

Carbosolv Gun Wash Thinners

Safety Data Sheet

Date of issue: 28/02/2023

Revision Date: N/A

Version 1



PALATINE PAINTS



SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product Identifier

Product Name Carbosolv Gun Wash Thinners
Synonyms Trade names Gun Wash, Cellulose Thinners
Application Industrial Blend of Solvents
REACH Registration Number(s) 01-211978062-37-0000, 01-2119488216-32, 01-2119471310-51,
01-2119457558-25, 01-2119433307-44, 01-2119475103-46, 01-2119480404-41-XXXX
CAS-No. 67-64-1, 1330-20-7, 108-88-3, 67-63-0, 67-56-1, 141-78-6, 75-09-2
EC No. 200-660-2, 215-535-7, 203-625-9, 200-661-7, 200-659-6, 205-500-4, 200-838-9
Formula Not determined

1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Identified Uses Industrial uses, professional uses
Cleaner
Solvents
Manufacture of substance
Distribution of substance

Further information See exposure scenarios in section 8

1.3 Details of the Supplier of the Safety Data Sheet

Supplier Palatine Paints & Chemicals Limited
55 Smallbrook Lane
Leigh,
Lancashire
WN7 5PZ

Tel +44 (0) 1373 451170
Fax +44 (0) 1373 467800

Contact Person: sales@palatinepaints.co.uk

1.4 Emergency Number

Country	Organisation/Company	Address	Emergency number
	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QH Birmingham	0844 892 0111 (UK only)

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the Substance or Mixture

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

Product Definition Blended substance
Application Industrial Blend of Solvents
REACH Registration Number(s) 01-211978062-37-0000, 01-2119488216-32, 01-2119471310-51,
01-2119457558-25, 01-2119433307-44, 01-2119475103-46, 01-2119480404-41-XXXX
CAS-No. 67-64-1, 1330-20-7, 108-88-3, 67-63-0, 67-56-1, 141-78-6, 75-09-2
EC No. 200-660-2, 215-535-7, 203-625-9, 200-661-7, 200-659-6, 205-500-4, 200-838-9

Flam. Liq. (Category 2) H225
Aspiration Toxicity (Category 1) H304
Acute Dermal Tox (Category 4) H312
Acute Inhalation Tox – vapours (Category 4) H332
Skin corrosion/irritation (Category 2) H315

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Eye irritation (Category 2)	H319
STOT SE (Category 2)	H373
Chronic aquatic toxicity (Category 3)	H412
Reproductive toxicity (Category 2)	H361
Specific target organ toxicity – single exposure (Category 3) Narcosis	H336
Specific target organ toxicity – repeated exposure (Category 2)	H373

For the full text of the H statements mentioned in this section, see Section 16.

Adverse Physicochemical, human health and environmental effects

Highly flammable liquid and vapour
May cause drowsiness or dizziness

2.2 Label Elements

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



Pictogram
Signal word

Danger

Hazardous Ingredients

Toluene, Acetone, Xylene, Methanol, Ethyl Acetate, Isopropanol, Dichloromethane

Hazard statements(s)

H225 Highly Flammable liquid and vapour
H304 May be fatal if swallowed and enters airways
H312+H332 Harmful in contact with skin or if inhaled
H315 Causes skin irritation
H319 Causes serious eye irritation
H335 May cause respiratory irritation
H361 Suspected of damaging fertility or the unborn child
H373 May cause damage to organs through prolonged or repeated exposure
H412 Harmful to aquatic life with long lasting effects
H336 May cause drowsiness or dizziness
H373 May cause damage to organs through prolonged or repeated exposure

Precautionary statement(s)

P210 Keep away from heat hot surface sparks, open flames and other ignition sources.
No smoking
P240 Ground/bond container and receiving equipment.
P243 Take precautionary measures against static discharge.
P305+351+338
IF IN EYES: Rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do. Continue rinsing.
P313 Get medical advice/attention.
P233 Keep container tightly closed.
P241 Use explosion-proof electrical/ventilating/lighting/equipment.
P242 Use only non-sparking tools.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 Wash thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P304+340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P301+P330+P331
IF SWALLOWED: rinse mouth. Do NOT induce vomiting
P303+361+353
IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing
Rinse skin with water/ shower
P312 Call a POISON CENTER or doctor/physician if you feel unwell.
P337 If eye irritation persists:
P370+378 In case of fire: Use for extinction.
P403+233 Store in a well-ventilated place. Keep container tightly closed.
P403+235 Store in a well-ventilated place. Keep cool.

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P405 Store locked up.
P501 Dispose of contents/container to a licensed waste contractor.

Supplemental Hazard statements

EUH066 Repeated exposure may cause skin dryness or cracking

2.3 Others Hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels 0.1% or higher

SECTION 3: Composition/ Information on Ingredients

3.1 Substances

REACH Registration Number(s) 01-211978062-37-0000, 01-2119488216-32, 01-2119471310-51,
01-2119457558-25, 01-2119433307-44, 01-2119475103-46, 01-2119480404-41-XXXX
CAS-No. 67-64-1, 1330-20-7, 108-88-3, 67-63-0, 67-56-1, 141-78-6, 75-09-2
EC No. 200-660-2, 215-535-7, 203-625-9, 200-661-7, 200-659-6, 205-500-4, 200-838-9
Formula Not determined

Xylenes

Substance name / Component	Classification	Concentration
CAS-No. 1330-20-7 EC No. 215-535-7 REACH 01-2119488216-32	Flam. Liq. 3 (H226) Asp. Tox. 1 (H304) Acute Tox. 4 (H312) Acute Tox. 4 (H332) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) STOT SE 3 (H335) STOT RE 23 (H373) Aquatic Chronic 3 (H412)	1 - <3%

Propan-2-one, propanone, Acetone

Substance name / Component	Classification	Concentration
CAS-No. 67-64-1 EC No. 200-660-2 EU Index No. 606-001-00-8 REACH No 01-211978062-37-0000	Flam. Liq. 2 H225 Eye Irrit. 2 H319 STOT SE3: H336	5 - < 10%

Toluene

Substance name / Component	Classification	Concentration
CAS No 108-88-3 EC no 203-625-9 EC index no 601-021-00-3 REACH-no 01-2119471310-51	Flam. Liq. 2, H225 Repr. 2, H361d Asp. Tox. 1, H304 STOT RE 2, H373 Skin Irrit. 2, H315 STOT SE 3, H336	10 - <20.%

