

Safety Data Sheet

MAPEFLEX PRIMER NA

Safety Data Sheet dated: 06/16/2021 - version 2

Date of first edition: 01/21/2021



1. IDENTIFICATION

Product identifier

Mixture identification:

Trade name: MAPEFLEX PRIMER NA

Trade code: 9026759

Recommended use of the chemical and restrictions on use

Recommended use: Sealant

Restrictions on use: Not available

Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party

Company: MAPEI CORP. (USA and Puerto Rico)

1144 East Newport Center Drive - 33442 - Deerfield Beach - FL - USA

Responsible: RDProductSafety@mapei.com

Emergency 24 hour numbers:

Emergency Number (USA/Canada) CHEMTREC 1(800) 424-9300 / 1(703) 527-3887

Emergency Transport CANUTEC (Canada) 1-613-996-6666

2. HAZARD(S) IDENTIFICATION



Classification of the chemical

Flam. Liq. 2	Highly flammable liquid and vapour.
Skin Irrit. 2	Causes skin irritation.
Eye Irrit. 2A	Causes serious eye irritation.
Resp. Sens. 1	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Skin Sens. 1	May cause an allergic skin reaction.
Carc. 2	Suspected of causing cancer if inhaled, in contact with skin and if swallowed.
Repr. 2	Suspected of damaging fertility or the unborn child if inhaled, in contact with skin and if swallowed.
STOT SE 3	May cause respiratory irritation.
STOT SE 3	May cause drowsiness or dizziness.
STOT RE 2	May cause damage to organs through prolonged or repeated exposure if inhaled.

Label elements

Hazard pictograms and Signal Word



Danger

Hazard statements

H225	Highly flammable liquid and vapour.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer if inhaled, in contact with skin and if swallowed.
H361	Suspected of damaging fertility or the unborn child if inhaled, in contact with skin and if swallowed.
H373	May cause damage to organs through prolonged or repeated exposure if inhaled.

Precautionary statements

P201	Obtain special instructions before use.
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P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat/sparks/open flames/hot surfaces. — No smoking.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P260	Do not breathe mist/vapours/spray.
P264	Wash skin thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P284	[In case of inadequate ventilation] wear respiratory protection.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P304+P341	IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P312	Call a doctor if you feel unwell.
P321	Specific treatment (see supplementary instructions on this label).
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P342+P311	If experiencing respiratory symptoms: Call a doctor.
P362+P364	Take off contaminated clothing and wash it before reuse.
P370+P378	In case of fire, use a dry powder fire extinguisher to extinguish.
P403+P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/container in accordance with applicable regulations.

Ingredient(s) with unknown acute toxicity:

None

Hazards not otherwise classified identified during the classification process:

None

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances

Not available

Mixtures

Hazardous components within the meaning of 29 CFR 1910.1200 and related classification:

List of components

Concentration (%) w/w	Name	Ident. Numb.	Classification	Registration Number
25-50 %	ethylacetate; acetic acid ethyl ester	CAS:141-78-6	Flam. Liq. 2, H225; STOT SE 3, H336	
10-20 %	1,6-diisocyanatohexane homopolymer; Hexamethylene diisocyanate homopolymer	CAS:28182-81-2	Acute Tox. 4, H332; Skin Sens. 1, H317; STOT SE 3, H335	
10-20 %	4,4'-methylenediphenyl diisocyanate; benzene, 1,1'-methylenebis[4-isocyanato-	CAS:101-68-8	Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2A, H319; STOT SE 3, H335; STOT RE 2, H373; Carc. 2, H351; Resp. Sens. 1, H334; Skin Sens. 1, H317	
5-10 %	methyl ethyl ketone; Butanone	CAS:78-93-3	Flam. Liq. 2, H225; Eye Irrit. 2A, H319; STOT SE 3, H336	

