

Safety Data Sheet

Conforms to Regulation (EC) No. 1907/2006 (REACH), Article 31, Annex II, as amended by Commission Regulation (EU) 2020/878

CLEAN & SEAL

Date of first edition: 9/1/2021

Safety Data Sheet dated 06/11/2025

version 3

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

1.1. Product identifier

Mixture identification:

Trade name: CLEAN & SEAL

Trade code: 12012020

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

Recommended use: detergent

Uses advised against: Not available

1.3. Details of the supplier of the safety data sheet

Company: KERAKOLL France

25, avenue de l'Industrie - 69960 Corbas - France

Tel. +33 472 890 684

safety@kerakoll.com

1.4. Emergency telephone number

European emergency phone number 112

Ireland Emergency medical information: (seven days) contact National Poisons Information Centre, Beaumont Hospital, Dublin 9 DOV2NO, Ireland.

Members of the public Number (8 am-10 pm): +353 (0)1 809 2166

Healthcare professional telephone Number (24hrs): +353 (0)1 809 2566

Malta In case of emergency call: +356 2395 2000 (24h)

SECTION 2: Hazards identification



2.1. Classification of the substance or mixture

Regulation (EC) n. 1272/2008 (CLP)

Aerosols 1 Extremely flammable aerosol. Pressurized container: may burst if heated.

Eye Irrit. 2 Causes serious eye irritation.

STOT SE 3 May cause drowsiness or dizziness.

Aquatic Chronic 2 Toxic to aquatic life with long lasting effects.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Regulation (EC) No 1272/2008 (CLP):

Hazard pictograms and Signal Word



Danger

Hazard statements

H222, H229 Extremely flammable aerosol. Pressurized container: may burst if heated.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P211	Do not spray on an open flame or other ignition source.
P251	Do not pierce or burn, even after use.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash ... Thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P280	Wear protective gloves and eye protection.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312	Call a POISON CENTER/doctor/... if you feel unwell.
P337+P313	If eye irritation persists: Get medical advice/attention.
P391	Collect spillage.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122°F.
P501	Dispose of contents/container to ...

Special Provisions:

EUH044	Risk of explosion if heated under confinement.
EUH066	Repeated exposure may cause skin dryness or cracking.

Contains

Acetone

Hydrocarbons, C7-C9, n-alkanes,
isoalkanes, cyclics

Isopropyl acetate

Regulation (EC) nr 648/2004 (Detergents).

Product contents:

aliphatic hydrocarbons > 30%

Special provisions according to Annex XVII of REACH and subsequent amendments:

None.

2.3. Other hazards

No PBT, vPvB or endocrine disruptor substances present in concentration $\geq 0.1\%$

Other Hazards: No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Mixture identification: CLEAN & SEAL

Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	Ident. Numb.	Classification	Registration Number
≥ 20 -<50 %	Acetone	CAS:67-64-1 EC:200-662-2 Index:606-001-00-8	Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336, EUH066	01-2119471330-49
≥ 20 -<50 %	Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics	EC:920-750-0	Flam. Liq. 2, H225; Asp. Tox. 1, H304; STOT SE 3, H336; Aquatic Chronic 2, H411, EUH066	01-2119473851-33
≥ 20 -<50 %	Isopropyl acetate	CAS:108-21-4 EC:203-561-1 Index:607-024-00-6	Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336, EUH066	

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.

Wash thoroughly the body (shower or bath).

Remove contaminated clothing immediately and dispose off safely.

After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Do not induce vomiting, get medical attention showing the SDS and label hazardous.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

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

Eye irritation

Eye damages

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

CO2 or Dry chemical fire extinguisher.

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

5.3. Advice for firefighters

Use suitable breathing apparatus .

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non emergency personnel:

Wear personal protection equipment.

Remove all sources of ignition.

Remove persons to safety.

See protective measures under point 7 and 8.

For emergency responders:

Wear personal protection equipment.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

6.3. Methods and material for containment and cleaning up

Suitable material for taking up: absorbing material, organic, sand

Wash with plenty of water.

6.4. Reference to other sections

See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Do not use on extensive surface areas in premises where there are occupants.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

Advice on general occupational hygiene:

7.2. Conditions for safe storage, including any incompatibilities

Always keep in a well ventilated place.

Never seal the container hermetically. Always allow for venting.

Keep away from unguarded flame, sparks, and heat sources. Avoid direct exposure to sunlight.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Cool and adequately ventilated.