Isopropanol

Substance name / Component	Classification	Concentration
CAS No)67-63-0 EC no)200-661-7 EC index no 603-117-00-0 REACH-no 01-2119457558-25	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336	5 - <10.%

Methanol

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Substance name / Component	Classification	Concentration
CAS No 67-56-1 EC no 200-659-6 EC index no 603-001-00- X REACH-no 01-2119433307-44	Flam. Liq. 2, H225 Acute Tox. 3 (Inhalation), H331 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Oral), H301 STOT SE 1, H370	1 - <10.%

Ethyl Acetate

Substance name / Component	Classification	Concentration
CAS No 141-78-6 EC no 205-500-4 EC index no 607-022-00-5 REACH-no 01-2119475103-46	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336	1 - <3.%

Dichloromethane

Substance name / Component	Classification	Concentration
CAS No 75-09-2 EC no 200-838-9 EC index no 602-004-00-3 REACH 01-2119480404-41-XXXX	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Carc. 2, H351	1 - <10%

For the full text of the H statements mentioned in this section, see Section 16

SECTION 4: First Aid Measures

4.1 Description of First Aid Measures

General Advice	Remove affected person from source of contamination. If symptoms persist call a physician.
If Inhaled	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Get medical attention. If not breathing, give artificial respiration Risk of serious damage to the lungs (by aspiration)
If Ingested	Rinse mouth thoroughly with water. Give plenty of water to drink. Keep affected person under observation. Do NOT induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention immediately. Show this Safety Data Sheet to the medical personnel.
Skin Contact	Wash off immediately with plenty of water for at least 15 minutes If skin irritation persists, call a physician
In in eyes	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes Get medical attention
Self-protection of the first aider	Ensure the medical personal are aware of the material(s) involved Take precaution to protect themselves and prevent spread of contamination

4.2 Most Important Symptoms and Effects, both Acute and Delayed

General Information	The severity of the symptoms described will vary dependant of the concentration and the length of exposure
If inhaled	Acute: Vapours may cause headache, fatigue, dizziness and nausea Irritation of nose, throat and airway Delayed: Central nervous system depression
If ingested	Acute: Nausea vomiting, headache, drowsiness, irritation of mouth, throat and oesophagus Delayed: Pulmonary edema, coma, liver and kidney damage

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Skin contact
Acute: Redness and skin irritation
Delayed: Skin dryness and dermatitis

If in eyes
Acute: irritating and may cause redness and pain
Delayed: May cause conjunctivitis

4.3 Indication of any immediate medical attention and special treatment needed

Hand / Eye wash facilities must be in place close to operators work area to provide immediate first aid prior to medical attention
Severe cases of eye contact and ingestion should receive medical attention immediately

Notes to Physician
Treat symptomatically
Symptoms may be delayed

SECTION 5: Firefighting Measures

5.1 Extinguishing Media

Suitable extinguishing media
Water spray
Alcohol resistant foam
Carbon dioxide (CO₂)
Water mist may be used to cool closed containers
DO NOT USE a solid water stream as it may scatter and spread fire

5.2 Special hazards arising from the substance or mixture

Specific Hazards
Highly flammable liquid and vapour.
Containers may explode when heated
Vapours may form explosive mixtures with air
Vapours may travel to source of ignition and flash back

Hazardous decomposition products
Carbon oxides (CO, CO₂)..

5.3 Advice for firefighters

Special Firefighting Procedures
Evacuate area.
Containers close to the fire should be cooled with water if safe to do so
Be aware that any flammable substance containers are liable to explode when heated
Prevent run-off from entering drains and watercourses
Be aware of dangers from other hazardous substances in the immediate area

Protective measures in Fire
Do not attempt to take action without suitable protective equipment.
Self-contained breathing apparatus.

5.4 Further Information

Do not allow run-off from fire-fighting to enter drains or water courses. Dispose of waste in accordance with environmental legislation.

SECTION 6: Accidental Release Measures

6.1 Personal Precautions, Protective Equipment and Emergency Procedures

Advice for non-emergency personnel
Evacuate unnecessary personnel.
Use protective clothing and equipment as described in section 8 of this datasheet
Isolate all sources of ignition
Provide adequate ventilation
Avoid ingestion, inhalation of vapours and contact with skin and eyes
Restrict access to the area until the spillage is treated
If large amounts of vapours are produced that will be hazardous to others evacuate the area
Use suitable respiratory equipment if spillages occur in enclosed spaces and vapours are produced
Have emergency procedures in place for treating spillages evacuating the area and informing the emergency services if necessary

Advice for emergency personnel
Ensure procedures and training for emergency decontamination and disposal are in place.
Concerning personal protective equipment to use, see section 8.

6.2 Environmental Precautions

Do not allow spilled material to enter drains sewers or water courses

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Cover all drains and sewers
Avoid spreading material
Contain spillages with sand, earth or suitable absorbent material
Prevent further spillage if safe to do so
In the event of contamination of watercourses or sewers, advise the Environment Agency fire brigade and police

6.3 Methods and Materials for containment and cleaning up

Isolate all ignition sources
Avoid heat, flames, sparks and static discharge
NO SMOKING
Small spillages Absorb with inert, non-combustible material
Large spillages Dam and absorb spillages with sand, earth or other inert non-combustible material
Fit drain covers where they are available
Provide adequate ventilation
Any extraction systems use to ventilate the area must be flameproof
Collect spillage in containers, seal securely and deliver for disposal according to local regulations
Containers with collected spillage must be properly labelled with correct contents and hazard symbol
Ensure there are no ignition or heat sources in the waste storage area
Wash spillage site with water and detergent; be aware of the potential surfaces to become slippery
After spillages in enclosed areas test atmosphere before using any potential ignition sources
Ventilate area and allow to dry before allowing access

6.4 Reference to Other Sections

See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and Storage

7.1 Precautions for Safe Handling

Advice on safe handling	Provide adequate ventilation. Use personal protective equipment as required. Concerning personal protective equipment to use, see section 8. Do not breathe vapours. Avoid contact with skin, eyes and clothing. Take any precaution to avoid mixing with Incompatible materials, Refer to Section 10 on Incompatible Materials. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.. Use explosion-proof equipment. Use only non-sparking tools.
Hygiene Measures	Keep good industrial hygiene. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Do not eat, drink or smoke when using this product. Keep away from food, drink and animal feeding stuffs. Remove contaminated clothes. Separate working clothes from town clothes. Launder separately. Wash contaminated clothing before reuse..
Information on fire and explosion protection	Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air. When operators, whether spraying or not, have to work inside the spray booth, ventilation is unlikely to be sufficient to control particulates and solvent vapour in all cases. In such circumstances they should wear a compressed air-fed respirator during the spraying process and until such time as the particulates and solvent vapour concentration has fallen below the exposure limits.

