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

1.1. Product identifier

ADINOX M305, Adhesive methacrylate resin.

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

Use of the substance/mixture

Adhesives, sealants

Uses advised against

Any non-intended use.

1.3. Details of the supplier of the safety data sheet

Company name:	Adhesivos y Suministros de México, S.A. de C.V.
Place:	Guadalajara, Jalisco. Mx. 44190
Internet:	www.adinoxadhesives.com
Responsible Department:	info@adinoxadhesives.com

1.4. Emergency telephone number:

México: 800-262-8200

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories:
Flammable liquid: Flam. Liq. 2
Skin corrosion/irritation: Skin Irrit. 2
Serious eye damage/eye irritation: Eye Irrit. 2
Respiratory or skin sensitisation: Skin Sens. 1
Specific target organ toxicity - single exposure: STOT SE 3
Hazardous to the aquatic environment: Aquatic Chronic 2
Hazard Statements:
Highly flammable liquid and vapour.
Causes skin irritation.
Causes serious eye irritation.
May cause an allergic skin reaction.
May cause respiratory irritation.
Toxic to aquatic life with long lasting effects.

2.2. Label elements

Regulation (EC) No. 1272/2008

Hazard components for labelling

methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate
2-methylpropenoic acid, methacrylic acid

Signal word: Danger

Pictograms:

Hazard statements

H225	Highly flammable liquid and vapour.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.

H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
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.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P370+P378 In case of fire: Use Carbon dioxide (CO2). Dry extinguishing powder. alcohol resistant foam. Water spray jet to extinguish.
P391 Collect spillage.
P403+P235 Store in a well-ventilated place. Keep cool.

2.3. Other hazards

In use, may form flammable/explosive vapor-air mixture.
The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
80-62-6	methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate			60 - 90 %
	201-297-1	607-035-00-6	01-2119452498-28	
	Flam. Liq. 2, Skin Irrit. 2, Skin Sens. 1, STOT SE 3; H225 H315 H317 H335			
128-37-0	2,6-di-tert-butyl-p-cresol			1 - < 10 %
	204-881-4		01-2119480433-40	
	Aquatic Acute 1, Aquatic Chronic 1; H400 H410			
79-41-4	2-methylpropenoic acid, methacrylic acid			1 - < 3 %
	201-204-4	607-088-00-5	01-2119463884-26	
	Acute Tox. 3, Acute Tox. 4, Acute Tox. 4, Skin Corr. 1A, STOT SE 3; H311 H332 H302 H314 H335			

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

Further Information

Product does not contain listed SVHC substances > 0,1 % according to Regulation (EC) No. 1907/2006 Article 59 (REACH).

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Take off immediately all contaminated clothing.
First aider: Pay attention to self-protection!

After inhalation

Remove person to fresh air and keep comfortable for breathing. In case of irregular breathing or respiratory arrest provide artificial respiration. In case of respiratory tract irritation, consult a physician.
In the case of lung irritation: Primary treatment using corticoide spray, eg. Auxiloson spray, Pulmicort-dosage-spray. (Auxiloson and Pulmicort are registered trademarks).

After contact with skin

Take off immediately all contaminated clothing. Wash with plenty of water. In case of skin irritation, seek medical treatment.

After contact with eyes

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

After ingestion

Rinse mouth thoroughly with water. Let water be drunken in little sips (dilution effect). Do NOT induce vomiting. Never give anything by mouth to an unconscious person or a person with cramps. In all cases of doubt, or when symptoms persist, seek medical advice.

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

No information available.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Carbon dioxide (CO2). Dry extinguishing powder. alcohol resistant foam.
In case of major fire and large quantities: Atomized water.

Unsuitable extinguishing media

High power water jet.

5.2. Special hazards arising from the substance or mixture

Can be released in case of fire: Gas/vapours, irritant. Carbon monoxide Carbon dioxide (CO2).

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.In case of fire and/or explosion do not breathe fumes.

Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. Use water spray jet to protect personnel and to cool endangered containers.
In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Remove persons to safety. Remove all sources of ignition. Provide adequate ventilation.
Do not breathe gas/vapour/aerosol. Avoid contact with skin, eyes and clothes.
Wear personal protection equipment. (refer to chapter 8)

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Prevent spread over a wide area (e.g. by containment or oil barriers). In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Ventilate affected area.
Treat the recovered material as prescribed in the section on waste disposal.
Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Safe handling: see section 7
Personal protection equipment: see section 8
Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Provide adequate ventilation as well as local exhaustion at critical locations.
Do not breathe gas/vapour/aerosol. Avoid contact with skin, eyes and clothes.
Wear suitable protective clothing. (See section 8.)

Advice on protection against fire and explosion

Keep away from sources of ignition. - No smoking. Take precautionary measures against static discharges.
Flammable vapours can accumulate in head space of closed systems. In use, may form flammable/explosive vapour-air mixture. Heating causes rise in pressure with risk of bursting.

Further information on handling

General protection and hygiene measures: See section 8.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed in a cool, well-ventilated place. Protect against direct sunlight.
Ensure adequate ventilation of the storage area.
Make sure spills can be contained (e.g. sump pallets or kerbed areas).

Advice on storage compatibility

Do not store together with: Gas. Explosives. Flammable solids. Pyrophoric liquids and solids. Self-heating substances and mixtures. Substances and mixtures which, in contact with water, emit flammable gases. Oxidizing liquids. Oxidizing solids. ammonium nitrate. Self-reactive substances and mixtures. Organic peroxides. Non-combustible toxic substances. Radioactive substances. Infectious substances.

Further information on storage conditions

Keep the packing dry and well sealed to prevent contamination and absorbtion of humidity.
Recommended storage temperature: 20°C
Protect against: Light. UV-radiation/sunlight. heat. moisture.
Do not store at temperatures over: 60°C
Do not keep the container sealed.

