work station. Use spark-/explosionproof appliances and lighting system. No open flames. No smoking. Avoid the build-up of electrostatic charge.

8.2.2. Personal protection equipment

Personal protective equipment symbol(s):

8.2.2.1. Eye and face protection

Eye protection:
Safety glasses (EN 166)

8.2.2.2. Skin protection

Skin and body protection:
Protective clothing (EN 14605 or EN 13034)

Hand protection:
Protective gloves against chemicals (EN 374)

8.2.2.3. Respiratory protection

Respiratory protection:
In case of insufficient ventilation, wear suitable respiratory equipment

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	:	pink.
Odour	:	characteristic.
Odour threshold	:	Not available
Melting point	:	Not applicable
Freezing point	:	Not available
Boiling point	:	> 35 °C
Flammability	:	Not applicable
Explosive limits	:	Not available
Lower explosion limit	:	Not available
Upper explosion limit	:	Not available
Flash point	:	< 20 °C
Auto-ignition temperature	:	Not available
Decomposition temperature	:	Not available
pH	:	Not available
Viscosity, kinematic	:	Not available
Viscosity, dynamic	:	250 – 300 mPa.s
Solubility	:	Not available
Partition coefficient n-octanol/water (Log Kow)	:	Not available
Vapour pressure	:	Not available
Vapour pressure at 50 °C	:	Not available
Density	:	≈ 0,8 g/cm³
Relative density	:	Not available
Relative vapour density at 20 °C	:	Not available
Particle characteristics	:	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	:	85 – 86 %

SECTION 10: Stability and reactivity

10.1. Reactivity

Highly flammable liquid and vapour. This gas is denser than air and may travel along the ground. Distance ignition possible.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

No additional information available

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) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	
LD50 dermal rat	2800 – 3100 mg/kg bodyweight Animal: rat
LC50 Inhalation - Rat	> 23,3 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity)

hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rat	> 2000 mg/kg
LC50 Inhalation - Rat	5610 mg/m³

xylene (1330-20-7)	
LD50 oral rat	> 4000 mg/kg bodyweight (Equivalent or similar to EU Method B.1, Rat, Female, Experimental value, Oral, 14 day(s))
LD50 oral	4300 mg/kg bodyweight
LD50 dermal rabbit	12126 mg/kg bodyweight Animal: rabbit, Animal sex: male
LD50 dermal	> 5000 mg/kg bodyweight
LC50 Inhalation - Rat	29 g/m³
LC50 Inhalation - Rat (Dust/Mist)	> 10000 mg/l

aceton (67-64-1)	
LD50 oral rat	5800 mg/kg (Rat, Female, Experimental value, Oral, 14 day(s))
LD50 dermal rabbit	> 15800 mg/kg bodyweight (24 h, Rabbit, Male, Experimental value, Dermal, 14 day(s))
LC50 Inhalation - Rat	76 mg/l (4 h, Rat, Female, Weight of evidence, Inhalation (vapours))

butanone (78-93-3)	
LD50 oral rat	2193 mg/kg bodyweight (Equivalent or similar to OECD 423, Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 dermal rabbit	> 8100 mg/kg bw/day (Equivalent or similar to OECD 402, 24 h, Rabbit, Male, Experimental value, Dermal, 14 day(s))

Skin corrosion/irritation : Causes skin irritation.

xylene (1330-20-7)	
pH	No data available in the literature

aceton (67-64-1)	
pH	5 – 6 (20 °C)

butanone (78-93-3)	
pH	No data available in the literature

Serious eye damage/irritation : Causes serious eye irritation.

xylene (1330-20-7)	
pH	No data available in the literature

aceton (67-64-1)	
pH	5 – 6 (20 °C)

butanone (78-93-3)	
pH	No data available in the literature

Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
STOT-single exposure : May cause drowsiness or dizziness.

hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	
STOT-single exposure	May cause drowsiness or dizziness.

hydrocarbons, C6, isoalkanes, < 5% n-hexane	
STOT-single exposure	May cause drowsiness or dizziness.

hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane	
STOT-single exposure	May cause drowsiness or dizziness.

Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane	
STOT-single exposure	May cause drowsiness or dizziness.

