Safety Data Sheet

acc. to Hazardous Products Regulations (HPR)

POR PATCH BLACK

Version number: GHS 1.0 Date of compilation: 2024-06-20

1 Identification

1.1 Product identifier

Trade name **POR PATCH BLACK**

Product code(s) 49013, 49015

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

Relevant identified uses General use

1.3 Details of the supplier of the safety data sheet

P.O.R. Products
38 Portman Road
New Rochelle NY 10801
United States

Telephone: +1 914-636-0700
e-mail: support@porproducts.com
Website: www.porproducts.com

e-mail (competent person) support@porproducts.com

1.4 Emergency telephone number

Emergency information service 1-800-255-3924
ChemTel Inc.

2 Hazard identification

2.1 Classification of the substance or mixture

Classification acc. to GHS

Section	Hazard class	Category	Hazard class and category	Hazard statement
3.2	skin corrosion/irritation	2	Skin Irrit. 2	H315
3.3	serious eye damage/eye irritation	2	Eye Irrit. 2	H319
3.4R	respiratory sensitization	1	Resp. Sens. 1	H334
3.4S	skin sensitization	1	Skin Sens. 1	H317
3.5	germ cell mutagenicity	1B	Muta. 1B	H340
3.6	carcinogenicity	1A	Carc. 1A	H350
3.8R	specific target organ toxicity - single exposure (respiratory tract irritation)	3	STOT SE 3	H335
3.9	specific target organ toxicity - repeated exposure	2	STOT RE 2	H373
3.10	aspiration hazard	1	Asp. Tox. 1	H304

For full text of abbreviations: see SECTION 16.

The most important adverse physicochemical, human health and environmental effects

Delayed or immediate effects can be expected after short or long-term exposure.

2.2 Label elements

Labeling

- Signal word danger

- Pictograms

GHS07, GHS08

- Hazard statements

H304	May be fatal if swallowed and enters airways.
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.
H340	May cause genetic defects.
H350	May cause cancer.
H373	May cause damage to organs through prolonged or repeated exposure.

- Precautionary statements

P201	Obtain special instructions before use.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
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/hearing protection.
P284	In case of inadequate ventilation wear respiratory protection.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P302+P352	IF ON SKIN: Wash with plenty of water.
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.
P321	Specific treatment (see on this label).
P331	Do NOT induce vomiting.
P342+P311	If experiencing respiratory symptoms: Call a POISON CENTER/doctor.
P362+P364	Take off contaminated clothing and wash it before reuse.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P501	Dispose of contents/container to industrial combustion plant.

- Hazardous ingredients for labelling 4,4'-methylenediphenyl diisocyanate, Solvent naphtha (petroleum), light arom., o-(p-isocyanatobenzyl)phenyl isocyanate, 2,2'-methylenediphenyl diisocyanate

2.3 Other hazards

Special danger of slipping by leaking/spilling product.

Results of PBT and vPvB assessment

Does not contain a PBT-/vPvB-substance at a concentration of ≥ 0.1%.

Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) in a concentration of ≥ 0.1%.

3 Composition/ Information on ingredients

3.1 Substances

Not relevant (mixture)

3.2 Mixtures

Description of the mixture

Name of substance	Identifier	Wt%	Classification acc. to GHS
4,4'-methylenediphenyl diisocyanate	CAS No 101-68-8	10 – < 30	Acute Tox. 2 / H330 Skin Irrit. 2 / H315 Eye Irrit. 2 / H319 Resp. Sens. 1 / H334 Skin Sens. 1 / H317 Carc. 2 / H351 STOT SE 3 / H335 STOT RE 2 / H373
o-(p-isocyanatobenzyl)phenyl isocyanate	CAS No 5873-54-1	5 – < 10	Acute Tox. 2 / H330 Skin Irrit. 2 / H315 Eye Irrit. 2 / H319 Resp. Sens. 1 / H334 Skin Sens. 1 / H317 Carc. 2 / H351 STOT SE 3 / H335 STOT RE 2 / H373
Solvent naphtha (petroleum), light arom.	CAS No 64742-95-6	5 – < 10	Flam. Liq. 1 / H224 Muta. 1B / H340 Carc. 1A / H350 Asp. Tox. 1 / H304
Titanium dioxide (excluding nanoparticle)	CAS No 13463-67-7	5 – < 10	Carc. 2 / H351
Confidential Organoclay	CAS No 68953-58-2 92704-41-1	5 – < 10	Acute Tox. 4 / H332
1,2,4-trimethylbenzene	CAS No 95-63-6	1 – < 5	Flam. Liq. 3 / H226 Acute Tox. 4 / H332 Skin Irrit. 2 / H315 Eye Irrit. 2 / H319 STOT SE 3 / H335 Asp. Tox. 1 / H304
2,2'-methylenediphenyl diisocyanate	CAS No 2536-05-2	0.1 – < 1	Acute Tox. 2 / H330 Skin Irrit. 2 / H315 Eye Irrit. 2 / H319 Resp. Sens. 1 / H334 Skin Sens. 1 / H317 Carc. 2 / H351 STOT SE 3 / H335 STOT RE 2 / H373
cumene	CAS No 98-82-8	0.1 – < 1	Flam. Liq. 3 / H226 Carc. 1B / H350 STOT SE 3 / H335 Asp. Tox. 1 / H304