7.3. Specific end use(s)

refer to chapter 1.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
128-37-0	2,6-Di-tert-butyl-p-cresol	-	10		TWA (8 h)	WEL
		-	-		STEL (15 min)	WEL
79-41-4	Methacrylic acid	20	72		TWA (8 h)	WEL
		40	143		STEL (15 min)	WEL
80-62-6	Methyl methacrylate	50	208		TWA (8 h)	WEL
		100	416		STEL (15 min)	WEL

DNEL/DMEL values

CAS No	Substance		
DNEL type	Exposure route	Effect	Value
80-62-6	methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate		
Worker DNEL, long-term	inhalation	systemic	208 mg/m³

Worker DNEL, long-term	dermal	systemic	13.67 mg/kg bw/day
Worker DNEL, long-term	dermal	local	1.5 mg/cm²
Worker DNEL, acute	dermal	local	1.5 mg/cm²
Worker DNEL, long-term	inhalation	local	208 mg/m³
Consumer DNEL, long-term	inhalation	systemic	74.3 mg/m³
Consumer DNEL, long-term	inhalation	local	104 mg/m³
Consumer DNEL, long-term	dermal	systemic	8.2 mg/kg bw/day
Consumer DNEL, long-term	dermal	local	1.5 mg/cm²
Consumer DNEL, acute	dermal	local	1.5 mg/cm²
128-37-0	2,6-di-tert-butyl-p-cresol		
Worker DNEL, long-term	inhalation	systemic	3,5 mg/m³
Worker DNEL, long-term	dermal	systemic	0,5 mg/kg bw/day
Consumer DNEL, long-term	inhalation	systemic	0,86 mg/m³
Consumer DNEL, long-term	dermal	systemic	0,25 mg/kg bw/day
Consumer DNEL, long-term	oral	systemic	0,25 mg/kg bw/day
79-41-4	2-methylpropenoic acid, methacrylic acid		
Worker DNEL, long-term	dermal	systemic	4,25 mg/kg bw/day
Worker DNEL, long-term	inhalation	systemic	29,6 mg/m³
Worker DNEL, long-term	inhalation	local	88 mg/m³
Consumer DNEL, long-term	dermal	systemic	2,55 mg/kg bw/day
Consumer DNEL, long-term	inhalation	systemic	6,3 mg/m³
Consumer DNEL, long-term	inhalation	local	6,55 mg/m³

PNEC values

CAS No	Substance	
Environmental compartment		Value
80-62-6	methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate	
Freshwater		0.94 mg/l
Marine water		0.94 mg/l
Freshwater sediment		5.74 mg/kg
Micro-organisms in sewage treatment plants (STP)		10 mg/l
Soil		1.47 mg/kg
128-37-0	2,6-di-tert-butyl-p-cresol	
Freshwater		0,000199 mg/l
Freshwater (intermittent releases)		0,00199 mg/l
Marine water		0,00002 mg/l
Freshwater sediment		0,0996 mg/kg
Marine sediment		0,00996 mg/kg
Micro-organisms in sewage treatment plants (STP)		0,17 mg/l
Soil		0,04769 mg/kg
79-41-4	2-methylpropenoic acid, methacrylic acid	

Freshwater	0,82 mg/l
Freshwater (intermittent releases)	0,82 mg/l
Marine water	0,82 mg/l
Micro-organisms in sewage treatment plants (STP)	10 mg/l
Soil	1,2 mg/kg

8.2. Exposure controls




Appropriate engineering controls

Provide adequate ventilation as well as local exhaustion at critical locations.

Protective and hygiene measures

The usual precautions for handling chemicals should be considered.
Keep away from food, drink and animal feedingstuffs.
Always close containers tightly after the removal of product. When using do not eat, drink, smoke, sniff. Wash hands before breaks and after work. Protect skin by using skin protective cream. Take off contaminated clothing and wash it before reuse.

Eye/face protection

Recommended eye protection brand: Tightly sealed safety glasses. (DIN EN 166)

Hand protection

In case of prolonged or frequently repeated skin contact: Wear suitable gloves.
Suitable material: Butyl rubber.
Thickness of glove material: 0,5 mm
Breakthrough time >= 480 min. penetration time (maximum wearing period): ~ 120 min. (estimated)
In the case of wanting to use the gloves again, clean them before taking off and air them well. Before using check leak tightness / impermeability.
For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.
The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Skin protection

Wear fire/flame resistant/retardant clothing.
Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500.

Respiratory protection

With correct and proper use, and under normal conditions, breathing protection is not required.
Respiratory protection necessary at:
Insufficient ventilation.
exceeding exposure limit values
generation/formation of aerosols
Generation/formation of mist
Suitable respiratory protective equipment: Combination filtering device (EN 14387) Type: A / P2/P3
The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used.

Environmental exposure controls

Do not allow uncontrolled discharge of product into the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	viscous
Colour:	-
Odour:	characteristic
pH-Value:	not determined

Changes in the physical state

Melting point:	not determined
Initial boiling point and boiling range:	Methyl-methacrylate: 100 °C
Flash point:	Methyl-methacrylate: 10 °C

Explosive properties
none

Lower explosion limits:	not determined
Upper explosion limits:	not determined
Ignition temperature:	not determined
Decomposition temperature:	not determined

Oxidizing properties
none

Vapour pressure: (at 20 °C)	not determined
Density:	not determined
Water solubility:	miscible.

Solubility in other solvents
not determined

Partition coefficient:	not determined
Viscosity / dynamic: (at 20 °C)	not determined
Viscosity / kinematic: (at 20 °C)	not determined
Flow time:	not determined
Vapour density:	not determined
Evaporation rate:	not determined
Solvent separation test:	not determined
Solvent content:	not determined

9.2. Other information

Solid content:	not determined

No information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Stabilization required by: stabiliser and Oxygen.