5-10 %	diphenylmethane-2,4-diisocyanate; o-(p-Isocyanatobenzyl)phenyl isocyanate	CAS:5873-54-1	Eye Irrit. 2A, H319; Skin Irrit. 2, H315; STOT SE 3, H335; Resp. Sens. 1, H334; Acute Tox. 4, H332; STOT RE 2, H373; Skin Sens. 1, H317
2.5-5 %	xylenes; 1,2 dimethylbenzene	CAS:1330-20-7	Flam. Liq. 3, H226; Acute Tox. 4, H332; Acute Tox. 4, H312; Skin Irrit. 2, H315
1-2.5 %	2,2'-methylenediphenyl diisocyanate; 1,1'-Methylenebis(2-isocyanatobenzene)	CAS:2536-05-2	STOT RE 2, H373; Eye Irrit. 2A, H319; STOT SE 3, H335; Skin Irrit. 2, H315; Acute Tox. 4, H332; Resp. Sens. 1, H334; Skin Sens. 1, H317
1-2.5 %	polymethylene polyphenylene isocyanate; Isocyanic acid, polymethylenepolyphenylene ester	CAS:9016-87-9	Acute Tox. 4, H332; STOT SE 3, H335; Skin Irrit. 2, H315; STOT RE 2, H373; Eye Irrit. 2A, H319; Resp. Sens. 1, H334; Skin Sens. 1, H317
1-2.5 %	ethyl benzene; aethylbenzol	CAS:100-41-4	Flam. Liq. 2, H225; Acute Tox. 4, H332; Asp. Tox. 1, H304
0.25-0.49 %	dibutyltin dilaurate; dibutyltin dilaurate; dibutyl[bis(dodecanoyloxy)] stannane	CAS:77-58-7	Skin Corr. 1C, H314; Eye Dam. 1, H318; Skin Sens. 1, H317; Muta. 2, H341; STOT RE 1, H372; Repr. 2, H361
0.25-0.49 %	4-methylbenzenesulfonyl isocyanate; 4-isocyanatosulphonyltoluene	CAS:4083-64-1	Eye Irrit. 2A, H319; STOT SE 3, H335; Skin Irrit. 2, H315; Resp. Sens. 1, H334

4. FIRST AID MEASURES

Description of first aid measures

In case of skin contact:

- Immediately take off all contaminated clothing.
- OBTAIN IMMEDIATE MEDICAL ATTENTION.
- Obtain medical attention if skin related symptoms persist.
- Remove contaminated clothing immediately and dispose of 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 the hazard label.

In case of Inhalation:

- If breathing is irregular or stopped, administer artificial respiration.
- In case of inhalation, consult a doctor immediately and show him packing or label.

Most important symptoms/effects, acute and delayed

Eye irritation
Eye damages
Skin Irritation
Erythema

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).

Treatment:

(see paragraph 4.1)

5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media:

Unsuitable extinguishing media:

None in particular.

Specific hazards arising from the chemical

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.
Hazardous combustion products: Not available
Explosive properties: Not available
Oxidizing properties: Not available

Special protective equipment and precautions for fire-fighters

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.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.
Remove all sources of ignition.
Wear breathing apparatus if exposed to vapours/dusts/aerosols.
Provide adequate ventilation.
Use appropriate respiratory protection.
Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.
Limit leakages with earth or sand.

Methods and material for containment and cleaning up

Suitable material for taking up: absorbing material, organic, sand
Retain contaminated washing water and dispose it.

7. HANDLING AND STORAGE

Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.
Exercise the greatest care when handling or opening the container.
Do not use on extensive surface areas in premises where there are occupants.
Use localized ventilation system.
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.

Conditions for safe storage, including any incompatibilities

Storage temperature: Not available

Always keep in a well ventilated place.
Store at below 20 °C. Keep away from unguarded flame and heat sources. Avoid direct exposure to sunlight.
Keep away from unguarded flame, sparks, and heat sources. Avoid direct exposure to sunlight.
Avoid accumulating electrostatic charge.
Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Cool and adequately ventilated.
Safety electric system.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

List of components with OEL value

Component	OEL Type	Country	Ceiling	Long Term mg/m3	Long Term ppm	Short Term mg/m3	Short Term ppm	Behaviour	Note
ethylacetate; acetic acid ethyl ester	OSHA			1400	400				
	ACGIH				400				eye and upper respiratory tract irritation;
	MAK	GERMANY		750	200				
	ACGIH				400				eye and upper respiratory tract irritation

