

Material Safety Data Sheet

WEVO-CHEMIE GmbH

according to regulation (EC) 1907/2006

Version : 2.0
Revision date: 02.02.2015

Number of page : 11

#1. Identification of substance/preparation and of the company/undertaking

Product identifier:

Product name : **WEVOPUR 552 FL**

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

Use : Resin/Polyol components for the production of polyurethanes

Manufacturer / Supplier : WEVO -CHEMIE GmbH
Schönbergstrasse 14
D - 73760 Ostfildern – Kemnat / Germany

Phone number : +49 (0) 711 - 16761 - 0

Fax number: : +49 (0) 711 - 16761 - 44

Contact: : msds@wevo-chemie.de

In case of emergency : +49 761 – 19240 (Poison Information Centre Freiburg)

#2. Hazards Identification

Classification of the substance or mixture

Regulation (EC) No 1272/2008

Toxic to aquatic life with long lasting effects - Category 2 (H412)

Directive 67/548/EEC or 1999/45/EC

harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Label elements

none

Hazardous components which must be listed on the label

Contains Diphenyle tolylphosphate

Regulation (EC) No 1272/2008

No labeling necessary according to EC Directives 2006/121/EC or 1999/45/EC.

Directive 67/548/EEC or 1999/45/EC

No labeling necessary according to EC Directives 2006/121/EC or 1999/45/EC.

Hazard statements:

H412 Harmful to aquatic life with long lasting effects

Directive 67/548/EEC or 1999/45/EC

Labeling and classification in accordance with the EC Dangerous Preparations Directive (1999/45/EC) and subsequent amendments

Contains

Diphenyle tolylphosphate

R-phras(e)s

R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

#3. Composition/information on ingredients

Typ of product: mixture
Polyester-/Polyetherpolyole preparation with mineral filler

Material Safety Data Sheet

according to regulation (EC) 1907/2006

WEVO-CHEMIE GmbH

Version : 2.0
Revision date: 02.02.2015

Number of page : 11

Trade name : WEVOPUR 552 FL

#3. Composition/information on ingredients

Ingredients	EC-No	CAS-No	concentration [wt.-%]:
Diphenyle tolylphosphate	907-387-3	26444-49-5	< 2,5
triethyle phosphate Reach#01-2119492852-28	201-114-5	78-40-0	< 5

Ingredients	Classification (67/548/EEC)	Classification (1272/2008/CE)
triethyle phosphate Reach#01-2119492852-28	Xn R 22	Acut.Tox. 4 H 302 Eye Irrit. 2 H319
Diphenyle tolylphosphate	N, R50/53	Aquatic acut 1 H400 Aquatic Chronic 3, H412

4. First aid measures

General advice: Remove contaminated clothing.

If inhaled: Take the person into the fresh air and keep him warm, let him rest; if there is difficulty in breathing, medical advice is required.

In case of skin contact: In case of skin contact wash affected areas thoroughly with soap and plenty of water. Consult a doctor in the event of a skin reaction.

In case of eye contact: Hold the eyes open and rinse with preferably lukewarm water for a sufficiently long period of time (at least 10 minutes). Contact an ophthalmologist.

If swallowed: DO NOT induce the patient to vomit, medical advice is required.

5. Fire fighting measures

Suitable extinguishing media: CO₂, foam, dry powder, in cases of large fires, water spray should be used

Unsuitable extinguishing media: High volume water jet

Special hazards arising from the substance or mixture:

Burning releases carbon monoxide, carbon dioxide, oxides of nitrogen and traces of hydrogen cyanide. In the event of fire and/or explosion do not breathe fumes.

Advice for fire-fighters:

Firemen must wear self-contained breathing apparatus.

Do not allow contaminated extinguishing water to enter the soil, ground-water or surface waters.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Put on protective equipment (see section 8). Ensure adequate ventilation/exhaust extraction. Keep unauthorized persons away.

Environment related measures: Do not allow to escape into waterways, wastewater or soil.

Material Safety Data Sheet

according to regulation (EC) 1907/2006

WEVO-CHEMIE GmbH

Version : 2.0
Revision date: 02.02.2015

Number of page : 11

Trade name : WEVOPUR 552 FL

6. Accidental release measures

Methods and material for containment and cleaning up:

Take up with absorbent for chemicals or, if necessary with dry sand and store in closed containers.

Reference to other sections:

For further disposal measures see section 13.

#7. Handling and storage

Precautions for safe handling:

When handling observe the usual precautionary measures for chemicals. Avoid contact with the skin and the eyes.

In all workplaces or parts of the plant where high concentrations of aerosols and/or vapors may be generated (e.g. during pressure release, mold venting or when cleaning mixing heads with an air blast), appropriately located exhaust ventilation must be provided in such a way that the OEL is not exceeded. The air should be drawn away from the personnel handling the product. The efficiency of the exhaust equipment should be periodically checked.

Precautions should generally be taken against electrostatic charges according to the equipment used and the way the product is handled and packaged.

Keep away from foodstuffs, drinks and tobacco. Wash hands before breaks and at the end of workday. Keep working clothes separately. Change contaminated or soaked clothing.

Conditions for safe storage, including any incompatibilities

Keep container tightly closed and dry.

Storage temperature regarding personal safety: max. 50 °C.

Keep away from foodstuffs, drinks and tobacco.