7.3. Specific end use(s)

Recommendation(s)

None in particular

Industrial sector specific solutions:

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Community Occupational Exposure Limits (OEL)

	OEL Type	Country	Occupational Exposure Limit
Acetone CAS: 67-64-1	ACGIH		Long Term: 250 ppm (8h); Short Term: 500 ppm A4, BEI - URT and eye irr, CNS impair
	NATIONAL	AUSTRIA	Long Term: 1200 mg/m ³ - 500 ppm; Short Term: 4800 mg/m ³ - 2000 ppm 15(Miw), 4x, MAK Source: GKV, BGBl. II Nr. 156/2021
	NATIONAL	BULGARIA	Long Term: 600 mg/m ³ ; Short Term: 1400 mg/m ³ Source: НАРЕДБА № 13 ОТ 30 ДЕКЕМВРИ 2003 Г.
	NATIONAL	CZECHIA	Long Term: 800 mg/m ³ ; Short Term: Ceiling - 1500 mg/m ³ Source: Nařízení vlády č. 361-2007 Sb
	NATIONAL	DENMARK	Long Term: 600 mg/m ³ - 250 ppm E Source: BEK nr 2203 af 29/11/2021
	NATIONAL	ESTONIA	Long Term: 1210 mg/m ³ - 500 ppm Source: Vabariigi Valitsuse, 20. märtsi 2001. a määrus nr 105
	NATIONAL	FINLAND	Long Term: 1200 mg/m ³ - 500 ppm; Short Term: 1500 mg/m ³ - 630 ppm Source: HTP-ARVOT 2020
	NATIONAL	FRANCE	Long Term: 1210 mg/m ³ - 500 ppm; Short Term: 2420 mg/m ³ - 1000 ppm Source: INRS outil65, article R. 4412-149 du Code du travail
	NATIONAL	GREECE	Long Term: 1780 mg/m ³ ; Short Term: 3560 mg/m ³ Source: ΦΕΚ 94/Α` 13.5.1999
	NATIONAL	HUNGARY	Long Term: 1210 mg/m ³ i, EU[1], N Source: 5/2020. (II. 6.) ITM rendelet
	NATIONAL	LITHUANIA	Long Term: 1210 mg/m ³ - 500 ppm; Short Term: 2420 mg/m ³ - 1000 ppm Source: 2011 m. rugsėjo 1 d. Nr. V-824/A1-389
	NATIONAL	NETHERLANDS	Long Term: 1210 mg/m ³ ; Short Term: 2420 mg/m ³ Source: Arbeidsomstandighedenregeling - Lijst A
	NATIONAL	NORWAY	Long Term: 295 mg/m ³ - 125 ppm E Source: FOR-2021-06-28-2248
	NATIONAL	POLAND	Long Term: 600 mg/m ³ ; Short Term: 1800 mg/m ³ Source: Dz.U. 2018 poz. 1286
	NATIONAL	SLOVAKIA	Long Term: 1210 mg/m ³ - 500 ppm 7) Source: 355 NARIADENIE VLÁDY z 10. mája 2006
	NATIONAL	SWEDEN	Long Term: 600 mg/m ³ - 250 ppm; Short Term: 1200 mg/m ³ - 500 ppm