4,4'-methylenediphenyl diisocyanate; benzene, 1,1'-methylenebis[4-isocyanato-	MAK	AUSTRIA	734	200	1468	400	respiratory sensitization (listed under Methylene bisphenyl isocyanate (MDI));
	MAK	SWITZERLAND	730	200			
	ACGIH			0,005			
	OSHA	C			0,2	0,02	
	MAK	GERMANY	0,05				
methyl ethyl ketone; Butanone	ACGIH			0,005			respiratory sensitization (listed under Methylene bisphenyl isocyanate (MDI))
	MAK	AUSTRIA	0,05	0,005	0,1	0,01	CNS and PNS impairment;upper respiratory tract irritation;
	OSHA		590	200			
	ACGIH			200		300	
	EU		600	200	900	300	
	MAK	GERMANY	600	200			
diphenylmethane-2,4-diisocyanate; o-(p-Isocyanatobenzyl)phenyl isocyanate	ACGIH			200		300	CNS and PNS impairment;upper respiratory tract irritation
	MAK	AUSTRIA	295	100	590	200	Indicative
	MAK	SWITZERLAND	590	200			
	MAK	AUSTRIA	0,05	0,005	0,1	0,01	
xylenes; 1,2 dimethylbenzene	OSHA		435	100			A4 - Not Classifiable as a Human Carcinogen;CNS impairment;eye and upper respiratory tract irritation;
	ACGIH			100		150	
	EU		221	50	442	100	
	MAK	GERMANY	220	50			
	ACGIH			100		150	
	MAK	AUSTRIA	221	50	442	100	
	MAK	SWITZERLAND	435	100			
	EU		221	50	442	100	
2,2'-methylenediphenyl diisocyanate; 1,1'-Methylenebis(2-isocyanatobenzene)	MAK	AUSTRIA	0,05	0,005	0,1	0,01	Indicative
polymethylene polyphenylene isocyanate; Isocyanic acid, polymethylenepolyphenyl ene ester	MAK	GERMANY	0,05				
ethyl benzene; aethylbenzol	OSHA		435	100			

ACGIH			20				A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans;upper respiratory tract irritation;kidney damage (nephropathy);cochlear impairment;
EU		442	100	884	200	Indicative	Possibility of significant uptake through the skin;
MAK	GERMANY	88	20				
ACGIH			20				A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans;upper respiratory tract irritation;kidney damage (nephropathy);cochlear impairment
MAK	AUSTRIA	440	100	880	200		
MAK	SWITZERLAND	220	50				
EU		442	100	884	200	Indicative	Possibility of significant uptake through the skin

Biological Exposure Index

Component	CAS-No.	Value	UoM	Medium	Biological Indicator	Sampling Period
methyl ethyl ketone; Butanone	78-93-3	2	mg/L	Urine	MEK	End of turn
xylenes; 1,2 dimethylbenzene	1330-20-7	1,5	GGCREAT	Urine	Methyl uric Acid	End of turn
ethyl benzene; aethylbenzol	100-41-4	0,7	GGCREAT	Urine	Mandelic acid and fenilgliossalico	End of turn; End of working week
				Air at the end of exhalation	Ethylbenzene	Not critical
		0,15	GGCREAT	Urine	Mandelic acid and fenilgliossalico	End of turn

Appropriate engineering controls: Not available

Individual protection measures

Eye protection:

Use close fitting safety goggles, don't use eye lens.

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Suitable materials for safety gloves; 29 CFR 1910.138 - ANSI/ISEA 105:

Polychloroprene - CR: thickness $\geq 0,5\text{mm}$; breakthrough time $\geq 480\text{min}$.

Nitrile rubber - NBR: thickness $\geq 0,35\text{mm}$; breakthrough time $\geq 480\text{min}$.

Butyl rubber - IIR: thickness $\geq 0,5\text{mm}$; breakthrough time $\geq 480\text{min}$.

Fluorinated rubber - FKM: thickness $\geq 0,4\text{mm}$; breakthrough time $\geq 480\text{min}$.

Use impervious gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.