10.2. Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.
Can polymerise exothermically in the absence of stabilisers, particularly in acid conditions or if shelf life

exceeded.
Stabilization required by: Oxygen.

10.3. Possibility of hazardous reactions

Hazardous polymerisation: Protect against direct sunlight.
Can polymerise exothermically in the absence of stabilisers, particularly in acid conditions or if shelf life exceeded.

10.4. Conditions to avoid

Protect against: Light. UV-radiation/sunlight. heat. Cold moisture.
Do not store at temperatures over: 60°C
In use may form flammable/explosive vapour-air mixture.
Heating causes rise in pressure with risk of bursting.

10.5. Incompatible materials

Materials to avoid: Strong acid. Oxidizing agents, strong. Alkalis (alkalis), concentrated.

10.6. Hazardous decomposition products

Can be released in case of fire: Gas/vapours, irritant. Carbon monoxide Carbon dioxide (CO2).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicocinetics, metabolism and distribution

No data available.

Acute toxicity

Based on available data, the classification criteria are not met.

CAS No	Chemical name					
	Exposure route	Dose		Species	Source	Method
80-62-6	methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate					
	oral	LD50 mg/kg	>5000	Rat	ECHA Dossier	
	dermal	LD50 mg/kg	> 5000	Rabbit	ECHA Dossier	OECD Guideline 402
	inhalation aerosol	LC50	29,8 mg/l	Rat	ECHA Dossier	
128-37-0	2,6-di-tert-butyl-p-cresol					
	oral	LD50 mg/kg	>6000	Rat.	ECHA Dossier	
	dermal	LD50 mg/kg	(2000)	Rat.	ECHA Dossier	
79-41-4	2-methylpropenoic acid, methacrylic acid					
	oral	LD50 mg/kg	1320	Rat	ECHA Dossier	
	dermal	LD50 mg/kg	500-1000	Rabbit	MSDS external	
	inhalation vapour	ATE	11 mg/l			
	inhalation (4 h) aerosol	LC50	(7,1) mg/l	Rat	ECHA Dossier	

Irritation and corrosivity

Causes skin irritation.
Causes serious eye irritation.

Sensitising effects

May cause an allergic skin reaction. (methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate)
The product is: sensitizing.
People who suffer from skin sensitazion problems, asthma, allergies, chronic or recurring respiratory illnesses should not be deployed in any process using this preparation.

Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.
methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate:
In-vitro mutagenicity: Method: OECD Guideline 471 (Bacterial Reverse Mutation Assay); Result: negative. Literature information: ECHA Dossier; Carcinogenicity: negative. Method: OECD Guideline 451 (Carcinogenicity Studies, 6h/d); Species: Rat,oral.; Exposure duration: 2 years; Result: NOAEC >= 2000 ppm; Literature information: ECHA Dossier; Reproductive toxicity: Method: OECD Guideline 416 (Two-Generation Reproduction Toxicity Study); Species: Rat; Result: NOAEL = 400 mg/kg; Literature information: ECHA Dossier; 1. Developmental toxicity/teratogenicity: Method: OECD Guideline 414 (Prenatal Developmental Toxicity Study); Species: Rabbit. Exposure duration: 28d; Result: NOAEL = 450 mg/kg
2. Developmental toxicity/teratogenicity: Method: OECD Guideline 414 (Prenatal Developmental Toxicity Study); Species: Rat; Result: NOAEC >= 8,3 mg/l ; Literature information: ECHA Dossier
2,6-di-tert-butyl-p-cresol:
In-vitro mutagenicity: Method: -; Result: negative. Literature information: ECHA Dossier; Carcinogenicity: Species: Rat.; Method: -; Length of test: 28 d. Result: NOAEL = 25 mg/kg; Literature information: ECHA Dossier; Reproductive toxicity: Species: Rat; Method: - (two generation carcinogenicity study with emphasis on hepatocellular changes in F1 generation); Result: NOAEL =500 mg/kg; Literature information: ECHA Dossier; Developmental toxicity/teratogenicity: Species: Rat; Method: -; Result: NOAEL = 100 mg/kg; Literature information: ECHA Dossier
2-methylpropenoic acid, methacrylic acid:
In-vitro mutagenicity: Method: OECD Guideline 471 (Bacterial Reverse Mutation Assay); Result: negative. Literature information: ECHA Dossier; Reproductive toxicity: Method: [inhalative, other guideline: OECD 413, 90 d inhalation study]; Species: Rat; Exposure duration: 90 d. Result: NOAEC = 350 ppm (1253 mg/m3); Literature information: ECHA Dossier; Reproductive toxicity: (Rat) NOAEL = 400 mg/kg; Literature information: ECHA Dossier; Developmental toxicity/teratogenicity: Method: [inhalative, OECD Guideline 414 (Prenatal Developmental Toxicity Study)]; Species: Rat; Result: NOEC = 300 ppm (1076 mg/m³); Literature information: ECHA Dossier

STOT-single exposure

May cause respiratory irritation. (methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate; 2-methylpropenoic acid, methacrylic acid)

STOT-repeated exposure

Based on available data, the classification criteria are not met.
methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate:
Chronic oral toxicity: Method: -; Species: Rat;Exposure duration: 2 years; Results: NOAEL = 2000 ppm. Literature information: ECHA Dossier; 1. Chronic inhalation toxicity: Method: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies, 6h/d); Species: Rat; Exposure duration: approx. 2 years; Results: LOAEC = 250 ppm.
2. Chronic inhalation toxicity: Method: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies, 6h/d); Species: Rat; Exposure duration: approx. 2 years; Results: NOAEC = 1,64 m/l; Literature information: ECHA Dossier
2,6-di-tert-butyl-p-cresol:
Chronic oral toxicity: Method: - ; Species: Rat; Results: NOAEL = 25 mg/kg; Literature information: ECHA Dossier
2-methylpropenoic acid, methacrylic acid:
Subchronic inhalation toxicity: Method: -; Species: Mouse; Exposure duration: 90d; Result: NOAEL = 20 ppm (0.07 mg/l); Literature information: ECHA Dossier; Subacute dermal toxicity Method: -; Species: Mouse. Exposure duration: 21 d. Results: NOAEL = 600 mg/kg; Literature information: ECHA Dossier

Aspiration hazard

Based on available data, the classification criteria are not met.