7.2 Conditions for Safe Storage Including any Incompatibilities

Storage conditions	Storage of flammable liquids. Store in a dry, cool and well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not store near or with any of the incompatible materials listed in section 10. Keep container tightly closed in a dry and well-ventilated place
Packaging material	Keep only in the original container

7.3 Specific end user(s)

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Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

SECTION 8: Exposure Controls / Personal Protection

8.1 Control Parameters

Ingredients with workplace control parameters

Exposure limits

List source(s):

EU – Commission Directive (EU) 2019-1831 of 24 October 2019 establishing a fifth list of indicative occupational exposure limit values pursuant to Council directive 98/24/EC and amending Commission Directive 2000/39/EC

UK – EH40/2005 Work Exposure Limits, Third edition. Published 2018

IRE – 2018 Code of Practice for the Chemical Agents Regulations, Schedule 1. Published by the Health and Safety Authority

Component	The United Kingdom	European Union	Ireland
Xylenes	STEL: 100 ppm 15 min STEL: 441 mg/m ³ 15 min TWA: 50 ppm 5 hr TWA: 220 mg/m ³ 5 hr Skin	TWA: 50 ppm (8hr) TWA: 221 mg/m ³ (8h) STEL: 100 ppm (15 min) STEL: 442 mg/m ³ (15 min) Skin	TWA: 50 ppm 8 hr TWA: 221 mg/m ³ 8hr STEL: 100 ppm 15 min STEL: 442 mg/m ³ 15 min Skin

Biological limit values

List source(s):

UK – Biological Monitoring Guidance Values provided by the UK's health and Safety Executive (HSE) Control of Substances Hazardous to Health Regulations (COSHH) 2002 (as amended) and EH40/2005

Component	United Kingdom	European Union
Xylenes	Methyl hippuric acid: 650 mmol/mol Creatinine urine post shift	

Monitoring methods

BS EN 14042:2003 Title identifier: Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents

MDHS70 General methods for sampling airborne gases and vapours

MDHS 88 Volatile organic compounds in air. Laboratory method using diffusive samplers, solvent desorption and gas chromatography

NDHS 96 Volatile organic compounds in air – Laboratory method using pumped solid sorbent tubes solvent desorption and gas chromatography
Derived No Effect Level (DNEL)

Industry	Inhalation	Short Term	289 (systemic and local)	mg/m ³
Industry	Dermal	Long Term	289 (systemic)	mg/kg/day
Industry	Inhalation	Long Term	77	mg/m ³
Consumer	Inhalation	Short Term	174 (systemic and local)	mg/m ³
Consumer	Dermal	Long Term	108 (systemic)	mg/kg/day
Consumer	Inhalation	Long Term	14.8 (systemic)	mg/m ³
Consumer	Oral	Long Term	1.6 (systemic)	mg/kg/day

Predicted No Effect Level (PNEC)

Freshwater	0.327	mg/l
Marine water	0.327	mg/l
Microorganisms in sewage treatment	6.58	mg/l
Sediment (freshwater)	12.46	mg/kg dw
Sediment (Marine water)	12.46	mg/kg dw
Soil	2.31	mg/kg dw

Propan-2-one, propanone, Acetone

EU	Local name	Acetone
EU	IOELV TWA (mg/m ³)	1210 mg/m ³
EU	IOELV TWA (ppm)	500 ppm
EU	Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC
Germany	TRGS 910 Acceptable concentration notes	
United Kingdom	Local name	Acetone
United Kingdom	WEL TWA (mg/m ³)	1210 mg/m ³
United Kingdom	WEL TWA ppm	500 ppm
United Kingdom	WEL STEL (mg/m ³)	3620 (mg/m ³)
United Kingdom	WEL STEL (ppm)	1500 ppm
United Kingdom	Regulatory reference	EH40/2005 (third edition, 2018) HSE

Derived No Effect Level (DNEL) Derived Minimal Effect Level (DMEL)

DNEL / DMEL – workers	Acute – local effects, inhalation Long-term – systemic effects, dermal Long-term – systemic effects, inhalation	2420 mg/m ³ 186 mg/kg bodyweight/day 1210 mg/m ³
DNEL / DMEL – general population	Long-term – systemic effects, oral	62 mg/kg bodyweight/day

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	Long-term – systemic effects, inhalation	200 mg/m ³
	Long-term – systemic effects, dermal	62 mg/kg bodyweight/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
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PNEC (STP)

PNEC sewage treatment plant	100 mg/l
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Toluene

Component	The United Kingdom	European Union	Ireland
Toluene	STEL: 100 ppm 15 min STEL: 384 mg/m ³ 15 min TWA: 50 ppm 8 hr TWA: 191 mg/m ³ 8 hr Skin	TWA: 50 ppm 8 hr TWA: 192 mg/m ³ 8 hr STEL: 100 ppm 15 min STEL: 384 mg/m ³ 15 min Skin	TWA: 192 mg/m ³ 8 hr TWA: 50 ppm 8 hr STEL: 384 mg/m ³ 15 min STEL: 100 ppm 15 min Skin

Monitoring methods

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Derived No Effect Level (DNEL)

Route of exposure	Acute effects (local)	Acute effects (systemic)	Chronic effects (local)	Chronic effects (systemic)
Oral				8.13 mg/kg bw/day
Dermal				384 mg/kg bw/day
Inhalation	384 mg/m ³	384 mg/m ³	192 mg/m ³	192 mg/m ³

Predicted No Effect Concentration (PNEC)

According to our experience and to the information provided to us, the product does not have any harmful effects if it is used and handled as specified. See values below.