Remarks

For full text of abbreviations: see SECTION 16

4 First-aid measures

4.1 Description of first-aid measures

General notes

Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

Following inhalation

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. In case of respiratory tract irritation, consult a physician. Provide fresh air.

Following skin contact

Wash with plenty of soap and water.

Following eye contact

Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

Following ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms and effects are not known to date.

4.3 Indication of any immediate medical attention and special treatment needed

none

5 Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water spray, BC-powder, Carbon dioxide (CO2)

Unsuitable extinguishing media

Water jet

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products

Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide (CO2)

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Coordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Remove persons to safety.

For emergency responders

Wear breathing apparatus if exposed to vapors/dust/aerosols/gases.

6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it.

6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains

Advice on how to clean up a spill

Wipe up with absorbent material (e.g. cloth, fleece). Collect spillage: sawdust, kieselgur (diatomite), sand, universal binder

Appropriate containment techniques

Use of adsorbent materials.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

7 Handling and storage

7.1 Precautions for safe handling

Recommendations

- Measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation. Use only in well-ventilated areas.

Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities

- Packaging compatibilities

Only packagings which are approved (e.g. acc. to the Dangerous Goods Regulations) may be used.

7.3 Specific end use(s)

See section 16 for a general overview.

8 Exposure controls/ Personal protection

8.1 Control parameters

Occupational exposure limit values (Workplace Exposure Limits)

Country	Name of agent	CAS No	Identifier	TWA [ppm]	TWA [mg/m³]	STEL [ppm]	STEL [mg/m³]	Ceiling-C [ppm]	Ceiling-C [mg/m³]	Notation	Source
CA	diphenylmethane-4,4'-diisocyanate (methylbis(phenyl-isocyanate)) (4,4'-MDI)	101-68-8	OEL (AB)	0.005	0.05						OHS Code
CA	methylbis(phenyl-isocyanate) (4,4'-MDI)	101-68-8	OEL (BC)	0.005				0.01			"BC Regulation"
CA	methylbis(phenyl-isocyanate) (4,4'-MDI)	101-68-8	OEL (ON)	0.005				0.02			Regulation 833
CA	methylbis(phenyl-isocyanate) (4,4'-MDI)	101-68-8	OEL (ON-MoL)	0.005				0.02			MoL
CA	methylenebis(p-phenyl isocyanate) (4,4'-MDI)	101-68-8	PEV/ VEA	0.005	0.051						Regulation OHS
CA	carbon black	1333-86-4	OEL (AB)		3.5						OHS Code
CA	carbon black	1333-86-4	PEV/ VEA		3					dust, i	Regulation OHS
CA	carbon black	1333-86-4	OEL (BC)		3					i	"BC Regulation"
CA	carbon black	1333-86-4	OEL (ON-MoL)		3					i	MoL
CA	titanium dioxide	13463-67-7	OEL (AB)		10						OHS Code
CA	titanium dioxide	13463-67-7	OEL (ON-MoL)		10						MoL
CA	titanium dioxide	13463-67-7	OEL (BC)		10					dust	"BC Regulation"
CA	titanium dioxide	13463-67-7	PEV/ VEA		10					dust, noAsb_less1Sil	Regulation OHS
CA	titanium dioxide	13463-67-7	OEL (BC)		3					r	"BC Regulation"
CA	diisocyanates	2536-05-2	OEL (BC)	0.005				0.01			"BC Regulation"
CA	1,2,4-trimethylbenzene	95-63-6	OEL (BC)	25							"BC Regulation"

Occupational exposure limit values (Workplace Exposure Limits)