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

butanone (78-93-3)	
STOT-single exposure	May cause drowsiness or dizziness.

4-tert-butylphenol-formaldehyde copolymer (25085-50-1)	
STOT-single exposure	May cause respiratory irritation.

STOT-repeated exposure : Not classified

hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	
LOAEC (inhalation, rat, vapour, 90 days)	16,6 mg/l air Animal: rat, Animal sex: male
NOAEC (inhalation, rat, vapour, 90 days)	3,3 mg/l air Animal: rat, Animal sex: male

xylene (1330-20-7)	
LOAEL (oral, rat, 90 days)	150 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents), Guideline: EPA OPP 82-1 (90-Day Oral Toxicity)

Aspiration hazard : Not classified

hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	
Viscosity, kinematic	0,67 mm²/s Temp.: '20°C' Parameter: 'kinematic viscosity (in mm²/s)'

hydrocarbons, C6, isoalkanes, < 5% n-hexane	
Viscosity, kinematic	0,46 mm²/s Temp.: '20°C' Parameter: 'kinematic viscosity (in mm²/s)'

Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane	
Viscosity, kinematic	1,02 mm²/s Temp.: '20°C' Parameter: 'kinematic viscosity (in mm²/s)'

xylene (1330-20-7)	
Viscosity, kinematic	0,74 mm²/s (20 °C)

aceton (67-64-1)	
Viscosity, kinematic	No data available in the literature

butanone (78-93-3)	
Viscosity, kinematic	No data available in the literature

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Toxic to aquatic life with long lasting effects.
Hazardous to the aquatic environment, short–term (acute) : Not classified
Hazardous to the aquatic environment, long–term (chronic) : Toxic to aquatic life with long lasting effects.
Not rapidly degradable

hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	
LOEC (chronic)	0,32 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	0,17 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane	
LC50 - Fish [1]	8,2 – 10 mg/l (read-across to all substances in the naphtha category)
EC50 - Crustacea [1]	4,5 mg/l (read-across to all substances in the naphtha category)
ErC50 algae	3,1 mg/l (read-across to all substances in the naphtha category)

xylene (1330-20-7)	
LC50 - Fish [1]	2,6 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oncorhynchus mykiss, Static renewal, Fresh water, Read-across, Lethal)
EC50 - Crustacea [1]	> 3,4 mg/l Test organisms (species): Ceriodaphnia dubia
EC50 - Other aquatic organisms [1]	350 mg/l waterflea
ErC50 algae	4,36 mg/l (OECD 201: Alga, Growth Inhibition Test, 73 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP)
NOEC chronic fish	> 1,3 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri) Duration: '56 d'

aceton (67-64-1)	
LC50 - Fish [1]	6210 – 8120 mg/l (Equivalent or similar to OECD 203, 96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value, Measured concentration)

butanone (78-93-3)	
LC50 - Fish [1]	2993 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Pimephales promelas, Static system, Fresh water, Experimental value, Lethal)
EC50 - Crustacea [1]	308 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect)
EC50 72h - Algae [1]	1972 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 96h - Algae [1]	2029 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)

butanone (78-93-3)	
ErC50 algae	1972 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, Growth rate)

12.2. Persistence and degradability

xylene (1330-20-7)	
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.

aceton (67-64-1)	
Persistence and degradability	Biodegradable in the soil. Biodegradable in the soil under anaerobic conditions. Readily biodegradable in water.
Biochemical oxygen demand (BOD)	1,43 g O_2/g substance
Chemical oxygen demand (COD)	1,92 g O_2/g substance
ThOD	2,2 g O_2/g substance

butanone (78-93-3)	
Persistence and degradability	Biodegradable in the soil. Biodegradable in the soil under anaerobic conditions. Readily biodegradable in water.
Biochemical oxygen demand (BOD)	2,03 g O_2/g substance
Chemical oxygen demand (COD)	2,31 g O_2/g substance
ThOD	2,44 g O_2/g substance