Respiratory protection:

Respiratory protection must be used where exposure levels exceed workplace exposure limits. Refer to 29 CFR 1910.134 - CSA Z94.4 for information on selection and use of appropriate respiratory protection equipment.

Use adequate protective respiratory equipment.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state: Liquid

Appearance and colour: Liquid light brown

Odour: No data available

Odour threshold: No data available

pH: No data available
Melting point / freezing point: No data available
Initial boiling point and boiling range: No data available
Flash point: 4,4 °C (39,9 °F)
Evaporation rate: No data available
Upper/lower flammability or explosive limits: No data available
Vapour density: No data available
Vapour pressure: No data available
Relative density: 1.05 g/cm³
Solubility in water: No data available
Solubility in oil: No data available
Partition coefficient (n-octanol/water): No data available
Auto-ignition temperature: No data available
Decomposition temperature: No data available
Viscosity: No data available
Explosive properties: No data available
Oxidizing properties: No data available
Solid/gas flammability: No data available

Other information

Substance Groups relevant properties No data available
Miscibility: No data available
Fat Solubility: No data available
Conductivity: No data available

10. STABILITY AND REACTIVITY

Reactivity

It may generate dangerous reactions (See subsections below)

Chemical stability

It may generate dangerous reactions (See subsections below)

Possibility of hazardous reactions

None.

Conditions to avoid

Avoid accumulating electrostatic charge.

Incompatible materials

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

Hazardous decomposition products

None.

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Toxicological information of the product:

There is no toxicological data available on the mixture. Consider the individual concentration of each component to assess toxicological effects resulting from exposure to the mixture.

Toxicological information of the main substances found in the product:

ethylacetate; acetic acid ethyl ester	a) acute toxicity	LD50 Skin Rabbit > 20 ml/kg
		LC50 Inhalation Mouse = 1500 ppm 4h
		LD50 Oral Rat = 5620 mg/kg
		LD50 Skin Rabbit > 18000,00000 mg/kg
		LD50 Skin Rabbit > 18000 mg/kg
		LC50 Inhalation Rat = 4000 ppm 4h
		LD50 Oral Rat = 5620 mg/kg
		LC50 Inhalation Rat = 4000 ppm 4h

1,6-diisocyanatohexane homopolymer; Hexamethylene diisocyanate homopolymer	a) acute toxicity	LC50 Inhalation Rat = 18500 mg/m ³ 1h
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4,4'-methylenediphenyl diisocyanate; benzene, 1,1'-methylenebis[4-isocyanato-	a) acute toxicity	LC50 Inhalation Rat = 369 mg/m ³ 4h LD50 Oral Rat = 31600 mg/kg
methyl ethyl ketone; Butanone	a) acute toxicity	LC50 Inhalation Rat = 23500 mg/m ³ 8h LD50 Skin Rabbit = 5000 mg/kg LC50 Inhalation Rat = 11700 ppm 4h LD50 Oral Rat = 2483 mg/kg
xylene; 1,2 dimethylbenzene	a) acute toxicity	LC50 Inhalation Rat = 47635 mg/l 4h LD50 Oral Rat = 4300 mg/kg LD50 Skin Rabbit > 4350 mg/kg LC50 Inhalation Rat = 29,08 mg/l 4h LD50 Oral Rat = 3500 mg/kg
polymethylene polyphenylene isocyanate; Isocyanic acid, polymethylenepolyphenylene ester	a) acute toxicity	LC50 Inhalation Rat = 490 mg/m ³ 4h LD50 Skin Rabbit > 9,4 g/kg LD50 Oral Rat = 49 g/kg
ethyl benzene; aethylbenzol	a) acute toxicity	LD50 Skin Rabbit = 15354 mg/kg LC50 Inhalation Rat = 172 mg/l 4h LD50 Oral Rat = 3500 mg/kg LD50 Skin Rabbit = 15400 mg/kg LC50 Inhalation Rat = 17,4 mg/l 4h LD50 Oral Rat = 3500 mg/kg
dibutyltin dilaurate; dibutyltin dilaurate; dibutyl[bis (dodecanoyloxy)] stannane	a) acute toxicity	LD50 Skin Rabbit = 630 mg/kg LD50 Oral Rat = 45 mg/kg
4-methylbenzenesulfonyl isocyanate; 4-isocyanatosulphonyltoluene	a) acute toxicity	LC50 Inhalation Rat > 640 ppm 1h LD50 Oral Rat = 2234 mg/kg

If not differently specified, the information required in the regulation and listed below must be considered as N.A.