V
Source: AFS 2021:3

SUVA	SWITZERLAND	Long Term: 1200 mg/m ³ - 500 ppm; Short Term: 2400 mg/m ³ - 1000 ppm B, VR SNC Yeux / AW ZNS Auge, NIOSH Source: suva.ch/valeurs-limites
WEL-EH40	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	Long Term: 1210 mg/m ³ - 500 ppm; Short Term: 3620 mg/m ³ - 1500 ppm Source: EH40/2005 Workplace exposure limits (Fourth Edition 2020)
NATIONAL	BELGIUM	Long Term: 594 mg/m ³ - 246 ppm; Short Term: 1187 mg/m ³ - 492 ppm Source: Code du bien-être au travail, Livre VI, Titre 1er, Annexe VI.1-1
NATIONAL	CROATIA	Long Term: 1210 mg/m ³ - 500 ppm Source: 2000/39/EZ
NATIONAL	CYPRUS	Long Term: 1210 mg/m ³ - 500 ppm δέρμα Source: Οι περί Ασφάλειας και Υγείας στην Εργασία (Χημικοί Παράγοντες) Κανονισμοί του 2001 έως 2021
NATIONAL	GERMANY	Long Term: 1200 mg/m ³ - 500 ppm AGS, DFG, EU, Y, 2(I) Source: TRGS 900
NATIONAL	IRELAND	Long Term: 1210 mg/m ³ - 500 ppm IOELV Source: 2021 Code of Practice
NATIONAL	ITALY	Long Term: 1210 mg/m ³ - 500 ppm Source: D.lgs. 81/2008, Allegato XXXVIII
NATIONAL	LATVIA	Long Term: 1210 mg/m ³ - 500 ppm Source: KN325P1
NATIONAL	LUXEMBOURG	Long Term: 1210 mg/m ³ - 500 ppm Source: Mémorial A n.226 du 22 mars 2021
NATIONAL	MALTA	Long Term: 1210 mg/m ³ - 500 ppm Source: S.L.424.24
NATIONAL	PORTUGAL	Long Term: 1210 mg/m ³ - 500 ppm Source: Decreto-Lei n.º 1/2021
NATIONAL	ROMANIA	Long Term: 1210 mg/m ³ - 500 ppm Dir. 2000/39 Source: Republicarea 1 - nr. 743 din 29 iulie 2021
NATIONAL	SLOVENIA	Long Term: 1210 mg/m ³ - 500 ppm; Short Term: 2420 mg/m ³ - 1000 ppm Y, BAT, EU1 Source: UL št. 72, 11. 5. 2021
NATIONAL	SPAIN	Long Term: 1210 mg/m ³ - 500 ppm VLB®, VLI Source: LEP 2022
EU		Long Term: 1210 mg/m ³ - 500 ppm (8h)
ACGIH		Long Term: 100 ppm (8h); Short Term: 150 ppm URT and eye irr, CNS impair
NATIONAL	AUSTRIA	Long Term: 420 mg/m ³ - 100 ppm; Short Term: Ceiling - 420 mg/m ³ - 100 ppm Mow, MAK Source: BGBl. II Nr. 156/2021
NATIONAL	CZECHIA	Long Term: 800 mg/m ³ ; Short Term: Ceiling - 1000 mg/m ³ I Source: Nařízení vlády č. 361-2007 Sb
NATIONAL	DENMARK	Long Term: 625 mg/m ³ - 150 ppm Source: BEK nr 2203 af 29/11/2021
NATIONAL	FINLAND	Long Term: 420 mg/m ³ - 100 ppm; Short Term: 850 mg/m ³ - 200 ppm Source: HTP-ARVOT 2020
NATIONAL	FRANCE	Long Term: 950 mg/m ³ - 250 ppm; Short Term: 1140 mg/m ³ - 300 ppm Source: INRS outil65

Isopropyl acetate
CAS: 108-21-4

NATIONAL	GREECE	Long Term: 950 mg/m ³ - 250 ppm; Short Term: 1140 mg/m ³ - 275 ppm Source: ΦΕΚ 94/Α` 13.5.1999
NATIONAL	HUNGARY	Long Term: 420 mg/m ³ i, N Source: 5/2020. (II. 6.) ITM rendelet
NATIONAL	NORWAY	Long Term: 420 mg/m ³ - 100 ppm Source: FOR-2021-06-28-2248
NATIONAL	POLAND	Long Term: 600 mg/m ³ ; Short Term: 1000 mg/m ³ Source: Dz.U. 2018 poz. 1286
SUVA	SWITZERLAND	Long Term: 420 mg/m ³ - 100 ppm; Short Term: 840 mg/m ³ - 200 ppm SSC, VRS SNC Yeux / OAW ZNS Auge Source: suva.ch/valeurs-limites
WEL-EH40	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	Short Term: 849 mg/m ³ - 200 ppm Source: EH40/2005 Workplace exposure limits (Fourth Edition 2020)
NATIONAL	BELGIUM	Long Term: 424 mg/m ³ - 100 ppm; Short Term: 849 mg/m ³ - 200 ppm Source: Code du bien-être au travail, Livre VI, Titre 1er, Annexe VI.1-1
NATIONAL	CROATIA	Short Term: 849 mg/m ³ - 200 ppm Source: NN 1/2021
NATIONAL	ROMANIA	Long Term: 400 mg/m ³ - 96 ppm; Short Term: 600 mg/m ³ - 144 ppm Source: Republicarea 1 - nr. 743 din 29 iulie 2021
NATIONAL	SPAIN	Long Term: 425 mg/m ³ - 100 ppm; Short Term: 850 mg/m ³ - 200 ppm Source: LEP 2022

Biological limit values

Acetone
CAS: 67-64-1
Biological Indicator: Acetone; Sampling Period: End of turn
Value: 80 mg/L; Medium: Urine
Remark: Not Specific