Specific effects in experiment on an animal

No information available.

SECTION 12: Ecological information

12.1. Toxicity

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h] | [d]	Species	Source	Method
80-62-6	methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate						
	Acute fish toxicity	LC50	>79 mg/l	96 h	Oncorhynchus mykiss	ECHA Dossier	EPA OTS 797.1400
	Acute algae toxicity	ErC50	>110 mg/l	72 h	Pseudokirchnerella subcapitata	ECHA Dossier	OECD Guideline 201
	Acute crustacea toxicity	EC50	69 mg/l	48 h	Daphnia magna	ECHA Dossier	EPA OTS 797.1300
	Fish toxicity	NOEC	9,4 mg/l	35 d	Brachydanio rerio	ECHA Dossier	
	Crustacea toxicity	NOEC	37 mg/l	21 d	Daphnia magna	ECHA Dossier	OECD Guideline 211
	Acute bacteria toxicity	(100 mg/l)			activated sludge	ECHA Dossier	OECD 301C
128-37-0	2,6-di-tert-butyl-p-cresol						
	Acute crustacea toxicity	EC50	(0,48) mg/l	48 h	Daphnia magna	ECHA Dossier	
79-41-4	2-methylpropenoic acid, methacrylic acid						
	Acute fish toxicity	LC50	(85) mg/l	96 h	Oncorhynchus mykiss	ECHA Dossier	
	Acute algae toxicity	ErC50	(45) mg/l	72 h	Pseudokirchnerella subcapitata	ECHA Dossier	
	Acute crustacea toxicity	EC50	>130 mg/l	48 h	Daphnia magna	ECHA Dossier	
	Fish toxicity	NOEC	10 mg/l	35 d	Danio rerio	ECHA Dossier	
	Crustacea toxicity	NOEC	53 mg/l	21 d	Daphnia magna	ECHA Dossier	

12.2. Persistence and degradability

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
80-62-6	methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate			
	OECD 301C / ISO 9408 / EWG 92/69 Anhang V, C.4-F	94%	14	ECHA Dossier
	Easily biodegradable (concerning to the criteria of the OECD)			
79-41-4	2-methylpropenoic acid, methacrylic acid			
	OECD 301D / EWG 92/69 Anhang V, C.4-E	86%	28	ECHA Dossier
	Easily biodegradable (concerning to the criteria of the OECD)			

12.3. Bioaccumulative potential

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
80-62-6	methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate	1,32
79-41-4	2-methylpropenoic acid, methacrylic acid	0,93

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. Other adverse effects

No data available.

Further information

Do not allow to enter into surface water or drains.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Dispose of waste according to applicable legislation. Consult the local waste disposal expert about waste disposal. Non-contaminated packages may be recycled. According to EAKV, allocation of waste identity numbers/waste descriptions must be carried out in a specific way for every industry and process.
Control report for waste code/ waste marking according to EAKV:

Waste disposal number of waste from residues/unused products

080409 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU of adhesives and sealants (including waterproofing products); waste adhesives and sealants containing organic solvents or other hazardous substances; hazardous waste

Waste disposal number of used product

080409 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU of adhesives and sealants (including waterproofing products); waste adhesives and sealants containing organic solvents or other hazardous substances; hazardous waste

Waste disposal number of contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste

Contaminated packaging

Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number:	UN 1133
14.2. UN proper shipping name:	Adhesives
14.3. Transport hazard class(es):	3
14.4. Packing group:	II
Hazard label:	3

Classification code:	F1
Special Provisions:	640D
Limited quantity:	5 L

Excepted quantity:	E2
Transport category:	2
Hazard No:	33
Tunnel restriction code:	D/E

Inland waterways transport (ADN)

14.1. UN number:	UN 1133
14.2. UN proper shipping name:	Adhesives
14.3. Transport hazard class(es):	3
14.4. Packing group:	II
Hazard label:	3

Classification code:	F1
Special Provisions:	640D
Limited quantity:	5 L
Excepted quantity:	E2

Marine transport (IMDG)

14.1. UN number:	UN 1133
14.2. UN proper shipping name:	Adhesives
14.3. Transport hazard class(es):	3
14.4. Packing group:	II
Hazard label:	3

Marine pollutant:	Yes
Special Provisions:	-
Limited quantity:	5 L
Excepted quantity:	E2
EmS:	F-E, S-D

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number:	UN 1133
14.2. UN proper shipping name:	Adhesives
14.3. Transport hazard class(es):	3
14.4. Packing group:	II
Hazard label:	3

Special Provisions:	A3
Limited quantity Passenger:	1 L
Passenger LQ:	Y341
Excepted quantity:	E2
IATA-packing instructions - Passenger:	353
IATA-max. quantity - Passenger:	5 L
IATA-packing instructions - Cargo:	364
IATA-max. quantity - Cargo:	60 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: yes

14.6. Special precautions for user

See section 8.

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

not relevant.