- a) acute toxicity
- b) skin corrosion/irritation
- c) serious eye damage/irritation
- d) respiratory or skin sensitisation
- e) germ cell mutagenicity

- f) carcinogenicity
- g) reproductive toxicity
- h) STOT-single exposure
- Toxicological kinetics, metabolism and distribution information
- i) STOT-repeated exposure
- j) aspiration hazard

Substance(s) listed on the IARC Monographs:

4,4'-methylenediphenyl diisocyanate; benzene, 1,1'-methylenebis[4-isocyanato-
xylenes; 1,2 dimethylbenzene
polymethylene polyphenylene isocyanate; Isocyanic acid, polymethylenepolyphenylene ester
ethyl benzene; aethylbenzol

Group 3
Group 3
Group 3
Group 2B

Substance(s) listed as OSHA Carcinogen(s):

ethyl benzene; aethylbenzol

Substance(s) listed as NIOSH Carcinogen(s):

None

Substance(s) listed on the NTP report on Carcinogens:

None

12. ECOLOGICAL INFORMATION

Toxicity

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

Eco-Toxicological Information:

List of components with eco-toxicological properties

Component	Ident. Numb.	Ecotox Infos
ethylacetate; acetic acid ethyl ester	CAS: 141-78-6	a) Aquatic acute toxicity : LC50 Fish Pimephales promelas 220 mg/L 96h EPA a) Aquatic acute toxicity : LC50 Fish Oncorhynchus mykiss = 484 mg/L 96h IUCLID
methyl ethyl ketone; Butanone	CAS: 78-93-3	a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna = 560 mg/L 48h EPA a) Aquatic acute toxicity : LC50 Fish Oncorhynchus mykiss 352 mg/L 96h EPA a) Aquatic acute toxicity : LC50 Fish Pimephales promelas 3130 mg/L 96h EPA a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna > 520 mg/L 48h IUCLID a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna = 5091 mg/L 48h IUCLID
xylenes; 1,2 dimethylbenzene	CAS: 1330-20-7	a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna 4025 mg/L 48h EPA a) Aquatic acute toxicity : LC50 Fish Cyprinus carpio = 780 mg/L 96h EPA a) Aquatic acute toxicity : LC50 Fish Pimephales promelas = 13,4 mg/L 96h EPA a) Aquatic acute toxicity : LC50 Fish Oncorhynchus mykiss 2,661 mg/L 96h EPA a) Aquatic acute toxicity : LC50 Fish Oncorhynchus mykiss 13,5 mg/L 96h IUCLID a) Aquatic acute toxicity : LC50 Fish Lepomis macrochirus 13,1 mg/L 96h EPA a) Aquatic acute toxicity : LC50 Fish Lepomis macrochirus = 19 mg/L 96h EPA a) Aquatic acute toxicity : LC50 Fish Lepomis macrochirus 7,711 mg/L 96h EPA a) Aquatic acute toxicity : LC50 Fish Pimephales promelas 23,53 mg/L 96h