Predicted No Effect Concentration (PNEC) values

Acetone
CAS: 67-64-1
Exposure Route: Fresh Water; PNEC Limit: 10.6 mg/l

Exposure Route: Intermittent releases (fresh water); PNEC Limit: 21 mg/l
Exposure Route: Marine water; PNEC Limit: 1.06 mg/l
Exposure Route: Microorganisms in sewage treatments; PNEC Limit: 100 mg/l
Exposure Route: Freshwater sediments; PNEC Limit: 30.4 mg/kg
Exposure Route: Marine water sediments; PNEC Limit: 3.04 mg/kg
Exposure Route: Soil; PNEC Limit: 29.5 mg/kg
Isopropyl acetate
CAS: 108-21-4
Exposure Route: Fresh Water; PNEC Limit: 220 µg/l

Exposure Route: Intermittent releases (fresh water); PNEC Limit: 1.1 mg/l
Exposure Route: Marine water; PNEC Limit: 22 µg/l
Exposure Route: Microorganisms in sewage treatments; PNEC Limit: 190 mg/l
Exposure Route: Freshwater sediments; PNEC Limit: 1.25 mg/kg
Exposure Route: Marine water sediments; PNEC Limit: 125 µg/kg
Exposure Route: Soil; PNEC Limit: 350 µg/kg

Derived No Effect Level (DNEL) values

Isopropyl acetate
CAS: 108-21-4
Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects
Worker Professional: 275 mg/m³; Consumer: 168 mg/m³

Exposure Route: Human Inhalation; Exposure Frequency: Short Term, systemic effects
Worker Professional: 558 mg/m³; Consumer: 335 mg/m³

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, local effects
Worker Professional: 227 mg/m³; Consumer: 136 mg/m³

Exposure Route: Human Dermal; Exposure Frequency: Long Term, local effects

Worker Professional: 27 mg/kg; Consumer: 16 mg/kg

Exposure Route: Human Oral; Exposure Frequency: Long Term, systemic effects
Consumer: 16 mg/kg

8.2. Exposure controls

Eye protection:

Eye glasses with side protection.(EN166)

Protection for skin:

Chemical protection clothing.

Protection for hands:

Polyvinyl alcohol . Nitrile rubber

Respiratory protection:

Full face piece with gas filter type A . EN 149; Particle filter P1

Thermal Hazards:

Not expected if used as intended

Environmental exposure controls:

Prevent the product from entering sewers or surface and underground water.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Liquid

Colour: Transparent

Odour: N.A.

Odour threshold: N.A.

pH: N.A.

Kinematic viscosity: N.A.

Melting point/freezing point: N.A.

Boiling point or initial boiling point and boiling range: N.A.

Flash point: 0 °C (32 °F)

Lower and upper explosion limit: N.A.

Relative vapour density: N.A.

Vapour pressure: N.A.

Density and/or relative density: 1.00 g/cm³

Solubility in water: Insoluble

Solubility in oil: N.A.

Partition coefficient n-octanol/water (log value): N.A.

Auto-ignition temperature: N.A.

Decomposition temperature: N.A.

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Flammability: N.A.

Volatile Organic compounds - VOCs = 95.1 % ; 951 g/l

Particle characteristics:

Particle size: N.A.

9.2. Other information

Viscosity: 7.00 cPo

No other relevant information

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions

10.2. Chemical stability

Data not available.

10.3. Possibility of hazardous reactions

None.

10.4. Conditions to avoid

Stable under normal conditions.

10.5. Incompatible materials

Avoid contact with combustible materials. The product could catch fire.

10.6. Hazardous decomposition products

None.

SECTION 11: Toxicological information

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

Toxicological Information of the Preparation

a) acute toxicity	Not classified Based on available data, the classification criteria are not met
b) skin corrosion/irritation	Not classified Based on available data, the classification criteria are not met
c) serious eye damage/irritation	The product is classified: Eye Irrit. 2(H319)
d) respiratory or skin sensitisation	Not classified Based on available data, the classification criteria are not met
e) germ cell mutagenicity	Not classified Based on available data, the classification criteria are not met
f) carcinogenicity	Not classified Based on available data, the classification criteria are not met
g) reproductive toxicity	Not classified Based on available data, the classification criteria are not met
h) STOT-single exposure	The product is classified: STOT SE 3(H336)
i) STOT-repeated exposure	Not classified Based on available data, the classification criteria are not met
j) aspiration hazard	Not classified Based on available data, the classification criteria are not met