SECTION 15: Regulatory information

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

EU regulatory information

2010/75/EU (VOC):	not determined
2004/42/EC (VOC):	not determined
Information according to 2012/18/EU (SEVESO III):	E2 Hazardous to the Aquatic Environment
Additional information:	P5c

Additional information

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].
REACH 1907/2006 Appendix XVII, No (mixture): 3

National regulatory information

TSCA STATUS: All ingredients in this products are listed in the T.S.C.A. inventory.

CALIFORNIA PROPOSITION 65: To the best of our knowledge this product does not contain any list of chemicals, which the state of California has found to cause cancer, birth defects or other reproductive harm.

15.2. Chemical safety assessment

For the following substances of this mixture a chemical safety assessment has been carried out:
methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate
2,6-di-tert-butyl-p-cresol
2-methylpropenoic acid, methacrylic acid

SECTION 16: Other information

Changes

Rev. 1,00, 19.03.2015, Initial release
Rev. 2,00, 09.29.2020, Changes in chapter: 1-16; 09.29.2020

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route
CAS Chemical Abstracts Service
DNEL: Derived No Effect Level
IARC: INTERNATIONAL AGENCY FOR RESEARCH ON CANCER
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
IATA-DGR: Dangerous Goods Regulations 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 Labelling of Chemicals
GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany)
LOAEL: Lowest observed adverse effect level

LOAEC: Lowest observed adverse effect concentration
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
NOAEL: No observed adverse effect level
NOAEC: No observed adverse effect level
NTP: National Toxicology Program
N/A: not applicable
OSHA: Occupational Safety and Health Administration
PNEC: predicted no effect concentration
PBT: Persistent bioaccumulative toxic
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
SARA: Superfund Amendments and Reauthorization Act
SVHC: substance of very high concern
TRGS Technische Regeln fuerGefahrstoffe
TSCA: Toxic Substances Control Act
VOC: Volatile Organic Compounds
VwVwS: Verwaltungsvorschrift wassergefaehrdender Stoffe
WGK: Wassergefaehrdungsklasse

Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]

Classification	Classification procedure
Flam. Liq. 2; H225	On basis of test data and / or calculated and / or estimated.
Skin Irrit. 2; H315	Calculation method
Eye Irrit. 2; H319	Calculation method
Skin Sens. 1; H317	Calculation method
STOT SE 3; H335	Calculation method
Aquatic Chronic 2; H411	Calculation method

Relevant H and EUH statements (number and full text)

H225	Highly flammable liquid and vapor.
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.

Further Information

Classification according EC regulation 1272/2008 (CLP): - Classification procedure:
Health hazards: Calculation method.
Environmental hazards: Calculation method.
Physical hazards: On basis of test data and / or calculated and / or estimated.

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

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

1.1. Product identifier

ADINOX M305 Methacrylate Adhesive Activator

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

Use of the substance/mixture

Adhesives, sealants

Uses advised against

Any non-intended use.

1.3. Details of the supplier of the safety data sheet

Company name:	Adhesivos y Suministros de México, S.A de C.V.
Place:	Guadalajara,Jalisco. Mx 44190
Internet:	www.adinoxadhesives.com
Responsible Department:	info@adinoxadhesives.com

1.4. Emergency telephone number:

Chemtrec: 1-800-262-8200

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories:
Flammable liquid: Flam. Liq. 2
Skin corrosion/irritation: Skin Irrit. 2
Serious eye damage/eye irritation: Eye Irrit. 2
Respiratory or skin sensitisation: Skin Sens. 1
Specific target organ toxicity - single exposure: STOT SE 3
Hazardous to the aquatic environment: Aquatic Chronic 1
Hazard Statements:
Highly flammable liquid and vapour.
Causes skin irritation.
Causes serious eye irritation.
May cause an allergic skin reaction.
May cause respiratory irritation.
Very toxic to aquatic life with long lasting effects.

2.2. Label elements

Regulation (EC) No. 1272/2008

Hazard components for labelling

methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate

Signal word: Danger

Pictograms:

Hazard statements

H225	Highly flammable liquid and vapour.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.

H335 May cause respiratory irritation.
H410 Very 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.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P370+P378 In case of fire: Use Carbon dioxide (CO2). Dry extinguishing powder. alcohol resistant foam. Water spray to extinguish.
P391 Collect spillage.
P403+P235 Store in a well-ventilated place. Keep cool.

2.3. Other hazards

In use, may form flammable/explosive vapor-air mixture.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
80-62-6	methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate			85 - < 90 %
	201-297-1	607-035-00-6	01-2119452498-28	
	Flam. Liq. 2, Skin Irrit. 2, Skin Sens. 1, STOT SE 3; H225 H315 H317 H335			
34562-31-7	3,5-diethyl-1,2-dihydro-1-phenyl-2-propylpyridine			15 - < 20 %
	252-091-3		01-2120769712-47	
	Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, Aquatic Chronic 1 (M-Factor = 10); H302 H315 H319 H410			

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

Further Information

Product does not contain listed SVHC substances > 0,1 % according to Regulation (EC) No. 1907/2006 Article 59 (REACH).

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Take off immediately all contaminated clothing.
First aider: Pay attention to self-protection!

After inhalation

Remove person to fresh air and keep comfortable for breathing. In case of irregular breathing or respiratory arrest provide artificial respiration. In case of respiratory tract irritation, consult a physician.
In the case of lung irritation: Primary treatment using corticoide spray, eg. Auxiloson spray, Pulmicort-dosage-spray. (Auxiloson and Pulmicort are registered trademarks).

After contact with skin

Take off immediately all contaminated clothing. Wash with plenty of water. In case of skin irritation, seek medical treatment.

After contact with eyes

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

After ingestion

Rinse mouth thoroughly with water. Let water be drunken in little sips (dilution effect). Do NOT induce vomiting. Never give anything by mouth to an unconscious person or a person with cramps. In all cases of doubt, or when symptoms persist, seek medical advice.