Fresh water	0.68 mg/l
Fresh water sediment	16.39 mg/kg
Marine water	0.68 mg/l
Marine water sediment	16.39 mg/kg
Water Intermittent	0.68 mg/l
Microorganisms in sewage treatment	13.61 mg/l
Soil (Agriculture)	2.89 mg/kg

Component	The United Kingdom	European Union	Ireland
Methanol	WEL – TWA 200ppm WEL - TWA 266 mg/m ³ WEL – STEL 250ppm WEL – STEL 333 mg/m ³ Skin	TWA: 200 ppm 8 hr TWA: 260 mg/m ³ 8 hr Skin	TWA: 260 mg/m ³ 8 hr TWA: 200 ppm 8 hr STEL: 780 mg/m ³ 15 min STEL: 600 ppm 15 min Skin
Component	The United Kingdom	European Union	Ireland
Methanol	WEL – TWA 200ppm WEL - TWA 266 mg/m ³ WEL – STEL 250ppm WEL – STEL 333 mg/m ³ Skin	TWA: 200 ppm 8 hr TWA: 260 mg/m ³ 8 hr Skin	TWA: 260 mg/m ³ 8 hr TWA: 200 ppm 8 hr STEL: 780 mg/m ³ 15 min STEL: 600 ppm 15 min Skin

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Derived No Effect Level (DNEL)

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Route of exposure	Acute effects (local)	Acute effects (systemic)	Chronic effects (local)	Chronic effects (systemic)
Oral		20 mg/kg bw/day		20 mg/kg bw/day
Dermal		130 mg/m ³	130 mg/m ³	130 mg/m ³
Inhalation	130 mg/m ³			

Predicted No Effect Concentration (PNEC)

According to our experience and to the information provided to us, the product does not have any harmful effects if it is used and handled as specified. See values below.

Fresh water	154 mg/l
Fresh water sediment	570.4 mg/kg
Marine water	15.4 mg/l
Microorganisms in sewage treatment	100 mg/l
Soil (Agriculture)	23.5 mg/kg

Component	The United Kingdom	European Union	Ireland
Isopropanol Alcohol	STEL: 500 ppm 15 min STEL: 1250 mg/m ³ 15 min TWA: 400 ppm 8 hr TWA: 999 mg/m ³ 8 hr Skin		TWA: 200 ppm 8 hr STEL: 1400 ppm 15 min Skin

Monitoring methods

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Derived No Effect Level (DNEL)

Route of exposure	Acute effects (local)	Acute effects (systemic)	Chronic effects (local)	Chronic effects (systemic)
Oral				
Dermal				888 mg/kg
Inhalation				500 mg/m ³

Predicted No Effect Concentration (PNEC)

According to our experience and to the information provided to us, the product does not have any harmful effects if it is used and handled as specified. See values below.

Fresh water	140.9 mg/l
Fresh water sediment	552 mg/kg
Marine water	140.9 mg/l
Water Intermittent	140.9 mg/l
Food chain	160 mg/kg
Microorganisms in sewage treatment	2251 mg/l
Soil (Agriculture)	28 mg/kg

Component	CAS-No	Value	Control Parameters	Basis
Dichloromethane	75-09-2	TWA	100ppm 353 mg/m ³	WK. EH40 WEL – Workplace Exposure Limits

Remarks: Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity

		TWA	100 ppm 353 mg/m ³	Europe. Commission Directive 2017 / 164 / EU establishing a fourth list of indicative occupational exposure limit
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Remarks: Identifies the possibility of significant uptake through the skin

		STEL	200 ppm 706 mg/m ³	Europe. Commission Directive 2017 / 164 / EU establishing a fourth list of indicative occupational exposure limit
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Remarks: Identifies the possibility of significant uptake through the skin

		STEL	200 ppm 706 mg/m ³	UK. EH40 WEL – Workplace Exposure Limits
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Remarks: Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity

Biological occupational exposure limits

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Component	CAS No.	Parameters	Value	Biological Specimen	Basis
Dichloromethane	75-09-2	Carbon Monoxide	30 parts per million	End-tidal breath	UK. Biological monitoring guidance values

Remarks: After shift

Derived No Effect Level (DNEL)

Application Area	Routes of Exposure	Health Effect	Value
Worker DNEL Acute	Inhalation	Systemic effects	706 mg/m ³
Worker DNEL longterm	Inhalation	Systemic effects	353 mg/m ³
Worker DNEL longterm	Dermal	Systemic effects	
Consumer DNEL longterm	Oral	Systemic effects	
Consumer DNEL longterm	Dermal	Systemic effects	
Consumer DNEL longterm	Inhalation	Systemic effects	88.3 mg/m ³
Consumer DNEL acute	Inhalation	Systemic effects	353 mg/m ³

Predicted No Effect Concentration (PNEC)

Compartment	Value
Fresh water	0.54 mg/l
Fresh water sediment	4.47 mg/kg
Sea Water	0.194 mg/l
Sea sediment	1.61 mg/kg
Aquatic intermittent release	0.27 mg/l
Sewage treatment plant	26 mg/l
Soil	0.583 mg/kg

8.2 Exposure Controls

Engineering measures

Provide adequate ventilation including appropriate local extraction to ensure that the defined workplace exposure limit (WEL) is not exceeded
When mists or sprays are produced work under fume extraction
Ventilation systems and extraction systems should be flame-proof

Personal Protective Equipment

The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Eye / Face protection

Use suitable eye protection. (EN166): tightly fitting safety goggles.
Have facilities in place to wash eyes in case of contact

Skin protection

Use protective gloves
Viton rubber (fluor rubber)
Polyvinyl alcohol (PVA)
For gloves involving total immersion 1.mm thickness (if available) are recommended at least 0.5mm and breakthrough time of >480 minutes
For splash resistance use minimum 0.5mmthickness and breakthrough time >240 minutes
Be aware that the liquid may penetrate the gloves
Frequent change is advisable
The most suitable glove must be chosen in consultation with the gloves supplier who can inform about the breakthrough time of the glove material
Gloves showing signs of degradation should be changed to avoid skin contamination
When removing used gloves apply proper technique by avoiding skin contact with outer surface
Gloves should carry the CE mark and conform to BS EN374 chemicals and micro-organisms
When packages of the product are being handled during storage or transport it is advisable to wear protective gloves to prevent damage to the skin