Country	Name of agent	CAS No	Identifier	TWA [ppm]	TWA [mg/m³]	STEL [ppm]	STEL [mg/m³]	Ceiling-C [ppm]	Ceiling-C [mg/m³]	Notation	Source
CA	cumene	98-82-8	OEL (AB)	50	246						OHS Code
CA	cumene	98-82-8	OEL (BC)	25		75					"BC Regulation"
CA	cumene	98-82-8	OEL (ONMoL)	50							MoL
CA	cumene	98-82-8	PEV/VEA	50	246						Regulation OHS

Notation

Ceiling-C	ceiling value is a limit value above which exposure should not occur
dust	as dust
i	inhalable fraction
noAsb_less1Sil	contains no asbestos and less than 1% free crystalline silica
r	respirable fraction
STEL	short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified)
TWA	time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified

Relevant DNELs of components

Name of substance	CAS No	Endpoint	Threshold level	Protection goal, route of exposure	Used in	Exposure time
4,4'-methylenediphenyl diisocyanate	101-68-8	DNEL	0.05 mg/m³	human, inhalatory	worker (industry)	chronic - local effects
4,4'-methylenediphenyl diisocyanate	101-68-8	DNEL	0.1 mg/m³	human, inhalatory	worker (industry)	acute - local effects
o-(p-isocyanatobenzyl)phenyl isocyanate	5873-54-1	DNEL	0.05 mg/m³	human, inhalatory	worker (industry)	chronic - local effects
o-(p-isocyanatobenzyl)phenyl isocyanate	5873-54-1	DNEL	0.1 mg/m³	human, inhalatory	worker (industry)	acute - local effects
Confidential Organoclay	68953-58-2 92704-41-1	DNEL	3 mg/m³	human, inhalatory	worker (industry)	chronic - systemic effects
Confidential Organoclay	68953-58-2 92704-41-1	DNEL	3 mg/m³	human, inhalatory	worker (industry)	acute - systemic effects
Confidential Organoclay	68953-58-2 92704-41-1	DNEL	3 mg/m³	human, inhalatory	worker (industry)	chronic - local effects
Confidential Organoclay	68953-58-2 92704-41-1	DNEL	3 mg/m³	human, inhalatory	worker (industry)	acute - local effects
1,2,4-trimethylbenzene	95-63-6	DNEL	100 mg/m³	human, inhalatory	worker (industry)	chronic - systemic effects

Relevant DNELs of components

Name of substance	CAS No	Endpoint	Threshold level	Protection goal, route of exposure	Used in	Exposure time
1,2,4-trimethylbenzene	95-63-6	DNEL	100 mg/m³	human, inhalatory	worker (industry)	acute - systemic effects
1,2,4-trimethylbenzene	95-63-6	DNEL	100 mg/m³	human, inhalatory	worker (industry)	chronic - local effects
1,2,4-trimethylbenzene	95-63-6	DNEL	100 mg/m³	human, inhalatory	worker (industry)	acute - local effects
1,2,4-trimethylbenzene	95-63-6	DNEL	16,171 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
2,2'-methylenediphenyl diisocyanate	2536-05-2	DNEL	0.05 mg/m³	human, inhalatory	worker (industry)	chronic - local effects
2,2'-methylenediphenyl diisocyanate	2536-05-2	DNEL	0.1 mg/m³	human, inhalatory	worker (industry)	acute - local effects
cumene	98-82-8	DNEL	100 mg/m³	human, inhalatory	worker (industry)	chronic - systemic effects
cumene	98-82-8	DNEL	250 mg/m³	human, inhalatory	worker (industry)	acute - local effects
cumene	98-82-8	DNEL	15.4 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects

Relevant PNECs of components

Name of substance	CAS No	Endpoint	Threshold level	Organism	Environmental compartment	Exposure time
4,4'-methylenediphenyl diisocyanate	101-68-8	PNEC	1 $^{mg}/_{l}$	aquatic organisms	freshwater	short-term (single instance)
4,4'-methylenediphenyl diisocyanate	101-68-8	PNEC	0.1 $^{mg}/_{l}$	aquatic organisms	marine water	short-term (single instance)
4,4'-methylenediphenyl diisocyanate	101-68-8	PNEC	1 $^{mg}/_{l}$	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
4,4'-methylenediphenyl diisocyanate	101-68-8	PNEC	1 $^{mg}/_{kg}$	terrestrial organisms	soil	short-term (single instance)
o-(p-isocyanatobenzyl)phenyl isocyanate	5873-54-1	PNEC	1 $^{mg}/_{l}$	aquatic organisms	freshwater	short-term (single instance)
o-(p-isocyanatobenzyl)phenyl isocyanate	5873-54-1	PNEC	0.1 $^{mg}/_{l}$	aquatic organisms	marine water	short-term (single instance)
o-(p-isocyanatobenzyl)phenyl isocyanate	5873-54-1	PNEC	1 $^{mg}/_{l}$	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
o-(p-isocyanatobenzyl)phenyl isocyanate	5873-54-1	PNEC	1 $^{mg}/_{kg}$	terrestrial organisms	soil	short-term (single instance)
Confidential Organoclay	68953-58-2 92704-41-1	PNEC	4.1 $^{mg}/_{l}$	aquatic organisms	freshwater	short-term (single instance)

Relevant PNECs of components

Name of substance	CAS No	Endpoint	Threshold level	Organism	Environmental compartment	Exposure time
Confidential Organo-clay	68953-58-2 92704-41-1	PNEC	0.41 $^{mg}/_{l}$	aquatic organisms	marine water	short-term (single instance)
Confidential Organo-clay	68953-58-2 92704-41-1	PNEC	1,400 $^{mg}/_{l}$	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
1,2,4-trimethylbenzene	95-63-6	PNEC	0.12 $^{mg}/_{l}$	aquatic organisms	freshwater	short-term (single instance)
1,2,4-trimethylbenzene	95-63-6	PNEC	0.12 $^{mg}/_{l}$	aquatic organisms	marine water	short-term (single instance)
1,2,4-trimethylbenzene	95-63-6	PNEC	2.41 $^{mg}/_{l}$	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
1,2,4-trimethylbenzene	95-63-6	PNEC	13.56 $^{mg}/_{kg}$	aquatic organisms	freshwater sediment	short-term (single instance)
1,2,4-trimethylbenzene	95-63-6	PNEC	13.56 $^{mg}/_{kg}$	aquatic organisms	marine sediment	short-term (single instance)
1,2,4-trimethylbenzene	95-63-6	PNEC	2.34 $^{mg}/_{kg}$	terrestrial organisms	soil	short-term (single instance)
2,2'-methylenediphenyl diisocyanate	2536-05-2	PNEC	1 $^{mg}/_{l}$	aquatic organisms	freshwater	short-term (single instance)
2,2'-methylenediphenyl diisocyanate	2536-05-2	PNEC	0.1 $^{mg}/_{l}$	aquatic organisms	marine water	short-term (single instance)
2,2'-methylenediphenyl diisocyanate	2536-05-2	PNEC	1 $^{mg}/_{l}$	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
2,2'-methylenediphenyl diisocyanate	2536-05-2	PNEC	1 $^{mg}/_{kg}$	terrestrial organisms	soil	short-term (single instance)
cumene	98-82-8	PNEC	0.035 $^{mg}/_{l}$	aquatic organisms	freshwater	short-term (single instance)
cumene	98-82-8	PNEC	0.004 $^{mg}/_{l}$	aquatic organisms	marine water	short-term (single instance)
cumene	98-82-8	PNEC	200 $^{mg}/_{l}$	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
cumene	98-82-8	PNEC	3.22 $^{mg}/_{kg}$	aquatic organisms	freshwater sediment	short-term (single instance)
cumene	98-82-8	PNEC	0.322 $^{mg}/_{kg}$	aquatic organisms	marine sediment	short-term (single instance)
cumene	98-82-8	PNEC	0.624 $^{mg}/_{kg}$	terrestrial organisms	soil	short-term (single instance)

8.2 Exposure controls

Appropriate engineering controls

General ventilation.

Individual protection measures (personal protective equipment)

Eye/face protection

Wear eye/face protection.

Skin protection

- Hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leak-tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well. 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.

- Other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Environmental exposure controls

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	liquid (viscous)
Color	not determined
Odor	characteristic
Melting point/freezing point	not determined
Boiling point or initial boiling point and boiling range	318 °C at 101.3 kPa
Flammability	this material is combustible, but will not ignite readily
Lower and upper explosion limit	1.4 vol% - 7.6 vol%
Flash point	212 °C
Auto-ignition temperature	183 °C (auto-ignition temperature (liquids and gases))
Decomposition temperature	not relevant
pH (value)	not determined
Kinematic viscosity	not determined
Solubility(ies)	not determined

Partition coefficient

Partition coefficient n-octanol/water (log value)	this information is not available

Vapor pressure	≤240 kPa at 37.8 °C

Density and/or relative density

Density	not determined
Relative vapour density	information on this property is not available

Particle characteristics	not relevant (liquid)

9.2 VOC Content g/L 7.07

Information with regard to physical hazard classes	hazard classes acc. to GHS (physical hazards): not relevant
Other safety characteristics	there is no additional information

10 Stability and reactivity

10.1 Reactivity

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

10.2 Chemical stability

See below "Conditions to avoid".