EPA

ethyl benzene; aethylbenzol

CAS: 100-41-4

- a) Aquatic acute toxicity : LC50 Fish Cyprinus carpio > 780 mg/L 96h IUCLID
- a) Aquatic acute toxicity : LC50 Fish Poecilia reticulata 30,26 mg/L 96h EPA
- a) Aquatic acute toxicity : EC50 Daphnia water flea = 3,82 mg/L 48h
- a) Aquatic acute toxicity : LC50 Daphnia Gammarus lacustris = 0,6 mg/L 48h
- a) Aquatic acute toxicity : LC50 Fish Oncorhynchus mykiss 11 mg/L 96h EPA
- a) Aquatic acute toxicity : LC50 Fish Lepomis macrochirus = 32 mg/L 96h EPA
- a) Aquatic acute toxicity : EC50 Algae Pseudokirchneriella subcapitata > 438 mg/L 96h IUCLID
- a) Aquatic acute toxicity : LC50 Fish Oncorhynchus mykiss = 4,2 mg/L 96h EPA
- a) Aquatic acute toxicity : LC50 Fish Pimephales promelas 7,55 mg/L 96h EPA
- a) Aquatic acute toxicity : LC50 Fish Pimephales promelas 9,1 mg/L 96h EPA
- a) Aquatic acute toxicity : LC50 Fish Poecilia reticulata = 9,6 mg/L 96h EPA
- a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna 1,8 mg/L 48h IUCLID
- a) Aquatic acute toxicity : EC50 Algae Pseudokirchneriella subcapitata = 4,6 mg/L 72h IUCLID
- a) Aquatic acute toxicity : EC50 Algae Pseudokirchneriella subcapitata 2,6 mg/L 72h EPA
- a) Aquatic acute toxicity : EC50 Algae Pseudokirchneriella subcapitata 1,7 mg/L 96h EPA

Persistence and degradability

Not available

Bioaccumulative potential

Not available

Mobility in soil

Not available

Other adverse effects

Not available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

The generation of waste should be avoided or minimized wherever possible. Recover if possible.

Methods of disposal:

Disposal of this product, solutions, packaging and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Dispose of surplus and nonrecyclable products via a licensed waste disposal contractor.

Do not dispose of waste into sewers.

Disposal considerations:

Do not allow to enter drains or watercourses.

Dispose of product according to all federal, state and local applicable regulations.

If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned.

Dispose of containers contaminated by the product in accordance with local or national legal provisions. For further information, contact your local waste authority.

Special precautions:

This material and its container must be disposed of in a safe way. Care should be taken when handling untreated empty containers.

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Empty containers or liners may retain some product residues. Do not re-use empty containers.

14. TRANSPORT INFORMATION

UN number

ADR-UN number: 1993

DOT-UN Number: UN1993

IATA-Un number: 1993

IMDG-Un number: 1993

UN proper shipping name

ADR-Shipping Name: FLAMMABLE LIQUID, N.O.S. (ethylacetate; acetic acid ethyl ester - methyl ethyl ketone; Butanone)
DOT-Proper Shipping Name: Flammable liquids, n.o.s. (ethylacetate; acetic acid ethyl ester - methyl ethyl ketone; Butanone)
IATA-Technical name: FLAMMABLE LIQUID, N.O.S. (ethylacetate; acetic acid ethyl ester - methyl ethyl ketone; Butanone)
IMDG-Technical name: FLAMMABLE LIQUID, N.O.S. (ethylacetate; acetic acid ethyl ester - methyl ethyl ketone; Butanone)

Transport hazard class(es)

ADR-Class: 3
DOT-Hazard Class: 3
IATA-Class: 3
IMDG-Class: 3

Packing group

ADR-Packing Group: II
DOT-Packing group: II
IATA-Packing group: II
IMDG-Packing group: II

Environmental hazards

Marine pollutant: No
Environmental Pollutant: Not available

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not available

Special precautions

Department of Transportation (DOT):

DOT-Special Provision(s): IB2, T7, TP1, TP8, TP28
DOT-Label(s): 3
DOT-Symbol: N/A
DOT-Cargo Aircraft: N/A
DOT-Passenger Aircraft: N/A
DOT-Bulk: N/A
DOT-Non-Bulk: N/A

Road and Rail (ADR-RID) :

ADR-Label: 3
ADR-Hazard identification number: 33
ADR-Transport category (Tunnel restriction code): 2 (D/E)

Air (IATA) :

IATA-Passenger Aircraft: 353
IATA-Cargo Aircraft: 364
IATA-Label: 3
IATA-Subsidiary hazards: -
IATA-Erg: 3H
IATA-Special Provisioning: A3

Sea (IMDG) :