Toxicological information on main components of the mixture:

Acetone	a) acute toxicity	LD50 Oral Rat = 5800 mg/kg LC50 Inhalation Vapour Rat = 76 mg/l 4h LD50 Skin Rabbit > 7400 mg/kg 24h	
	b) skin corrosion/irritation	Skin Irritant Rabbit Negative	
	c) serious eye damage/irritation	Eye Irritant Rabbit Yes	
	d) respiratory or skin sensitisation	Skin Sensitization Guinea pig Negative	
	f) carcinogenicity	Genotoxicity Negative	Mouse oral route
	g) reproductive toxicity	No Observed Effect Level Oral Rat = 10000 mg/l	
Isopropyl acetate	a) acute toxicity	LD50 Oral Rat = 6750 mg/kg LC50 Inhalation Vapour Rat = 50600 mg/m ³ 8h LD50 Skin Rabbit > 20 ml/Kg	
	c) serious eye damage/irritation	Eye Irritant No	
	f) carcinogenicity	Genotoxicity Negative	Mouse intraperitoneal route
	g) reproductive toxicity	No Observed Adverse Effect Level Oral Rat = 100 mg/kg	

11.2. Information on other hazards

Endocrine disrupting properties:

No endocrine disruptor substances present in concentration $\geq 0.1\%$

SECTION 12: Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

Eco-Toxicological Information:

Toxic to aquatic life with long lasting effects.

List of Eco-Toxicological properties of the product

The product is classified: Aquatic Chronic 2(H411)

List of Eco-Toxicological properties of the components

Component	Ident. Numb.	Ecotox Data
Acetone	CAS: 67-64-1 - EINECS: 200- 662-2 - INDEX: 606-001-00-8	a) Aquatic acute toxicity : LC50 Fish Oncorhynchus mykiss = 5540 mg/L 96h OECD 203 a) Aquatic acute toxicity : LC50 Daphnia Daphnia pulex = 8800 mg/L 48h OECD 202 b) Aquatic chronic toxicity : NOEC Daphnia Daphnia magna = 2212 mg/L OECD 211 - 28days a) Aquatic acute toxicity : NOEC Algae Microcystis aeruginosa = 530 mg/L a) Aquatic acute toxicity : NOEC Sludge Activated sludge = 1000 mg/L OECD Guideline 209 - 30min d) Terrestrial toxicity : LC50 Worm Eisenia fetida = 0.55 mg/cm2 48h OECD Guideline 207
Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics	EINECS: 920- 750-0	a) Aquatic acute toxicity : LL50 Fish Oncorhynchus mykiss = 10 mg/L OECD 203 b) Aquatic chronic toxicity : NOELR Fish = 0.57 mg/L estimated using the Petrotox computer model a) Aquatic acute toxicity : EL50 Daphnia = 10 mg/L OECD 202
Isopropyl acetate	CAS: 108-21-4 - EINECS: 203- 561-1 - INDEX: 607-024-00-6	a) Aquatic acute toxicity : LC50 Fish P promelas = 400 mL/L 96h a) Aquatic acute toxicity : LC50 Daphnia D.magna > 1000 mg/L 48h a) Aquatic acute toxicity : EC50 Algae = 370 mg/L 96h c) Bacteria toxicity : NOEC Psuedomonas Putida = 190 mg/L - 16hr

12.2. Persistence and degradability

Component	Persitence/Degradability:	Test	Value	Notes:
Acetone	Readily biodegradable	Biochemical oxygen demand	90.000	
Isopropyl acetate	Readily biodegradable	Biochemical oxygen demand	76.000	20days

12.3. Bioaccumulative potential

Component	Bioaccumulation	Test	Value
Acetone	Bioaccumulative	BCF - Bioconcentration factor	3.000

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

No PBT or vPvB substances present in concentration $\geq 0.1\%$

12.6. Endocrine disrupting properties

No endocrine disruptor substances present in concentration $\geq 0.1\%$

12.7. Other adverse effects

N.A.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force. Disposal through discharge into wastewater is not permitted

The product disposed of as such, pursuant to Regulation (EU) 1357/2014, must be classified as hazardous waste

A waste code according to the European List of Wastes (LoW) cannot be specified, due to dependence on the usage. Contact an authorized waste disposal service.