10.3 Possibility of hazardous reactions

No known hazardous reactions.

10.4 Conditions to avoid

There are no specific conditions known which have to be avoided.

10.5 Incompatible materials

Oxidizers

10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

11 Toxicological information

11.1 Information on toxicological effects

Test data are not available for the complete mixture.

Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

Classification acc. to GHS

Acute toxicity

Shall not be classified as acutely toxic.

Acute toxicity estimate (ATE) of components

Name of substance	CAS No	Exposure route	ATE
4,4'-methylenediphenyl diisocyanate	101-68-8	inhalation: dust/mist	0.368 $^{mg}/_{l}$/4h
o-(p-isocyanatobenzyl)phenyl isocyanate	5873-54-1	inhalation: dust/mist	0.368 $^{mg}/_{l}$/4h
Confidential Organoclay	68953-58-2 92704-41-1	inhalation: dust/mist	>2.07 $^{mg}/_{l}$/4h
1,2,4-trimethylbenzene	95-63-6	inhalation: vapour	11 $^{mg}/_{l}$/4h
2,2'-methylenediphenyl diisocyanate	2536-05-2	inhalation: dust/mist	0.368 $^{mg}/_{l}$/4h

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/eye irritation

Causes serious eye irritation.

Respiratory or skin sensitization

May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.

Germ cell mutagenicity

May cause genetic defects.

Carcinogenicity

May cause cancer.

Reproductive toxicity

Shall not be classified as a reproductive toxicant.

Specific target organ toxicity - single exposure

May cause respiratory irritation.

Specific target organ toxicity - repeated exposure

May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard

May be fatal if swallowed and enters airways.

12 Ecological information

12.1 Toxicity

Harmful to aquatic life with long lasting effects.

Aquatic toxicity (acute) of components

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
4,4'-methylenediphenyl diisocyanate	101-68-8	LC50	>1,000 mg/l	fish	96 h
4,4'-methylenediphenyl diisocyanate	101-68-8	EC50	129.7 mg/l	aquatic invertebrates	24 h
o-(p-isocyanatobenzyl)phenyl isocyanate	5873-54-1	LC50	>1,000 mg/l	fish	96 h
o-(p-isocyanatobenzyl)phenyl isocyanate	5873-54-1	EC50	129.7 mg/l	aquatic invertebrates	24 h
Solvent naphtha (petroleum), light arom.	64742-95-6	LL50	8.2 mg/l	fish	96 h
Solvent naphtha (petroleum), light arom.	64742-95-6	EL50	4.5 mg/l	aquatic invertebrates	48 h
Confidential Organoclay	68953-58-2 92704-41-1	LC50	>100 mg/l	fish	96 h
Confidential Organoclay	68953-58-2 92704-41-1	EC50	>100 mg/l	aquatic invertebrates	48 h
Confidential Organoclay	68953-58-2 92704-41-1	ErC50	2,500 mg/l	algae	72 h
1,2,4-trimethylbenzene	95-63-6	LC50	7.72 mg/l	fish	96 h
1,2,4-trimethylbenzene	95-63-6	EC50	2.356 mg/l	algae	96 h
2,2'-methylenediphenyl diisocyanate	2536-05-2	LC50	>1,000 mg/l	fish	96 h
2,2'-methylenediphenyl diisocyanate	2536-05-2	EC50	129.7 mg/l	aquatic invertebrates	24 h
cumene	98-82-8	LC50	4.7 mg/l	fish	96 h
cumene	98-82-8	EC50	2.14 mg/l	aquatic invertebrates	48 h
cumene	98-82-8	ErC50	2.01 mg/l	algae	72 h

Aquatic toxicity (chronic) of components

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
4,4'-methylenediphenyl diisocyanate	101-68-8	ErC50	>1,640 mg/l	algae	3 d