Body Protection

Wear suitable protective clothing as protection against splashing or contamination
Provide eyewash station and safety shower
Wear plastic apron and full length gloves if handling large amounts
If there is a risk of splashing then wear a face shield
Wear suitable protective clothing during transport, handling and storage operations connected with the product
Wear protective footwear during handling of the product
When treating spillages it is recommended to wear protective boots, consult with the supplier as to the compatibility
Wear anti-static footwear
Protective clothing should conform to the general requirements of EN340:2003.
Also consider EN13034:2005; EN14605:2005; EN943:2002 dependent upon the situation resulting in exposure

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	<p>Safety footwear should conform to standard EN344 – 347 If handling large amounts it is recommended to have a safety shower</p>
Respiratory Protection	<p>Wear suitable respiratory protection if vapours are generated When the concentration of atmospheric vapours is sufficient to cause skin irritation it is advisable to wear full face respiratory protection Chemical respirator with organic vapour cartridge; Type A Consult with the supplier as to the compatibility of the equipment with the chemical of concern Respiratory protection should conform to the following standards: BS EN136: Full face masks BS EN140: Half-face masks CAUTION: Air purifying respirators do not protect the user in oxygen deficient atmospheres, use are supplied system Powered air respirators should meet requirements of EN146 and EN12941 Airline fed respirators should meet the requirements of EN270 and EN1835 When vapours are generated during spill clean-up operations and exposure of operators is likely then respiratory equipment should be worn Respiratory protection should be maintained in a proper condition and inspected at the frequency specified by current legislation</p>
Hygiene measures	<p>Wash hands at the end of each work shift and before eating, smoking or using bathroom facilities Remove clothing when contamination will result in exposure to the substance, segregate and wash before re-use Do not eat, drink or smoke in the work area</p>
Control of environmental exposure	<p>Prevent product from entering drains Do not allow material to contaminate ground water system Local authorities should be advised if significant spillages cannot be contained Comply with applicable Community environmental protection legislation</p>

SECTION 9: Physical and Chemical Properties

9.1 Information on Basic Physical and Chemical Properties

Appearance	Clear colourless liquid
Molecular mass	No data available
Odour Characteristic Ester	Pungent petroleum-like odour
Odour threshold	No data available
pH	5 - 9
Melting point / Freezing point	No Data Available
Initial boiling point and boiling range	No Data Available
Flash point	No Data Available
Evaporation rate (butylacetate=1)	No data available
Flammability (solid, gas)	Highly flammable liquid and vapour
Upper / lower flammability or explosive limits	Upper explosion limit: Not determined Lower explosion limit: Not determined
Vapour Pressure	240 hPa @ 20°C
Vapour density	No data available
Relative density	0.82 – 0.88 kg/m ³ @ 20°C
Water solubility	No data available
Partition coefficient: n-octanol/water	No data available
Autoignition temperature	No data available
Decomposition temperature	No data available
Viscosity	Viscosity, kinematic: No data available Viscosity dynamic: No data available
Explosive properties	No data available
Oxidising properties	Non oxidising material according to EC criteria
Explosive limits	Can form explosive vapour / air mixtures

9.2 Other safety information

VOC content	100 %
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SECTION 10: Stability and Reactivity

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10.1 Reactivity

Highly flammable liquid and vapour.
Can react with strong acids and oxidising agents
Reference to other sections: 10.4 & 10.5.

10.2 Chemical Stability

Stable when stored in sealed container at normal temperatures and in a suitable location
Evaporation will occur if the containers are not sealed correctly
Agitation of the substance in storage containers may produce a build-up of electrostatic charge
Forms explosive mixtures with are

10.3 Possibility of Hazardous Reactions

Hazardous reactions as specified in section 10.1
There will be immense pressure build up under explosive conditions causing sealed containers to rupture
Do not mix materials known to cause hazardous reactions
May react violently or exothermically
Hazardous polymerisation

10.4 Conditions to Avoid

Avoid sources of heat and ignition
Avoid direct sunlight and moisture
Avoid storage with incompatible materials
Avoid storage in freezing conditions
Avoid storage near to unprotected drainage systems
It is advisable to store the product within some form of containment to prevent spillage reaching drainage systems
Avoid situations that would produce vibration or agitation of the substance in storage containers as there is potential to build up static charge particularly in metal or compatible plastic containers
Do not allow the storage container to be left exposed to the atmosphere
Avoid storage in unstable manner or in a situation that would result in exposure of the product
Safe handling: See section 7

10.5 Incompatible Materials

Some plastics, rubber and coatings
Strong oxidising substances

10.6 Hazardous Decomposition Products

Thermal decomposition generates: Carbon oxides (COCO₂), fume.
May release flammable gases

SECTION 11: Toxicological Information

11.1 Information on toxicological effects

Acute Toxicity (oral) Not classified (Based on available data, the classification criteria are not met)
Acute Toxicity (dermal) Not classified (Based on available data, the classification criteria are not met)
Acute Toxicity (inhalation) Not classified (Based on available data, the classification criteria are not met)

Xylenes

LD50/oral/mouse	5251 mg/kg
LD50/dermal/rabbit	4200 mg/kg
LC50 inhalation rat (Vapours - mg/l/4h)	29091 mg/l/4h

Skin corrosion / irritation

Dose 4 (Semi-occlusive contact) hr Rabbit
Primary dermal irritation (PDI) 2.21 (average erythema and oedema for both intact and abraded skin)
Other registered information classes xylenes as either moderately irritating or non-corrosive
Moderately irritating
Human skin model test
No information available

Serious eye damage / eye irritation

Moderately irritating 0.1 ml sample; Draize system – 24, 48 and 72 hour observation periods
Average eye irritation scores; 24 hours - 8.33; 48 hours – 6.66; 72 hours – 4.67

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Respiratory or skin sensitisation

Respiratory sensitisation – no information available

Skin sensitisation

Mouse

Xylene is not classed as a skin sensitiser, but this score indicates a very slight positive result (>3.0) at 100% concentration.