Properties of waste which render it hazardous (Annex III, Directive 2008/98/EC):

HP 3: Flammable; HP 4: Irritant — skin irritation and eye damage; HP 14: Ecotoxic

SECTION 14: Transport information

14.1. UN number or ID number

1133

14.2. UN proper shipping name

ADR-Shipping Name: ADHESIVES containing flammable liquid

IATA-Shipping Name: ADHESIVES containing flammable liquid

IMDG-Shipping Name: ADHESIVES containing flammable liquid

14.3. Transport hazard class(es)

ADR-Class: 3

IATA-Class: 3

IMDG-Class: 3

14.4. Packing group

ADR-Packing Group: III

IATA-Packing group: III

IMDG-Packing group: III

14.5. Environmental hazards

Most important toxic component: Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics

Marine pollutant: Yes

Environmental Pollutant: Yes

IMDG-EMS: F-E, S-D

14.6. Special precautions for user

Road and Rail (ADR-RID):

ADR-Label: 3

ADR - Hazard identification number: -

ADR-Special Provisions: -

ADR-Transport category (Tunnel restriction code): 3 (E)

ADR Limited Quantities: 5 L

ADR Excepted Quantities: E1

Air (IATA):

IATA-Passenger Aircraft: 355

IATA-Cargo Aircraft: 366

IATA-Label: 3

IATA-Subsidiary hazards: -

IATA-Erg: 3L

IATA-Special Provisions: A3

Sea (IMDG):

IMDG-Stowage and handling: Category A

IMDG-Segregation: -

IMDG-Subsidiary hazards: -

IMDG-Special Provisions: 223 955

14.7. Maritime transport in bulk according to IMO instruments

N.A.

SECTION 15: Regulatory information

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

Dir. 98/24/EC (Risks related to chemical agents at work)

Dir. 2000/39/EC (Occupational exposure limit values)

Regulation (EC) n. 1907/2006 (REACH)

Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013

Regulation (EU) n. 286/2011 (ATP 2 CLP)

Regulation (EU) n. 618/2012 (ATP 3 CLP)

Regulation (EU) n. 487/2013 (ATP 4 CLP)

Regulation (EU) n. 944/2013 (ATP 5 CLP)

Regulation (EU) n. 605/2014 (ATP 6 CLP)

Regulation (EU) n. 2015/1221 (ATP 7 CLP)

Regulation (EU) n. 2016/918 (ATP 8 CLP)

Regulation (EU) n. 2016/1179 (ATP 9 CLP)

Regulation (EU) n. 2017/776 (ATP 10 CLP)

Regulation (EU) n. 2018/669 (ATP 11 CLP)

Regulation (EU) n. 2018/1480 (ATP 13 CLP)

Regulation (EU) n. 2019/521 (ATP 12 CLP)
Regulation (EU) n. 2020/217 (ATP 14 CLP)
Regulation (EU) n. 2020/1182 (ATP 15 CLP)
Regulation (EU) n. 2021/643 (ATP 16 CLP)
Regulation (EU) n. 2021/849 (ATP 17 CLP)
Regulation (EU) n. 2022/692 (ATP 18 CLP)
Regulation (EU) n. 2023/707
Regulation (EU) n. 2023/1434 (ATP 19 CLP)
Regulation (EU) n. 2023/1435 (ATP 20 CLP)
Regulation (EU) n. 2024/197 (ATP 21 CLP)
Regulation (EU) n. 2020/878

Regulation (EC) nr 648/2004 (Detergents).

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product: 3, 40

Restrictions related to the substances contained: 75

Provisions related to directive EU 2012/18 (Seveso III):

Seveso III category according to Annex 1, part 1

Product belongs to category: P3b 5000 50000

Product belongs to category: E2 200 500

Explosives precursors – Regulation 2019/1148

No substances listed

Regulation (EU) No 649/2012 (PIC regulation)

No substances listed

German Water Hazard Class.

3: Severe hazard to waters

German Lagerklasse according to TRGS 510:

LGK 2B

SVHC Substances:

No SVHC substances present in concentration $\geq 0.1\%$

Regulation (EU) 2019/1148 concerning the marketing and use of explosives precursors.

ACETONE (CAS 67-64-1): ANNEX II- Regulated explosives precursors.

Substance indicated in section 3.2 included in Annex II (regulated precursor).