12.3. Bioaccumulative potential

xylene (1330-20-7)	
BCF - Fish [1]	7,2 – 25,9 (56 day(s), Oncorhynchus mykiss, Flow-through system, Fresh water, Read-across)
Partition coefficient n-octanol/water (Log Pow)	3,2 (Read-across, 20 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

aceton (67-64-1)	
Partition coefficient n-octanol/water (Log Pow)	-0,23 (Test data)
Bioaccumulative potential	Not bioaccumulative.

butanone (78-93-3)	
Partition coefficient n-octanol/water (Log Pow)	0,3 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 40 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

12.4. Mobility in soil

xylene (1330-20-7)	
Surface tension	28,01 – 29,76 mN/m (25 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	2,73 (log Koc, Equivalent or similar to OECD 121, Read-across)
Ecology - soil	Low potential for adsorption in soil. May be harmful to plant growth, blooming and fruit formation.

aceton (67-64-1)	
Surface tension	23,3 mN/m (20 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0,374 – 0,988 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Ecology - soil	Highly mobile in soil.

butanone (78-93-3)	
Surface tension	No data available in the literature
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0,654 – 1,281 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Ecology - soil	Highly mobile in soil. Slightly harmful to plants.

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste) : Disposal must be done according to official regulations.
Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations : Do not discharge into drains or the environment.
Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.
Additional information : Flammable vapours may accumulate in the container.
European List of Waste (LoW) code : 08 04 09* - waste adhesives and sealants containing organic solvents or other dangerous substances
15 01 10* - packaging containing residues of or contaminated by dangerous substances

SECTION 14: Transport information

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

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
UN 1133	UN 1133	UN 1133	UN 1133	UN 1133
14.2. UN proper shipping name				
ADHESIVES	ADHESIVES	Adhesives	ADHESIVES	ADHESIVES
Transport document description				
UN 1133 ADHESIVES, 3, II, (D/E), ENVIRONMENTALLY HAZARDOUS	UN 1133 ADHESIVES, 3, II, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS	UN 1133 Adhesives, 3, II, ENVIRONMENTALLY HAZARDOUS	UN 1133 ADHESIVES, 3, II, ENVIRONMENTALLY HAZARDOUS	UN 1133 ADHESIVES, 3, II, ENVIRONMENTALLY HAZARDOUS
14.3. Transport hazard class(es)				
3	3	3	3	3

ADR	IMDG	IATA	ADN	RID
				
14.4. Packing group				
II	II	II	II	II
14.5. Environmental hazards				
Dangerous for the environment: Yes	Dangerous for the environment: Yes Marine pollutant: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes
No supplementary information available				

14.6. Special precautions for user

Overland transport

Classification code (ADR)	:	F1
Special provisions (ADR)	:	640D
Limited quantities (ADR)	:	5l
Excepted quantities (ADR)	:	E2
Packing instructions (ADR)	:	P001, IBC02, R001
Special packing provisions (ADR)	:	PP1
Mixed packing provisions (ADR)	:	MP19
Portable tank and bulk container instructions (ADR)	:	T4
Portable tank and bulk container special provisions (ADR)	:	TP1, TP8
Tank code (ADR)	:	LGBF
Vehicle for tank carriage	:	FL
Transport category (ADR)	:	2
Special provisions for carriage - Operation (ADR)	:	S2, S20
Hazard identification number (Kemler No.)	:	33
Orange plates	:	
Tunnel restriction code (ADR)	:	D/E

Transport by sea

Limited quantities (IMDG)	:	5 L
Excepted quantities (IMDG)	:	E2
Packing instructions (IMDG)	:	P001
Special packing provisions (IMDG)	:	PP1
IBC packing instructions (IMDG)	:	IBC02
Tank instructions (IMDG)	:	T4
Tank special provisions (IMDG)	:	TP1, TP8
EmS-No. (Fire)	:	F-E
EmS-No. (Spillage)	:	S-D
Stowage category (IMDG)	:	B
Properties and observations (IMDG)	:	Adhesives are solutions of gums, resins, etc., usually volatile due to the solvents. Miscibility with water depends upon their composition.