IMDG-Stowage Code: Category B
IMDG-Stowage Note: -
IMDG-Subsidiary hazards: -
IMDG-Special Provisioning: 274
IMDG-Page: N/A
IMDG-Label: N/A
IMDG-EMS: F-E, S-E
IMDG-MFAG: N/A

15. REGULATORY INFORMATION**USA - Federal regulations****TSCA - Toxic Substances Control Act****TSCA inventory:**

All the components are listed on the TSCA inventory

TSCA listed substances:

ethylacetate; acetic acid ethyl ester	is listed in TSCA	Section 8b
1,6-diisocyanatohexane homopolymer; Hexamethylene diisocyanate homopolymer	is listed in TSCA	Section 8b
4,4'-methylenediphenyl diisocyanate; benzene, 1,1'-methylenebis[4-isocyanato-	is listed in TSCA	Section 8b Section 8a - PAIR
methyl ethyl ketone; Butanone	is listed in TSCA	Section 8b
diphenylmethane-2,4-diisocyanate; o-(p-Isocyanatobenzyl)phenyl isocyanate	is listed in TSCA	Section 8b Section 8a - PAIR
xylene; 1,2 dimethylbenzene	is listed in TSCA	Section 8b
2,2'-methylenediphenyl diisocyanate; 1,1'-Methylenebis(2-isocyanatobenzene)	is listed in TSCA	Section 8b
polymethylene polyphenylene isocyanate; Isocyanic acid, polymethylenepolyphenylene ester	is listed in TSCA	Section 8b
ethyl benzene; aethylbenzol	is listed in TSCA	Section 8b
dibutyltin dilaurate; dibutyltin dilaurate; dibutyl[bis(dodecanoyloxy)] stannane	is listed in TSCA	Section 8b
4-methylbenzenesulfonyl isocyanate; 4-isocyanatosulphonyltoluene	is listed in TSCA	Section 8b

SARA - Superfund Amendments and Reauthorization Act

Section 302 - Extremely Hazardous Substances:

No substances listed

Section 304 - Hazardous substances:

ethylacetate; acetic acid ethyl ester

4,4'-methylenediphenyl diisocyanate; benzene, 1,1'-methylenebis[4-isocyanato-

methyl ethyl ketone; Butanone

xylene; 1,2 dimethylbenzene

ethyl benzene; aethylbenzol

Section 313 - Toxic chemical list:

4,4'-methylenediphenyl diisocyanate; benzene, 1,1'-methylenebis[4-isocyanato-

xylene; 1,2 dimethylbenzene

polymethylene polyphenylene isocyanate; Isocyanic acid, polymethylenepolyphenylene ester

ethyl benzene; aethylbenzol

CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act

Substance(s) listed under CERCLA:

ethylacetate; acetic acid ethyl ester	Reportable quantity:	5000	pounds
4,4'-methylenediphenyl diisocyanate; benzene, 1,1'-methylenebis[4-isocyanato-	Reportable quantity:	5000	pounds
methyl ethyl ketone; Butanone	Reportable quantity:	5000	pounds
xylene; 1,2 dimethylbenzene	Reportable quantity:	100	pounds
ethyl benzene; aethylbenzol	Reportable quantity:	1000	pounds

CAA - Clean Air Act

CAA listed substances:

4,4'-methylenediphenyl diisocyanate; benzene, 1,1'-methylenebis[4-isocyanato-	is listed in CAA	Section 112(b) - HAP Section 112(b) - HON
methyl ethyl ketone; Butanone	is listed in CAA	Section 112(b) - HON
xylene; 1,2 dimethylbenzene	is listed in CAA	Section 112(b) - HAP Section 112(b) - HON

ethyl benzene; aethylbenzol is listed in CAA Section 112(b) - HAP Section 112(b) - HON

CWA - Clean Water Act

CWA listed substances:

xylene; 1,2 dimethylbenzene is listed in CWA Section 311
ethyl benzene; aethylbenzol is listed in CWA Section 307 Section 311