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

No information available.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Carbon dioxide (CO2). Dry extinguishing powder. alcohol resistant foam.
In case of major fire and large quantities: Atomized water.

Unsuitable extinguishing media

High power water jet.

5.2. Special hazards arising from the substance or mixture

Can be released in case of fire: Gas/vapors, irritant. Carbon monoxide Carbon dioxide (CO2).

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.In case of fire and/or explosion do not breathe fumes.

Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. Use water spray jet to protect personnel and to cool endangered containers.
In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Remove persons to safety. Remove all sources of ignition. Provide adequate ventilation.
Do not breathe gas/vapour/aerosol. Avoid contact with skin, eyes and clothes.
Wear personal protection equipment. (refer to chapter 8)

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Prevent spread over a wide area (e.g. by containment or oil barriers). In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Ventilate affected area.
Treat the recovered material as prescribed in the section on waste disposal.
Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Safe handling: see section 7
Personal protection equipment: see section 8
Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Provide adequate ventilation as well as local exhaustion at critical locations.
Do not breathe gas/vapour/aerosol. Avoid contact with skin, eyes and clothes.
Wear suitable protective clothing. (See section 8.)

Advice on protection against fire and explosion

Keep away from sources of ignition. - No smoking. Take precautionary measures against static discharges. Flammable vapours can accumulate in head space of closed systems. In use, may form flammable/explosive vapour-air mixture. Heating causes rise in pressure with risk of bursting.

Further information on handling

General protection and hygiene measures: See section 8.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed in a cool, well-ventilated place. Protect against direct sunlight.
Ensure adequate ventilation of the storage area.
Make sure spills can be contained (e.g. sump pallets or kerbed areas).

Advice on storage compatibility

Do not store together with: Gas. Explosives. Flammable solids. Pyrophoric liquids and solids. Self-heating substances and mixtures. Substances and mixtures which, in contact with water, emit flammable gases. Oxidizing liquids. Oxidizing solids. ammonium nitrate. Self-reactive substances and mixtures. Organic peroxides. Non-combustible toxic substances. Radioactive substances. Infectious substances.

Further information on storage conditions

Keep the packing dry and well sealed to prevent contamination and absorption of humidity.
Recommended storage temperature: 20°C
Protect against: Light. UV-radiation/sunlight. heat. moisture.
Do not store at temperatures over: 60°C
Do not keep the container sealed.

7.3. Specific end use(s)

refer to chapter 1.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
80-62-6	Methyl methacrylate	50	208		TWA (8 h)	WEL
		100	416		STEL (15 min)	WEL

DNEL/DMEL values

CAS No	Substance		
DNEL type	Exposure route	Effect	Value
80-62-6	methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate		
Worker DNEL, long-term	inhalation	systemic	208 mg/m³
Worker DNEL, long-term	dermal	systemic	13.67 mg/kg bw/day
Worker DNEL, long-term	dermal	local	1.5 mg/cm²
Worker DNEL, acute	dermal	local	1.5 mg/cm²
Worker DNEL, long-term	inhalation	local	208 mg/m³
Consumer DNEL, long-term	inhalation	systemic	74.3 mg/m³
Consumer DNEL, long-term	inhalation	local	104 mg/m³
Consumer DNEL, long-term	dermal	systemic	8.2 mg/kg bw/day
Consumer DNEL, long-term	dermal	local	1.5 mg/cm²

Consumer DNEL, acute	dermal	local	1.5 mg/cm²

PNEC values

CAS No	Substance	
Environmental compartment		Value
80-62-6	methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate	
Freshwater		0.94 mg/l
Marine water		0.94 mg/l
Freshwater sediment		5.74 mg/kg
Micro-organisms in sewage treatment plants (STP)		10 mg/l
Soil		1.47 mg/kg

8.2. Exposure controls




Appropriate engineering controls

Provide adequate ventilation as well as local exhaustion at critical locations.

Protective and hygiene measures

The usual precautions for handling chemicals should be considered.
Keep away from food, drink and animal feedingstuffs.
Always close containers tightly after the removal of product. When using do not eat, drink, smoke, sniff. Wash hands before breaks and after work. Protect skin by using skin protective cream. Take off contaminated clothing and wash it before reuse.

Eye/face protection

Recommended eye protection brand: Tightly sealed safety glasses. (DIN EN 166)

Hand protection

In case of prolonged or frequently repeated skin contact: Wear suitable gloves.
Suitable material: Butyl rubber.
Thickness of glove material: 0,5 mm
Breakthrough time >= 480 min. penetration time (maximum wearing period): ~ 120 min. (estimated)
In the case of wanting to use the gloves again, clean them before taking off and air them well. Before using check leak tightness / impermeability.
For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.
The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Skin protection

Wear fire/flame resistant/retardant clothing.
Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500.

Respiratory protection

With correct and proper use, and under normal conditions, breathing protection is not required.
Respiratory protection necessary at:
Insufficient ventilation.
exceeding exposure limit values
generation/formation of aerosols
Generation/formation of mist
Suitable respiratory protective equipment: Combination filtering device (EN 14387) Type : A / P2/P3
The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates)

that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used.

Environmental exposure controls

Do not allow uncontrolled discharge of product into the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	viscous
Colour:	-
Odour:	characteristic
pH-Value:	not determined

Changes in the physical state

Melting point:	not determined
Initial boiling point and boiling range:	Methyl-methacrylate: 100 °C
Flash point:	Methyl-methacrylate: 10 °C

Explosive properties

none

Lower explosion limits:	not determined
Upper explosion limits:	not determined
Ignition temperature:	not determined
Decomposition temperature:	not determined

Oxidizing properties

none

Vapour pressure: (at 20 °C)	not determined
Density:	not determined
Water solubility:	miscible.