Aquatic toxicity (chronic) of components

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
4,4'-methylenediphenyl diisocyanate	101-68-8	EC50	>100 $^{mg}/_{l}$	microorganisms	3 h
o-(p-isocyanatobenzyl)phenyl isocyanate	5873-54-1	ErC50	>1,640 $^{mg}/_{l}$	algae	3 d
o-(p-isocyanatobenzyl)phenyl isocyanate	5873-54-1	EC50	>100 $^{mg}/_{l}$	microorganisms	3 h
Solvent naphtha (petroleum), light arom.	64742-95-6	EL50	10 $^{mg}/_{l}$	fish	21 d
Solvent naphtha (petroleum), light arom.	64742-95-6	EC50	15.41 $^{mg}/_{l}$	microorganisms	40 h
Confidential Organoclay	68953-58-2 92704-41-1	EC50	2,800 $^{mg}/_{l}$	microorganisms	16 h
2,2'-methylenediphenyl diisocyanate	2536-05-2	ErC50	>1,640 $^{mg}/_{l}$	algae	3 d
2,2'-methylenediphenyl diisocyanate	2536-05-2	EC50	>100 $^{mg}/_{l}$	microorganisms	3 h
cumene	98-82-8	EC50	1.5 $^{mg}/_{l}$	aquatic invertebrates	21 d
cumene	98-82-8	LC50	>3 $^{mg}/_{l}$	aquatic invertebrates	21 d

12.2 Persistence and degradability

Data are not available.

12.3 Bioaccumulative potential

Data are not available.

12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment

According to the results of its assessment, this substance is not a PBT or a vPvB. Does not contain a PBT-/vPvB-substance at a concentration of ≥ 0.1%.

12.6 Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) in a concentration of ≥ 0.1%.

12.7 Other adverse effects

Data are not available.

13 Disposal considerations

13.1 Waste treatment methods

Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

Waste treatment of containers/packages

Only packagings which are approved (e.g. acc. to the Dangerous Goods Regulations) may be used. Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

Remarks

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

14 Transport information

14.1 UN number

UN RTDG	UN 1263
IMDG-Code	UN 1263
ICAO-TI	UN 1263

14.2 UN proper shipping name

UN RTDG	PAINT
IMDG-Code	PAINT
ICAO-TI	Paint

14.3 Transport hazard class(es)

UN RTDG	3
IMDG-Code	3
ICAO-TI	3

14.4 Packing group

UN RTDG	III
IMDG-Code	III
ICAO-TI	III

14.5 Environmental hazards

non-environmentally hazardous acc. to the dangerous goods regulations

14.6 Special precautions for user

There is no additional information.

14.7 Transport in bulk according to IMO instruments

The cargo is not intended to be carried in bulk.

Information for each of the UN Model Regulations

Transport information - National regulations - Additional information (UN RTDG)

UN number	1263
Class	3
Packing group	III
Danger label(s)	3

Special provisions (SP)	163, 223, 367 (UN RTDG)
Excepted quantities (EQ)	E1 (UN RTDG)
Limited quantities (LQ)	5 L (UN RTDG)

International Maritime Dangerous Goods Code (IMDG) - Additional information

Marine pollutant	-
Danger label(s)	3

Special provisions (SP)	163, 223, 367, 955
Excepted quantities (EQ)	E1
Limited quantities (LQ)	5 L
EmS	F-E, S-E
Stowage category	A

International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information

Danger label(s)	3

Special provisions (SP)	A3, A72, A192
Excepted quantities (EQ)	E1
Limited quantities (LQ)	10 L

15 Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

National regulations (United States)

Toxic Substance Control Act (TSCA)	all ingredients are listed (ACTIVE) or exempt from listing

Superfund Amendment and Reauthorization Act (SARA TITLE III)

- The List of Extremely Hazardous Substances and Their Threshold Planning Quantities (EPCRA Section 302, 304)

none of the ingredients are listed

- Specific Toxic Chemical Listings (EPCRA Section 313)

Toxics Release Inventory: Specific Toxic Chemical Listings			
Name of substance	**CAS No**	**Remarks**	**Effective date**
2,2'-methylenediphenyl diisocyanate	101-68-8		1986-12-31
o-(p-isocyanatobenzyl)phenyl isocyanate	101-68-8		1986-12-31
1,2,4-trimethylbenzene	95-63-6		1986-12-31
cumene	98-82-8		1986-12-31
4,4'-methylenediphenyl diisocyanate	101-68-8		1986-12-31

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

- List of Hazardous Substances and Reportable Quantities (CERCLA section 102a) (40 CFR 302.4)