Air transport

PCA Excepted quantities (IATA)	:	E2
PCA Limited quantities (IATA)	:	Y341
PCA limited quantity max net quantity (IATA)	:	1L
PCA packing instructions (IATA)	:	353
PCA max net quantity (IATA)	:	5L
CAO packing instructions (IATA)	:	364

CAO max net quantity (IATA)	:	60L
Special provisions (IATA)	:	A3
ERG code (IATA)	:	3L

Inland waterway transport

Classification code (ADN)	:	F1
Special provisions (ADN)	:	640D
Limited quantities (ADN)	:	5 L
Excepted quantities (ADN)	:	E2
Equipment required (ADN)	:	PP, EX, A
Ventilation (ADN)	:	VE01
Number of blue cones/lights (ADN)	:	1

Rail transport

Classification code (RID)	:	F1
Special provisions (RID)	:	640D
Limited quantities (RID)	:	5L
Excepted quantities (RID)	:	E2
Packing instructions (RID)	:	P001, IBC02, R001
Special packing provisions (RID)	:	PP1
Mixed packing provisions (RID)	:	MP19
Portable tank and bulk container instructions (RID)	:	T4
Portable tank and bulk container special provisions (RID)	:	TP1, TP8
Tank codes for RID tanks (RID)	:	LGBF
Transport category (RID)	:	2
Colis express (express parcels) (RID)	:	CE7
Hazard identification number (RID)	:	33

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

REACH Annex XVII (Restriction List)

EU restriction list (REACH Annex XVII)

Reference code	Applicable on	Entry title or description
3(a)	NMC-Fix ; hydrocarbons, C7, n-alkanes, isoalkanes, cyclics ; hydrocarbons, C6, isoalkanes, < 5% n-hexane ; hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane ; Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane ; xylene ; aceton ; butanone	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F

EU restriction list (REACH Annex XVII)		
Reference code	**Applicable on**	**Entry title or description**
3(b)	NMC-Fix ; hydrocarbons, C7, n-alkanes, isoalkanes, cyclics ; hydrocarbons, C6, isoalkanes, < 5% n-hexane ; hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane ; Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane ; xylene ; aceton ; butanone	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10
3(c)	NMC-Fix ; hydrocarbons, C7, n-alkanes, isoalkanes, cyclics ; hydrocarbons, C6, isoalkanes, < 5% n-hexane ; hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane ; Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard class 4.1

REACH Annex XIV (Authorisation List)

Contains no REACH Annex XIV substances

REACH Candidate List (SVHC)

Contains no substance on the REACH candidate list

PIC Regulation (Prior Informed Consent)

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

POP Regulation (Persistent Organic Pollutants)

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Ozone Regulation (1005/2009)

Contains no substance subject to REGULATION (EU) No 1005/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 September 2009 on substances that deplete the ozone layer.

VOC Directive (2004/42)

VOC content : 85 – 86 %

Explosives Precursors Regulation (2019/1148)

Contains substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors.

ANNEX II REPORTABLE EXPLOSIVES PRECURSORS

List of substances on their own or in mixtures or in substances for which suspicious transactions and significant disappearances and thefts are to be reported to the relevant national contact point within 24 hours.

Name	CAS-No.	Combined Nomenclature code (CN)	Combined Nomenclature code for mixture without constituents which would determine classification under another CN code
Acetone	67-64-1	2914 11 00	ex 3824 99 92

Please see https://ec.europa.eu/home-affairs/system/files/2021-11/list_of_competent_authorities_and_national_contact_points_en.pdf

Drug Precursors Regulation (273/2004)

Contains substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on drug precursors)

Name	CN designation	CAS-No.	CN code	Category	Threshold	Annex
Acetone		67-64-1	2914 11 00	Category 3		Annex I
Methylethylketone	Butanone	78-93-3	2914 12 00	Category 3		Annex I

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:
Physical and chemical properties.

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
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
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
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration

Abbreviations and acronyms:	
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disrupting properties

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
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. Liq. 2	Flammable liquids, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
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.
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Narcosis

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:		
Flam. Liq. 2	H225	Calculation method
Skin Irrit. 2	H315	Calculation method
Eye Irrit. 2	H319	Calculation method
STOT SE 3	H336	Calculation method
Aquatic Chronic 2	H411	Calculation method

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.