Solubility in other solvents

not determined

Partition coefficient:	not determined
Viscosity / dynamic: (at 20 °C)	not determined
Viscosity / kinematic: (at 20 °C)	not determined
Flow time:	not determined
Vapour density:	not determined
Evaporation rate:	not determined
Solvent separation test:	not determined
Solvent content:	not determined

9.2. Other information

Solid content:	not determined

No information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Stabilization required by: stabiliser and Oxygen.

10.2. Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.
Can polymerise exothermically in the absence of stabilisers, particularly in acid conditions or if shelf life exceeded.
Stabilization required by: Oxygen.

10.3. Possibility of hazardous reactions

Hazardous polymerisation: Protect against direct sunlight.
Can polymerise exothermically in the absence of stabilisers, particularly in acid conditions or if shelf life exceeded.

10.4. Conditions to avoid

Protect against: Light. UV-radiation/sunlight. heat. Cold moisture.
Do not store at temperatures over: 60°C
In use may form flammable/explosive vapour-air mixture.
Heating causes rise in pressure with risk of bursting.

10.5. Incompatible materials

Materials to avoid: Strong acid. Oxidizing agents, strong. Alkalis (alkalis), concentrated.

10.6. Hazardous decomposition products

Can be released in case of fire: Gas/vapours, irritant. Carbon monoxide Carbon dioxide (CO2).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicocinetics, metabolism and distribution

No data available.

Acute toxicity

Based on available data, the classification criteria are not met.

CAS No	Chemical name					
	Exposure route	Dose		Species	Source	Method
80-62-6	methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate					
	oral	LD50 mg/kg	>5000	Rat	ECHA Dossier	
	dermal	LD50 mg/kg	> 5000	Rabbit	ECHA Dossier	OECD Guideline 402
	inhalation aerosol	LC50	29,8 mg/l	Rat	ECHA Dossier	
34562-31-7	3,5-diethyl-1,2-dihydro-1-phenyl-2-propylpyridine					
	oral	LD50 mg/kg	>500	Rat	ECHA Dossier	
	dermal	LD50 mg/kg	>2000	Rabbit	ECHA Dossier	

Irritation and corrosivity

Causes skin irritation.
Causes serious eye irritation.

Sensitising effects

May cause an allergic skin reaction. (methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate)
The product is: sensitizing.
People who suffer from skin sensitazion problems, asthma, allergies, chronic or recurring respiratory illnesses should not be deployed in any process using this preparation.

Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.
methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate:
In-vitro mutagenicity: Method: OECD Guideline 471 (Bacterial Reverse Mutation Assay); Result: negative. Literature information: ECHA Dossier; Carcinogenicity: negative. Method: OECD Guideline 451 (Carcinogenicity Studies, 6h/d); Species: Rat,oral.; Exposure duration: 2 years; Result: NOAEC >= 2000 ppm; Literature information: ECHA Dossier; Reproductive toxicity: Method: OECD Guideline 416 (Two-Generation Reproduction Toxicity Study); Species: Rat; Result: NOAEL = 400 mg/kg; Literature information: ECHA Dossier; 1. Developmental toxicity/teratogenicity: Method: OECD Guideline 414 (Prenatal Developmental Toxicity Study); Species: Rabbit. Exposure duration: 28d; Result: NOAEL = 450 mg/kg
2. Developmental toxicity/teratogenicity: Method: OECD Guideline 414 (Prenatal Developmental Toxicity Study); Species: Rat; Result: NOAEC >= 8,3 mg/l ; Literature information: ECHA Dossier

STOT-single exposure

May cause respiratory irritation. (methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate)

STOT-repeated exposure

Based on available data, the classification criteria are not met.
methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate:
Chronic oral toxicity: Method: -; Species: Rat;Exposure duration: 2 years; Results: NOAEL = 2000 ppm. Literature information: ECHA Dossier; 1. Chronic inhalation toxicity: Method: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies, 6h/d); Species: Rat; Exposure duration: approx. 2 years; Results: LOAEC = 250 ppm.
2. Chronic inhalation toxicity: Method: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies, 6h/d); Species: Rat; Exposure duration: approx. 2 years; Results: NOAEC = 1,64 m/l; Literature information: ECHA Dossier
2,6-di-tert-butyl-p-cresol:
Chronic oral toxicity: Method: - ; Species: Rat; Results: NOAEL = 25 mg/kg; Literature information: ECHA Dossier

Aspiration hazard

Based on available data, the classification criteria are not met.

Specific effects in experiment on an animal

No data available.

SECTION 12: Ecological information

12.1. Toxicity

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h] | [d]	Species	Source	Method
80-62-6	methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate						
	Acute fish toxicity	LC50	>79 mg/l	96 h	Oncorhynchus mykiss	ECHA Dossier	EPA OTS 797.1400
	Acute algae toxicity	ErC50 mg/l	>110	72 h	Pseudokirchnerella subcapitata	ECHA Dossier	OECD Guideline 201
	Acute crustacea toxicity	EC50	69 mg/l	48 h	Daphnia magna	ECHA Dossier	EPA OTS 797.1300
	Fish toxicity	NOEC	9,4 mg/l	35 d	Brachydanio rerio	ECHA Dossier	

	Crustacea toxicity	NOEC 37 mg/l	21 d	Daphnia magna	ECHA Dossier	OECD Guideline 211
	Acute bacteria toxicity	(100 mg/l)		activated sludge	ECHA Dossier	OECD 301C
34562-31-7	3,5-diethyl-1,2-dihydro-1-phenyl-2-propylpyridine					
	Acute algae toxicity	ErC50 40 mg/l	72 h	Pseudokirchneriella subcapitata	ECHA Dossier	OECD Guideline 201
	Acute crustacea toxicity	EC50 0,023 mg/l	48 h	Daphnia magna	ECHA Dossier	OECD Guideline 202

12.2. Persistence and degradability

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
80-62-6	methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate			
	OECD 301C / ISO 9408 / EWG 92/69 Anhang V, C.4-F	94%	14	ECHA Dossier
	Easily biodegradable (concerning to the criteria of the OECD)			
34562-31-7	3,5-diethyl-1,2-dihydro-1-phenyl-2-propylpyridine			
	ECHA Dossier	NO		ECHA Dossier
	Not easily bio-degradable (according to OECD-criteria).			