Can cause dermatitis on prolonged or repeated exposure

OECD Guideline 429 (Skin Sensitisation Local Lymph Node Assay). Simulation Index = 3.1

Germ cell mutagenicity

Genotoxicity

In vitro

Chromosome aberration

All registered tests gave negative results

Tests on hamster ovary

Negative. EU Method B. 19

Genotoxicity

In vitro

Chromosome aberration

All registered tests gave negative results

Tests on mice and rats

Negative. OECD 478 (Genetic toxicology)

Carcinogenicity

Not classified (Based on available data, the classification criteria are not met)

Reproductive toxicity

Reproductive Toxicity

Fertility

One-generation study

Dose Level 0, 60, 250, 500 ppm Inhalation. Rat P

NOAEC = 500ppm for systemic and reproductive toxicity

Exposure

6 hours / day, 5 days / week, for 131 days

Reproductive Toxicity

Development

Development toxicity

NOAEC 500 ppm Inhalation. Rat

Exposure

6 hours / day for 21 days. OECD Guideline 414

Foetal toxicity was observed at 1000 and 2000ppm

No teratogenic effects up to 2000ppm

Specific target organ toxicity – repeated exposure

STOT

Repeated exposure

Dose Level

0, 150 750, 1500 mg/kg Oral. Rat

OECD Guideline

408. 90 day exposure

Target organs

Liver, kidneys

Increased liver weight (males) – LOAEL = 150 mg/kg

Increase liver weight (females) – NOAEL = 150 mg/kg

Reduction in body weight gain (males) – NOAEL = 750 mg/kg

General information

Exposure via inhalation: 1ppm = odour threshold

100 – 200ppm = eye, nose and throat irritation, short term memory change

300ppm = impairment of reaction time and short term memory

>3000ppm = CNS depression confusion and coma

10,000ppm = CNS depression, lung congestion and death

Exposure via ingestion

50 mg/kg = estimated fatal dose in adults

Inhalation

Immediate: Low concentration

Headache

Dizziness

Immediate: High Concentration

Irritation of the respiratory system

Nausea

Fatigue

Central Nervous System depression

Ingestion

Immediate: Low concentration

Irritation of the mouth and oesophagus

Immediate: High Concentration

Drowsiness

Dizziness

Disorientation

Vertigo

Nausea

Vomiting

Central Nervous System depression

Delayed

Heart problems and coma

May cause liver and/or renal damage

Skin contact

Immediate

Irritation delayed

Prolonged or repeated contact may cause dermatitis

Product has defatting effect on skin

Eye Contact

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Immediate Irritating to eyes
Visual disturbances including blurred vision
Delayed Inflammation
Twitching of the eyelid

Propan-2-one, propanone, Acetone

LD50 oral rat	5800 mg/kg
LD50 dermal rabbit	7400 mg/kg bodyweight
LC50 inhalation rat (Vapours – mg/l/4h)	76 mg/l/4h

Skin corrosion/irritation Not classified (Based on available data, the classification criteria are not met)
Additional information Repeated exposure may cause skin dryness or cracking

Serious eye damage/irritation Causes serious eye irritation
Respiratory or skin sensitisation This product does not cause skin sensitisation
Additional information Based on available data, the classification criteria are not met

Germ cell mutagenicity Not classified (Based on available data, the classification criteria are not met)
Additional information Based on available data, the classification criteria are not met

Carcinogenicity Not classified (Based on available data, the classification criteria are not met)
Additional information Based on available data, the classification criteria are not met

Reproductive toxicity Not classified (Based on available data, the classification criteria are not met)
Additional information Based on available data, the classification criteria are not met

STOS – single exposure May cause drowsiness or dizziness
STOT – repeated exposure Not classified (Based on available data, the classification criteria are not met)
Additional information Based on available data, the classification criteria are not met

Propan-2-one, propanone, Acetone

NOAEL (oral – rat 90 days)	900 mg/kg bodyweight/day
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Aspiration hazard Not classified (Based on available data, the classification criteria are not met)
Additional information Based on available data, the classification criteria are not met

Toluene

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Toluene	>5000 mg/kg (Rat)	12000 mg/kg (Rabbit)	26700 ppm (Rat) 1h

Skin corrosion / irritation Category 2
Test method OECD 404
Test species Rabbit
Observational endpoint Irritating to skin

Serious eye damage / eye irritation Not classified (Based on available data, the classification criteria are not met)

Respiratory or skin sensitisation Not classified (Based on available data, the classification criteria are not met)

Germ cell mutagenicity Not classified (Based on available data, the classification criteria are not met)

Carcinogenicity Not classified (Based on available data, the classification criteria are not met)
There are no known carcinogenic chemicals in this product

Reproductive toxicity Category 2
Reproductive effects Experiments have shown reproductive toxicity effects on laboratory animals
Developmental effects Developmental effects have occurred in experimental animals
Teratogenicity Possible risk of harm to the unborn child

Specific target organ toxicity – single exposure Category 3
Result / Target organs Central Nervous System (CNS)

Specific target organ toxicity – repeated exposure Category 2
Target organs Liver
Kidney
Central Nervous System (CNS)
Blood
Spleen
Neuropsychological effects
Eyes

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Ears

Aspiration Hazard

Category 1

Symptoms / effects both acute and delayed

May cause central nervous system depression
In halation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting

Methanol

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Methanol	>1187 - 2769 mg/kg (Rat)	17100 mg/kg (Rabbit)	128.2 mg/l (Rat) 4h

Skin corrosion / irritation

Based on available data, the classification criteria are not met

Serious eye damage / eye irritation

Based on available data, the classification criteria are not met

Respiratory or skin sensitisation

Based on available data, the classification criteria are not met

Component	Test method	Test species	Study Result
Methanol	OECD Test guideline 406 Guinea Pig Maximisation Test (GPMT)	Guinea pig	Non-sensitising

Germ cell mutagenicity

Based on available data, the classification criteria are not met

Carcinogenicity

Based on available data, the classification criteria are not met
are no known carcinogenic chemicals in this product

There

Reproductive toxicity

Based on available data, the classification criteria are not met

Component	Test method	Test species / Duration	Study Result
Methanol (CAS No 67-56-1 (>95))	OECD Test guideline 416	Rat / Inhalation 2 Generation	NOAEC = 1.3 mg/l (air)

Developmental effects

Component substance is listed on California Proposition 65 as a developmental hazard

STOT – single exposure
Results

Category 1
Optic nerve
Central nervous system (CNS)

STOT – repeated exposure

Based on available data, the classification criteria are not met

Target organs

None known

Aspiration Hazard

Based on available data, the classification criteria are not met

Symptoms / effects both acute and delayed

May cause blindness
Inhalation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting

Isopropanol

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Isopropanol Alcohol	5045 mg/kg (Rat) 3600 mg/kg (Mouse)	12800 mg/kg (Rat)	72.6 mg/l (rat) 4hr

Skin corrosion / irritation

Not classified (Based on available data, the classification criteria are not met)

Serious eye damage / eye irritation

Category 2

Respiratory or skin sensitisation

Not classified (Based on available data, the classification criteria are not met)

Germ cell mutagenicity

Not classified (Based on available data, the classification criteria are not met)

Carcinogenicity

Not classified (Based on available data, the classification criteria are not met)
There are no known carcinogenic chemicals in this product

Reproductive toxicity

Not classified (Based on available data, the classification criteria are not met)

Specific target organ toxicity – single exposure

Category 3

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Result / Target organs	Central Nervous System (CNS)
Specific target organ toxicity – repeated exposure	Not classified (Based on available data, the classification criteria are not met)
Aspiration Hazard	Not classified (Based on available data, the classification criteria are not met)
Symptoms / effects both acute and delayed	May cause central nervous system depression In halation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting

Dichloromethane

Acute Toxicity	LD50 Oral – Rat – male and female - >2,000 mg/kg (OECD Test Guideline 401) LC50 Inhalation – Mouse – 4h – 86 mg/l Remarks: (ECHA) Symptoms: Possible damages; mucosal irritations LD50 Dermal – Rat – Male and female - > 2,000 mg/kg (OECD Test Guideline 402)
Skin corrosion / irritation	Skin – Rabbit Result: Irritations – 4 h OECD Test Guideline 404 Repeated or prolonged exposure may cause skin irritation and dermatitis due to degreasing properties of the product
Serious eye damage / eye irritation	Eyes – rabbit Result: eye irritation Remarks: (ECHA) Risk of corneal clouding
Respiratory or skin sensitisation	Local lymph node assay (LLNA) – Mouse Result – negative (OECD Test guideline 429)
Germ cell mutagenicity	Test type: Mutagenicity (mammal cell test): chromosome aberration Test system: Chinese hamster ovary cells Metabolic Activation: with and without metabolic activation Method: OECD Test Guideline 473 Result: Positive Test type: Ames test Test system: Salmonella typhimurium Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 471 Result: positive Test type: In vivo micronucleus test Species: Mouse Cell type: Bone marrow Application Route: oral Method: OECD Test Guideline 474 Result: negative
Carcinogenicity	No data available
Reproductive toxicity	No data available
Specific target organ toxicity – single exposure	Inhalation: may cause drowsiness or dizziness – Central nervous system
Specific target organ toxicity – repeated exposure	No data available
Aspiration hazard	No data available

11.2 Additional Information

No additional information

Propan-2-one, propanone, Acetone

Viscosity, kinematic	0.405 mm ² /s
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Potential adverse human health effects and symptoms

Based on available data, the classification criteria are not met

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SECTION 12: Ecological Information

12.1 Toxicity

Ecology - general

The product is not considered harmful to aquatic organism nor to cause long-term adverse effects in the environment

Component	Freshwater Fish	Water Flea	Freshwater Algae
Xylenes	LC50: = 780 mg/l, 96h semi-static (Cyprinus carpio) LC50: 23.53 - 29.97 mg/l, 96h static (Pimephales promelas) LC50: > 780 mg/l, 96h (Cyprinus carpio) LC50: 30.26 - 40.75 mg/l, 96h static (Poecilia reticulata) LC50: 7.711 - 9.591 mg/l, 96h static (Lepomis macrochirus) LC50: = 19 mg/l, 96h (Lepomis macrochirus) LC50: 13.1 - 16.5 mg/l, 96h flow-through (Lepomis macrochirus) LC50: 13.5 - 17.3 mg/l, 96h (Oncorhynchus mykiss) LC50: 2.661 - 4.093 mg/l, 96h static (Oncorhynchus mykiss) LC50: = 13.4 mg/l, 96h flow-through (Pimephales promelas)	LC50: = 0.6 mg/L, 48h (Gammarus lacustris) EC50: = 3.82 mg/l	

Component	Microtox	M-Factor
Xylenes	EC50 = 0.0084 mg/l 24 h	

Acetone

Acute aquatic toxicity

Not classified

Chronic aquatic toxicity

Not classified

Acetone

LC50 fish 1	5540 mg/l Onchorhynchus mykiss (Rainbow trout)
EC50 Daphnia 1	8800 mg/l

Toluene

Component	Freshwater Fish	Water Flea	Freshwater Algae
Toluene	50-70 mg/L LC50 96h 5-7 mg/L LC50 96h 15-19 mg/L LC50 96h 28 mg/L LC50 96h 12 mg/L LC50 96h	EC50: = 11.5 mg/L, 48h (Daphnia magna) EC50: 5.46 - 9.83 mg/L, 48h Static (Daphnia magna)	EC50: = 12.5 mg/L, 72h static (Pseudokirchneriella subcapitata) EC50: > 433 mg/L, 96h (Pseudokirchneriella subcapitata)

Component	Microtox	M-Factor
Toluene	EC50 = 19.7 mg/L 30 min	

Component	Freshwater Fish	Water Flea	Freshwater Algae
Methanol	Pimephales promelas: LC50 >10000 mg/l 96h	EC50 >10000 mg/l 24h	

Component	Microtox	M-Factor
Methanol	EC50 = 39000 mg/l 25 min EC50 = 40000 mg/l 15 min EC50 = 43000 mg/l 5 min	

Component	Freshwater Fish	Water Flea	Freshwater Algae
Isopropanol	LC50 = 9640 mg/l 96h Flow through (Pimephales promelas)	13299 mg/l EC50 = 48 h 9714 mg/l EC50 = 24 h	EC50 >1000 mg/l 96h (Desmodesmus subspicatus) EC50 >1000 mg/l 72h

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	LC50 >1400000 µg/l, 96h (Lepomis macrochirus LC50 = 11130 mg/l, 96 static (Pimephales promelas) LC50 = 10000000 µg/l, 96h (Daphnia)		(Desmodesmus subspicatus)
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Component	Microtox	M-Factor
Isopropanol	=35390 mg/l EC50 Photobacterium phosphoreum 5 min	

Dichloromethane

Toxicity to fish

Flow-through test LC50 – Pimephales promelas (fathead minnow) – 193.00 mg/l – 96h
Remarks: (ECHA)