USA - State specific regulations

California Proposition 65

Substance(s) listed under California Proposition 65:

ethyl benzene; aethylbenzol Listed as carcinogen

Massachusetts Right to know

Substance(s) listed under Massachusetts Right to know:

ethylacetate; acetic acid ethyl ester
4,4'-methylenediphenyl diisocyanate; benzene, 1,1'-methylenebis[4-isocyanato-
methyl ethyl ketone; Butanone
xylene; 1,2 dimethylbenzene
ethyl benzene; aethylbenzol

Pennsylvania Right to know

Substance(s) listed under Pennsylvania Right to know:

ethylacetate; acetic acid ethyl ester
4,4'-methylenediphenyl diisocyanate; benzene, 1,1'-methylenebis[4-isocyanato-
methyl ethyl ketone; Butanone
xylene; 1,2 dimethylbenzene
ethyl benzene; aethylbenzol

New Jersey Right to know

Substance(s) listed under New Jersey Right to know:

ethylacetate; acetic acid ethyl ester
4,4'-methylenediphenyl diisocyanate; benzene, 1,1'-methylenebis[4-isocyanato-
methyl ethyl ketone; Butanone
xylene; 1,2 dimethylbenzene
polymethylene polyphenylene isocyanate; Isocyanic acid, polymethylenepolyphenylene ester
ethyl benzene; aethylbenzol

Canada - Federal regulations

DSL - Domestic Substances List

DSL (Domestic Substances List)

All the substances are listed in the DSL.

NDSL - Non Domestic Substances List

NDSL (Non Domestic Substances List)

No substances listed

NPRI - National Pollutant Release Inventory

NPRI (National Pollutant Release Inventory) - List of substances listed.

No substances listed

16. OTHER INFORMATION

Safety Data Sheet dated: 6/16/2021 - version 2

Additional classification information

NFPA Health: 1 = Slight
NFPA Flammability: 4 = Flammable gas or extremely flammable liquid
NFPA Reactivity: 0 = Minimal
NFPA Special Risk: Not available



Reasonable care has been taken in the preparation of this information, but the manufacturer makes no warranty of merchantability or any other warranty, expressed or implied, with respect to this information. The manufacturer makes no representations and assumes no liability for any direct, incidental or consequential damages resulting from its use. The information herein is presented in good faith and believed to be accurate as of the effective date given. It is the buyer's responsibility to ensure that its activities comply with Federal, State or provincial, and local laws.

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

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

This SDS cancels and replaces any preceding release.

Code	Description
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.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H341	Suspected of causing genetic defects.
H351	Suspected of causing cancer.
H351	Suspected of causing cancer if inhaled, in contact with skin and if swallowed.
H361	Suspected of damaging fertility or the unborn child.
H361	Suspected of damaging fertility or the unborn child if inhaled, in contact with skin and if swallowed.
H372	Causes damage to organs through prolonged or repeated exposure.
H373	May cause damage to organs through prolonged or repeated exposure.
H373	May cause damage to organs through prolonged or repeated exposure if inhaled.

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

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
 RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.
 IMDG: International Maritime Code for Dangerous Goods.
 IATA: International Air Transport Association.
 IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
 ICAO: International Civil Aviation Organization.
 ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).
 GHS: Globally Harmonized System of Classification and Labeling of Chemicals.
 CLP: Classification, Labeling, Packaging.
 EINECS: European Inventory of Existing Commercial Chemical Substances.
 INCI: International Nomenclature of Cosmetic Ingredients.
 CAS: Chemical Abstracts Service (division of the American Chemical Society).
 GefStoffVO: Ordinance on Hazardous Substances, Germany.
 LC50: Lethal concentration, for 50 percent of test population.
 LD50: Lethal dose, for 50 percent of test population.
 DNEL: Derived No Effect Level.
 PNEC: Predicted No Effect Concentration.
 TLV: Threshold Limiting Value.
 TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).
 STEL: Short Term Exposure limit.
 STOT: Specific Target Organ Toxicity.
 WGK: German Water Hazard Class.
 KSt: Explosion coefficient.

Paragraphs modified from the previous revision:

- 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING
- 2. HAZARDS IDENTIFICATION
- 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
- 9. PHYSICAL AND CHEMICAL PROPERTIES
- 11. TOXICOLOGICAL INFORMATION
- 12. ECOLOGICAL INFORMATION