This product is regulated by Regulation (EU) 2019/1148: all suspicious transactions and significant disappearances and thefts must be reported to the competent national contact point at

GREAT BRITAIN: Metropolitan Police Service - Tel. 0207 230 9066; Tel. 0207 230 8850; E-mail: Chemical.Reporting@Met.Police.UK

NORTHERN IRELAND: Police Service of Northern Ireland - Tel. 0800 789 321; E-mail: Chemical.reporting@psni.pnn.police.uk

MALTA: Competition and Consumer Affairs Authority - Tel. (+356) 23952000; Fax: (+356) 21242420; E-mail: info@mccaa.org.mt

IRELAND: An Garda Síochána - Phone: +353 1 6661782 (office hours); or Garda 24hr Confidential Line: 1800 666 111; or 999 or 112 (in the event of a serious or imminent threat); Email: Liaisonandprotection_DV@garda.ie

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.

Substances for which a Chemical Safety Assessment has been carried out:

Acetone

SECTION 16: Other information

Code	Description
EUH044	Risk of explosion if heated under confinement.
EUH066	Repeated exposure may cause skin dryness or cracking.
H222, H229	Extremely flammable aerosol. Pressurized container: may burst if heated.
H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.

Code	Hazard class and hazard category	Description
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2.3/1	Aerosols 1	Aerosol, Category 1
2.6/2	Flam. Liq. 2	Flammable liquid, Category 2
3.10/1	Asp. Tox. 1	Aspiration hazard, Category 1
3.3/2	Eye Irrit. 2	Eye irritation, Category 2
3.8/3	STOT SE 3	Specific target organ toxicity — single exposure, Category 3
4.1/C2	Aquatic Chronic 2	Chronic (long term) aquatic hazard, category 2

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

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
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Aerosols 1, H222+H229	On basis of test data
Eye Irrit. 2, H319	Calculation method
STOT SE 3, H336	Calculation method
Aquatic Chronic 2, H411	Calculation method

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

Legend to abbreviations and acronyms used in the safety data sheet:

ACGIH: American Conference of Governmental Industrial Hygienists

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

AND: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

ATE: Acute Toxicity Estimate

ATEmix: Acute toxicity Estimate (Mixtures)

BCF: Biological Concentration Factor

BEI: Biological Exposure Index

BOD: Biochemical Oxygen Demand

CAS: Chemical Abstracts Service (division of the American Chemical Society).

CAV: Poison Center

CE: European Community

CLP: Classification, Labeling, Packaging.

CMR: Carcinogenic, Mutagenic and Reprotoxic

COD: Chemical Oxygen Demand

COV: Volatile Organic Compound

CSA: Chemical Safety Assessment

CSR: Chemical Safety Report

DMEL: Derived Minimal Effect Level

DNEL: Derived No Effect Level.

DPD: Dangerous Preparations Directive

DSD: Dangerous Substances Directive

EC50: Half Maximal Effective Concentration

ECHA: European Chemicals Agency

EINECS: European Inventory of Existing Commercial Chemical Substances.

ES: Exposure Scenario

GefStoffVO: Ordinance on Hazardous Substances, Germany.

GHS: Globally Harmonized System of Classification and Labeling of Chemicals.

IARC: International Agency for Research on Cancer

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

IC50: half maximal inhibitory concentration

ICAO: International Civil Aviation Organization.

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).

IMDG: International Maritime Code for Dangerous Goods.

INCI: International Nomenclature of Cosmetic Ingredients.

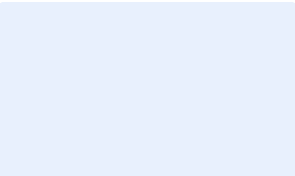
IRCCS: Scientific Institute for Research, Hospitalization and Health Care

KAFH: Keep Away From Heat

KSt: Explosion coefficient.
LC50: Lethal concentration, for 50 percent of test population.
LD50: Lethal dose, for 50 percent of test population.
LDLo: Leathal Dose Low
N.A.: Not Applicable
N/A: Not Applicable
N/D: Not defined/ Not available
NA: Not available
NIOSH: National Institute for Occupational Safety and Health
NOAEL: No Observed Adverse Effect Level
OSHA: Occupational Safety and Health Administration
PBT: Persistent, Bioaccumulative and Toxic
PGK: Packaging Instruction
PNEC: Predicted No Effect Concentration.
PSG: Passengers
RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL: Short Term Exposure limit.
STOT: Specific Target Organ Toxicity.
TLV: Threshold Limiting Value.
TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).
vPvB: Very Persistent, Very Bioaccumulative.
WGK: German Water Hazard Class.