Toxicity to daphnia and other aquatic invertebrates Static test LC50 – Daphnia magna (Water flea) – 27 mg/l – 48 h (US-EPA)

Toxicity to bacteria

Static test EC50 – activated sludge – 2,590 mg/l – 40 min (OECD Test Guideline 209)

12.2 Persistence and Degradability

Xylenes

Persistence and degradability	Persistence is unlikely
Biodegradation	Contains substances known to be hazardous to the environment or not degradable in waste water treatment plants

Acetone

Persistence and degradability	Readily biodegradable
Biodegradation	90 % after 28 days

Toluene

Persistence	Persistence is unlike based on information available
Degradability	86% (20d)

Methanol

Persistence	Persistence is unlike based on information available
Degradability	DT50 ~ 17.2d >94% after 20d

Isopropanol / Isopropyl Alcohol

Persistence and degradability	Persistence is unlike based on information available
Biodegradation	Expected to be biodegradable

Dichloromethane

Biodegradability

Aerobic – Exposure time 28d
Result: 68% - Readily biodegradable
(OECD Test Guideline 301D)

12.3 Bioaccumulative Potential

Component	Log Pow	Bioconcentration factor (BCF)
Xylenes	3.15	0.5 - 15

Acetone

Log Pow	-0.23
Bioaccumulative potential	Low

Toluene

Log Pow	2.7
Bioconcentration Factor (BCF)	90

Methanol

Log Pow	-0.77 @ 20°C
Bioconcentration Factor (BCF)	<10

Isopropanol / Isopropyl Alcohol

Log Pow	0.05
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Dichloromethane

Bioaccumulation

Cyprinus carpio (Carp) – 6 weeks
- 250 µg/l (Dichloromethane)

Bioconcentration factor (BCF): 2 – 5.4
(OECD Test Guideline 305)

Cyprinus carpio (Carp) – 6 Weeks
- 25 µg/l (Dichloromethane)

Bioconcentration factor (BCF): 6 – 40
(OECD Test Guideline 305)

12.4 Mobility in Soil

Xylenes

Spillage unlikely to penetrate soil

The product is insoluble and float on water

Is not likely mobile in the environment due to its low water solubility

Acetone

Surface tension	23.3 mN/m
Ecology - soil	Product evaporates when in contact with the air

Toluene

Mobility in soil	This product contains volatile organic compounds (VOC) which will evaporate easily from all surfaces. Spillage unlikely to penetrate soil This product is insoluble and floats on water Is likely mobile in the environment due to its low water solubility
Surface tension	27.73 mN/m at 25 °C

Methanol

Mobility in soil	This product contains volatile organic compounds (VOC) which will evaporate easily from all surfaces. Disperses rapidly in air Is likely mobile in the environment due to its low water solubility
Surface tension	0.02255 N/m @ 20°C

Isopropanol / Isopropyl Alcohol

Mobility in soil	This product contains volatile organic compounds (VOC) which will evaporate easily from all surfaces. Will like be mobile in the environment due to its volatility Disperses rapidly in air
Surface tension	22.7 mN/m at 20°C

Dichloromethane

No data available

12.5 Results of BPT and vPvB Assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels 0.1% or higher

12.6 Endocrine Disrupting Properties

Endocrine disruptor information

This product does not contain any known or suspected endocrine disruptors

12.7 Other Adverse Effects

Persistent Organic Pollutant Ozone Depletion Potential

This product does not contain any known or suspected substance

SECTION 13: Disposal Considerations

13.1 Waste Treatment Methods

Waste from residues / unused products

Waste is classified as hazardous

Dispose of in accordance with European Directives on waste and hazardous waste

Dispose in accordance with local regulations

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EAC code	2YE
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Transport by sea
No data available
Air Transport
No data available

Inland Waterway Transport
No data available

Rail Transport
No data available

14.7 Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code

Code: IBC No data available

SECTION 15: Regulatory Information

15.1 Safety, Health and Environmental Regulations / Legislation Specific for the Substance or Mixture

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

No REACH Annex XVII restrictions

Acetone is not on the REACH candidate list

Acetone is not on the REACH Annex XIV list

Acetone is not subject to Regulation (EU) No 649/2012 of the European Parliament and the Council of 4 July 2012 concerning the export and import of hazardous chemicals

Acetone is not subject to Regulation (EC) No 850/2004 of the European Parliament and the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC

SECTION 16: Other Information

Abbreviations and acronyms

ADN	Europeans Agreement concerning the International Carriage of Dangerous Goods by inland waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by road
CLP	Classification labelling packaging regulation; Regulation (EC) No 1272/2008
DNEL	Derived No-effect level
DMEL	Derived minimal-effect level
LC50	Median lethal concentration
LD50	Median lethal dose
NOAEL	No-observed adverse effect level
IMDG	International maritime dangerous goods
IATA	International Air Transport Association
EC50	Median effective concentration
PNEC	Predicted No-effect concentration
PBT	Persistent Bioaccumulative toxic
REACH	Reach, Evaluation, Authorisation and Restriction of Chemicals (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by rail
SDS	Safety Data Sheet
vPvB	Very persistent and very bioaccumulative
STP	Sewage treatment plant

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

Full test of H and EUH Statements referred to under sections 2 and 3

Flam. Liq. (Category 2)	H225
Aspiration Toxicity (Category 1)	H304
Acute Dermal Tox (Category 4)	H312
Acute Inhalation Tox – vapours (Category 4)	H332
Skin corrosion/irritation (Category 2)	H315
Eye irritation (Category 2)	H319
STOT SE (Category 2)	H373
Chronic aquatic toxicity (Category 3)	H412
Reproductive toxicity (Category 2)	H361
Specific target organ toxicity – single exposure (Category 3) Narcosis	H336

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Specific target organ toxicity – repeated exposure (Category 2)
H373

H225	HighlyFlammable liquid and vapour
H304	May be fatal if swallowed and enters airways
H312+H332	
H315	Harmful in contact with skin or if inhaled
H319	Causes skin irritation
H335	Causes serious eye irritation
H361	May cause respiratory irritation
H373	Suspected of damaging fertility or the unborn child
H412	May cause damage to organs through prolonged or repeated exposure
H336	Harmful to aquatic life with long lasting effects
H373	May cause drowsiness or dizziness
	May cause damage to organs through prolonged or repeated exposure

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