Name of substance	CAS No	Remarks	Statutory code	Final RQ pounds (Kg)
cumene	98-82-8		3 4	5000 (2270)
4,4'-methylenediphenyl diisocyanate	101-68-8		3	5000 (2270)

Legend
3 "3" indicates that the source is section 112 of the Clean Air Act
4 "4" indicates that the source is section 3001 of the Resource Conservation and Recovery Act (RCRA)

Clean Air Act

none of the ingredients are listed

Right to Know Hazardous Substance List

- Cleaning Product Right to Know Act Substance List (CA-RTK)

Name of substance	CAS No	Functionality	Authoritative Lists
4,4'-methylenediphenyl diisocyanate	101-68-8		CA TACs EC Annex VI Resp. Sens. - Cat. 1 Hazard Traits identified by DTSC IRIS Neurotoxicants OEHHA RELs
o-(p-isocyanatobenzyl)phenyl isocyanate	5873-54-1		EC Annex VI Resp. Sens. - Cat. 1
Solvent naphtha (petroleum), light arom.	64742-95-6		EC Annex VI CMRs - Cat. 1B
Titanium dioxide (excluding nanoparticle)	13463-67-7		IARC Carcinogens - 2B Prop 65
1,2,4-trimethylbenzene	95-63-6		CA NLs IRIS Neurotoxicants OEHHA RELs
2,2'-methylenediphenyl diisocyanate	2536-05-2		EC Annex VI Resp. Sens. - Cat. 1

Name of substance	CAS No	Functionality	Authoritative Lists
cumene	98-82-8		CA NLs CA TACs IARC Carcinogens - 2B NTP 13th RoC - reasonable OEHHA RELs Prop 65

- Toxic or Hazardous Substance List (MA-TURA)

Name of substance	CAS No	DEP CODE	PBT / HHS / LHS	PBT / HHS Threshold	De Minimis Concentration Threshold
1,2,4-trimethylbenzene	95-63-6				1.0 %
cumene	98-82-8				0.1 %

- Hazardous Substances List (MN-ERTK)

Name of substance	CAS No	References	Remarks
Titanium dioxide (excluding nanoparticle)	13463-67-7	A	
o-(p-isocyanatobenzyl)phenyl isocyanate		N	
1,2,4-trimethylbenzene	25551-13-7	A	
4,4'-methylenediphenyl diisocyanate	101-68-8	A, N, O	
4,4'-methylenediphenyl diisocyanate		N	

Legend

A	American Conference of Governmental Industrial Hygienists (ACGIH), "Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices for 1992-93", available from ACGIH
N	National Institute for Occupational Safety and Health (NIOSH), "Recommendations for Occupational Safety and Health Standards," August 1988, available from NIOSH, Publications Dissemination Office, Division of Standards Development and Technology Transfer
O	Occupational Safety and Health Administration (OSHA), Safety and Health Standards, Code of Federal Regulations, title 29, part 1910, subpart Z, "Toxic and Hazardous Substances, 1990." General information: Minnesota Department of Labor and Industry, Occupational Safety and Health Division

- Hazardous Substance List (NJ-RTK)

Name of substance	CAS No	Remarks	Classifications
Titanium dioxide (excluding nanoparticle)	13463-67-7		
2,2'-methylenediphenyl diisocyanate			
o-(p-isocyanatobenzyl)phenyl isocyanate			
1,2,4-trimethylbenzene	95-63-6		F2
cumene	98-82-8		F3 R1
4,4'-methylenediphenyl diisocyanate	101-68-8		R1
4,4'-methylenediphenyl diisocyanate			

Legend

F2	Flammable - Second Degree
F3	Flammable - Third Degree
R1	Reactive - First Degree

- Hazardous Substance List (Chapter 323) (PA-RTK)

Name acc. to inventory	CAS No	Classification
TITANIUM OXIDE (TIO2)	13463-67-7	
BENZENE, 1,1'-METHYLENEBIS[4-ISOCYANATO-	101-68-8	E
BENZENE, 1,1'-METHYLENEBIS[4-ISOCYANATO-	101-68-8	E
PSEUDOCUMENE	95-63-6	E
BENZENE, (1-METHYLETHYL)-	98-82-8	E
BENZENE, 1,1'-METHYLENEBIS[4-ISOCYANATO-	101-68-8	E

Legend
E Environmental hazard

- Hazardous Substance List (RI-RTK)