12.3. Bioaccumulative potential

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
80-62-6	methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate	1,32
34562-31-7	3,5-diethyl-1,2-dihydro-1-phenyl-2-propylpyridine	6,58

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. Other adverse effects

No data available.

Further information

Do not allow to enter into surface water or drains.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Dispose of waste according to applicable legislation. Consult the local waste disposal expert about waste disposal. Non-contaminated packages may be recycled. According to EAKV, allocation of waste identity numbers/waste descriptions must be carried out in a specific way for every industry and process.
Control report for waste code/ waste marking according to EAKV:

Waste disposal number of waste from residues/unused products

080409 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU of adhesives and sealants (including waterproofing products); waste adhesives and sealants containing organic solvents or other hazardous substances; hazardous waste

Waste disposal number of used product

080409 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU of adhesives and sealants (including waterproofing products); waste adhesives and sealants containing organic solvents or other hazardous substances; hazardous waste

Waste disposal number of contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste

Contaminated packaging

Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number:	UN 1133
14.2. UN proper shipping name:	Adhesives
14.3. Transport hazard class(es):	3
14.4. Packing group:	II
Hazard label:	3

Classification code:	F1
Special Provisions:	640D
Limited quantity:	5 L
Excepted quantity:	E0
Transport category:	2
Hazard No:	33
Tunnel restriction code:	D/E

Inland waterways transport (ADN)

14.1. UN number:	UN 1133
14.2. UN proper shipping name:	Adhesives
14.3. Transport hazard class(es):	3
14.4. Packing group:	II
Hazard label:	3

Classification code:	F1
Special Provisions:	640D
Limited quantity:	5 L
Excepted quantity:	E2

Marine transport (IMDG)

14.1. UN number:	UN 1133
14.2. UN proper shipping name:	Adhesives
14.3. Transport hazard class(es):	3
14.4. Packing group:	II

Hazard label:	3

Marine pollutant:	YES
Special Provisions:	-
Limited quantity:	5 L
Excepted quantity:	E2
EmS:	F-E, S-D

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number:	UN 1133
14.2. UN proper shipping name:	Adhesives
14.3. Transport hazard class(es):	3
14.4. Packing group:	II
Hazard label:	3

Special Provisions:	A3
Limited quantity Passenger:	1 L
Passenger LQ:	Y341
Excepted quantity:	E2
IATA-packing instructions - Passenger:	353
IATA-max. quantity - Passenger:	5 L
IATA-packing instructions - Cargo:	364
IATA-max. quantity - Cargo:	60 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: yes

14.6. Special precautions for user

See section 8.

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

not relevant.

SECTION 15: Regulatory information

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

EU regulatory information

2010/75/EU (VOC):	not determined
2004/42/EC (VOC):	not determined
Information according to 2012/18/EU (SEVESO III):	E1 Hazardous to the Aquatic Environment
Additional information:	P5c

Additional information

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].
REACH 1907/2006 Appendix XVII, No (mixture): 3

National regulatory information

TSCA STATUS: All ingredients in this products are listed in the T.S.C.A. inventory.

CALIFORNIA PROPOSITION 65: To the best of our knowledge this product does not contain any list of chemicals, which the state of California has found to cause cancer, birth defects or other reproductive harm.

15.2. Chemical safety assessment

For the following substances of this mixture a chemical safety assessment has been carried out:
methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate

SECTION 16: Other information

Changes

Rev. 1,00, 19.03.2015, Initial release
Rev. 2,00, 09.29.2020, Changes in chapter: 1-16; 09.29.2020

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route
CAS Chemical Abstracts Service
DNEL: Derived No Effect Level
IARC: INTERNATIONAL AGENCY FOR RESEARCH ON CANCER
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
IATA-DGR: Dangerous Goods Regulations 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 Labelling of Chemicals
GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany)
LOAEL: Lowest observed adverse effect level
LOAEC: Lowest observed adverse effect concentration
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
NOAEL: No observed adverse effect level
NOAEC: No observed adverse effect level
NTP: National Toxicology Program
N/A: not applicable
OSHA: Occupational Safety and Health Administration
PNEC: predicted no effect concentration
PBT: Persistent bioaccumulative toxic
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
SARA: Superfund Amendments and Reauthorization Act
SVHC: substance of very high concern
TRGS Technische Regeln fuerGefahrstoffe
TSCA: Toxic Substances Control Act
VOC: Volatile Organic Compounds
VwVwS: Verwaltungsvorschrift wassergefaehrdender Stoffe
WGK: Wassergefaehrdungsklasse

Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]

Classification	Classification procedure
Flam. Liq. 2; H225	On basis of test data and / or calculated and / or estimated.
Skin Irrit. 2; H315	Calculation method
Eye Irrit. 2; H319	Calculation method
Skin Sens. 1; H317	Calculation method
STOT SE 3; H335	Calculation method
Aquatic Chronic 1; H410	Calculation method

Relevant H and EUH statements (number and full text)

H225	Highly flammable liquid and vapour.
H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H410	Very toxic to aquatic life with long lasting effects.

Further Information

Classification according EC regulation 1272/2008 (CLP): - Classification procedure:
Health hazards: Calculation method.
Environmental hazards: Calculation method.
Physical hazards: On basis of test data and / or calculated and / or estimated.

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)