Paragraphs modified from the previous revision:

- SECTION 2: Hazards identification
- SECTION 3: Composition/information on ingredients
- SECTION 7: Handling and storage
- SECTION 8: Exposure controls/personal protection
- SECTION 9: Physical and chemical properties
- SECTION 11: Toxicological information
- SECTION 12: Ecological information
- SECTION 13: Disposal considerations
- SECTION 14: Transport information
- SECTION 15: Regulatory information
- SECTION 16: Other information



Exposure Scenario

Acetone

Exposure Scenario, 27/08/2021

Substance identity	
	Acetone
CAS No.	67-64-1
INDEX No.	606-001-00-8
EINECS No.	200-662-2
Registration number	01-2119471330-49

Table of contents

1. **ES 1** Widespread use by professional workers; Coatings and paints, thinners, paint removers (PC9a)

1. ES 1		Widespread use by professional workers; Coatings and paints, thinners, paint removers (PC9a)	
1.1 TITLE SECTION			
Exposure Scenario name	Professional application of coatings and inks		
Date - Version	27/08/2021 - 1.0		
Life Cycle Stage	Widespread use by professional workers		
Main user group	Professional uses		
Sector(s) of use	Professional uses (SU22)		
Product Categories	Coatings and paints, thinners, paint removers (PC9a)		
Environment Contributing Scenario			
CS1	ERC8a - ERC8c - ERC8d - ERC8f		
Worker Contributing Scenario			
CS2 Material transfers	PROC8a		
CS3 Rolling, Brushing	PROC10		
1.2 Conditions of use affecting exposure			
1.2. CS1: Environment Contributing Scenario (ERC8a, ERC8c, ERC8d, ERC8f)			
Environmental release categories	Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) - Widespread use leading to inclusion into/onto article (indoor) - Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor) - Widespread use leading to inclusion into/onto article (outdoor) (ERC8a, ERC8c, ERC8d, ERC8f)		
<i>Product (article) characteristics</i>			
Physical form of product: Liquid, vapour pressure > 10 kPa at STP			
Concentration of substance in product: Covers concentrations up to 70 %			
<i>Amount used, frequency and duration of use (or from service life)</i>			
Emission days: 365 days per year			
<i>Conditions and measures related to treatment of waste (including article waste)</i>			
Waste treatment External treatment and disposal of waste should comply with applicable local and/or national regulations.			
<i>Other conditions affecting environmental exposure</i>			
Local marine water dilution factor: 100 Local freshwater dilution factor: 10			
1.2. CS2: Worker Contributing Scenario: Material transfers (PROC8a)			
Process Categories	Transfer of substance or mixture (charging and discharging) at non-dedicated facilities (PROC8a)		
<i>Product (article) characteristics</i>			
Physical form of product: Liquid, vapour pressure > 10 kPa at STP			
Concentration of substance in product: Covers concentrations up to 70 %			
<i>Amount used, frequency and duration of use/exposure</i>			
Duration:			

Covers exposure up to 4 h

Technical and organisational conditions and measures

Technical and organisational measures

Natural ventilation is from doors, windows etc. Controlled ventilation means air is supplied or removed by a powered fan.

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

Wear suitable gloves tested to EN374.

Use suitable eye protection.

1.2. CS3: Worker Contributing Scenario: Rolling, Brushing (PROC10)

Process Categories

Roller application or brushing (PROC10)

Product (article) characteristics

Physical form of product:

Liquid, vapour pressure > 10 kPa at STP

Concentration of substance in product:

Covers concentrations up to 70 %

Amount used, frequency and duration of use/exposure

Duration:

Covers exposure up to 4 h

Technical and organisational conditions and measures

Technical and organisational measures

Natural ventilation is from doors, windows etc. Controlled ventilation means air is supplied or removed by a powered fan.

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

Wear suitable gloves tested to EN374.

Use suitable eye protection.

1.3 Exposure estimation and reference to its source

1.3. CS1: Environment Contributing Scenario (ERC8a, ERC8c, ERC8d, ERC8f)

Additional information on exposure estimation:

As no environmental hazard was identified no environmental-related exposure assessment and risk characterization was performed.

1.3. CS2: Worker Contributing Scenario: Material transfers (PROC8a)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative	N/A	ECETOC TRA worker v2.0	= 0.6
dermal	N/A	ECETOC TRA worker v2.0	= 0.07
combined routes	N/A	ECETOC TRA worker v2.0	= 0.67

1.3. CS3: Worker Contributing Scenario: Rolling, Brushing (PROC10)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative	N/A	ECETOC TRA worker v2.0	= 0.6
dermal	N/A	ECETOC TRA worker v2.0	= 0.15
combined routes	N/A	ECETOC TRA worker v2.0	= 0.75

1.4 Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Guidance to check compliance with the exposure scenario:

Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.