Name of substance	CAS No	References
Titanium dioxide (excluding nanoparticle)	13463-67-7	T
2,2'-methylenediphenyl diisocyanate	101-68-8	T
2,2'-methylenediphenyl diisocyanate	101-68-8	T
2,2'-methylenediphenyl diisocyanate	101-68-8	T
o-(p-isocyanatobenzyl)phenyl isocyanate	101-68-8	T
o-(p-isocyanatobenzyl)phenyl isocyanate	101-68-8	T
o-(p-isocyanatobenzyl)phenyl isocyanate	101-68-8	T
1,2,4-trimethylbenzene	25551-13-7	T
cumene	98-82-8	T, F
4,4'-methylenediphenyl diisocyanate	101-68-8	T
4,4'-methylenediphenyl diisocyanate	101-68-8	T
4,4'-methylenediphenyl diisocyanate	101-68-8	T

Legend
F Flammability (NFPA®)
T Toxicity (ACGIH®)

California Environmental Protection Agency (Cal/EPA): Proposition 65 - Safe Drinking Water and Toxic Enforcement Act of 1987

Proposition 65 List of chemicals

Name acc. to inventory	CAS No	Remarks	Type of the toxicity
titanium dioxide	13463-67-7	airborne, unbound particles of respirable size	cancer
cumene	98-82-8		cancer

Industry or sector specific available guidance(s)

NPCA-HMIS® III

Hazardous Materials Identification System. American Coatings Association.

Category	Rating	Description
Chronic	*	chronic (long-term) health effects may result from repeated overexposure
Health	2	temporary or minor injury may occur
Flammability	1	material that must be preheated before ignition can occur
Physical hazard	0	material that is normally stable, even under fire conditions, and will not react with water, polymerize, decompose, condense, or self-react. Non-explosive
Personal protection	-	

NFPA® 704

National Fire Protection Association: Standard System for the Identification of the Hazards of Materials for Emergency Response (United States).

Category	Degree of hazard	Description
Flammability	1	material that must be preheated before ignition can occur
Health	2	material that, under emergency conditions, can cause temporary incapacitation or residual injury
Instability	0	material that is normally stable, even under fire conditions
Special hazard		

National regulations (Canada)

Domestic Substances List (DSL)/Non-domestic Substances List (NDSL)

all ingredients are listed All ingredients are listed or exempt from listing.

National inventories

Country	Inventory	Status
US	TSCA	all ingredients are listed (ACTIVE)
AU	AIIC	not all ingredients are listed
CA	DSL	not all ingredients are listed
CA	NDSL	not all ingredients are listed
CN	IECSC	not all ingredients are listed
EU	ECSI	not all ingredients are listed
EU	REACH Reg.	not all ingredients are listed
JP	CSCL-ENCS	not all ingredients are listed
JP	ISHA-ENCS	not all ingredients are listed

Country	Inventory	Status
KR	KECI	not all ingredients are listed
MX	INSQ	not all ingredients are listed
NZ	NZIoC	all ingredients are listed
PH	PICCS	not all ingredients are listed
TR	CICR	not all ingredients are listed
TW	TCSI	all ingredients are listed
VN	NCI	not all ingredients are listed

Legend

AIIC	Australian Inventory of Industrial Chemicals
CICR	Chemical Inventory and Control Regulation
CSCL-ENCS	List of Existing and New Chemical Substances (CSCL-ENCS)
DSL	Domestic Substances List (DSL)
ECSI	EC Substance Inventory (EINECS, ELINCS, NLP)
IECSC	Inventory of Existing Chemical Substances Produced or Imported in China
INSQ	National Inventory of Chemical Substances
ISHA-ENCS	Inventory of Existing and New Chemical Substances (ISHA-ENCS)
KECI	Korea Existing Chemicals Inventory
NCI	National Chemical Inventory
NDSL	Non-domestic Substances List (NDSL)
NZIoC	New Zealand Inventory of Chemicals
PICCS	Philippine Inventory of Chemicals and Chemical Substances (PICCS)
REACH Reg.	REACH registered substances
TCSI	Taiwan Chemical Substance Inventory
TSCA	Toxic Substance Control Act

15.2 Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

16 Other information

Key literature references and sources for data

Hazardous Products Regulations (HPR)
SOR/2022-272: Regulations Amending the Hazardous Products Regulations (GHS, Seventh Revised Edition)

UN Recommendations on the Transport of Dangerous Good. International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

Classification procedure

Physical and chemical properties: The classification is based on tested mixture.
Health hazards, Environmental hazards: The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.