Storage class (TRGS 510) : 10: Combustible liquids

#8. Exposure controls and personal protection

control parameters

No information on Exposure Limit Values necessary according to EC directive 2006/121/EG

For technical protective measures to limit exposure see also Chapter 7 "Handling and storage".

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

Diphenyle tolylphosphate				
Value type	Route of exposure	value	population	Health Effects
DNEL	Short term inhalation	28 mg/m ³	Worker	systemic
DNEL	long term inhalation	3,5 mg/m ³	Worker	systemic
DNEL	Long term dermal	0,5 mg/kg bw/day	Worker	systemic
DNEL	Short term dermal	4 mg/kg bw/day	Worker	systemic

Trade name : WEVOPUR 552 FL

#8. Exposure controls and personal protection

triethyle phosphate				
DNEL	Short term inhalation	93,6 mg/m ³	Worker	systemic
DNEL	long term inhalation	11,7 mg/m ³	Worker	systemic
DNEL	Long term dermal	26,6 mg/kg bw/day	Worker	systemic
DNEL	Short term dermal	3,33 mg/kg bw/day	Worker	systemic
DNEL	Short term oral	13,3 mg/kg bw/day	Worker	systemic
DNEL	Long term oral	1,66 mg/kg bw/day	Worker	systemic

Predicted effect concentrations

Product/ingredient name	Type	Compartment Detail	Value	Method Detail
Diphenyle tolylphosphate	PNEC	Soil	0,245 mg/kg wwt	-
	PNEC	Sewage Treatment Plant	1000 mg/l	-
	PNEC	Fresh water	0,0022 mg/l	-
	PNEC	Marine water sediment	1,23 mg/ kg dwt	-

Product/ingredient name	Type	Compartment Detail	Value	Method Detail
triethyle phosphate	PNEC	Soil	0,596 mg/kg dwt	Assessment Factors
	PNEC	Sewage Treatment Plant	298,5 mg/l	Assessment Factors
	PNEC	Fresh water	0,632 mg/l	Assessment Factors
	PNEC	Marine water sediment	4,83 mg/kg dwt	Equilibrium Partitioning

Respiratory protection: Unless the product is entirely enclosed, do not handle it until you have studied the respiratory precautions issued by the appropriate authority or accident prevention association. At substantial vapor concentrations respirators must be used. Put on full-mask respirator with filter type ABEK.

Hand Protection : Conditionally suitable materials for protective gloves; DIN EN 374-3: nitrile rubber - NBR (>= 0.35 mm)
Breakthrough time not tested; dispose of immediately after contamination.

Eye Protection : Wear eye/face protection.

Skin and body protection: Wear suitable protective clothing.

Industrial Hygiene : Keep away from foodstuffs, drinks and tobacco. Wash hands before breaks and at end of work. Keep working clothes separate. Take off immediately all contaminated clothing. Decontaminate, destroy and dispose of soiled protective clothing

9. Physical and chemical properties

Information on basic physical and chemical properties

Form: : liquid
Colour : black, nature, grey, white, brown. yellow
Odour : nearly odourless

Trade name : WEVOPUR 552 FL

9. Physical and chemical properties

Density: : 1,55 – 1,60 g/cm³ at 22°C
Viscosity: : 6000 – 8500 mPa.s at 22°C
Flash point: : > 190 °C
Ignition temperature: : Not available
Solubility in water: : partial miscible

#10. Stability and reactivity

Reactivity: This information is not available

Chemical stability: No decomposition below initial boiling point.

Possibility of hazardous reactions: No hazardous reactions when used as directed.

Conditions to avoid: This information is not available

Incompatible materials: This information is not available.

Hazardous decomposition products': No hazardous decomposition products when stored and handled correctly.

#11. Toxicological information

Toxicological studies on the product are not yet available.

Please find below the toxicological data available to us for the components.

Information on toxicological effects

Acute toxicity, oral

Product/ingredient name	LD 50	Species	Exposition
triethyle phosphate	> 1.100 mg/kg	rat	-
diphenyle tolylphosphate	> 5.000 mg/kg	rat	-
polyether polyol	> 5.000 mg/kg	rat	-

Acute toxicity, dermal

Product/ingredient name	LD 50	Species	Exposition
triethyle phosphate	> 20.000 mg/kg	rabbit	-
diphenyle tolylphosphate	> 5.000 mg/kg	rat	-
polyether polyol	> 2.000 mg/kg	-	-

Acute toxicity, inhalation

Material Safety Data Sheet

according to regulation (EC) 1907/2006

WEVO-CHEMIE GmbHVersion : 2.0
Revision date: 02.02.2015

Number of page : 11

Trade name : WEVOPUR 552 FL**#11. Toxicological information**triethyle phosphate
LC 50 rat: > 8811 mg/m³, 4h – OECD 403polyether polyol
Not a relevant route of exposure**Primary skin irritation**

Product/ingredient name	Species	Method	result	Classification
polyether polyol	rabbit		slight irritant	No skin irritation
triethyle phosphate	rabbit	OECD 404	non-irritant	No skin irritation
diphenyle tolylphosphate	rabbit	OECD 404	non-irritant	No skin irritation

Primary mucosae irritation

Product/ingredient name	Species	Method	result	Classification
polyether polyol	rabbit	-	slight irritant	No eye irritation
triethyle phosphate	rabbit	OECD 405	slight irritant	moderate eye irritation
diphenyle tolylphosphate	rabbit	OECD 405	non-irritant	No eye irritation

Sensitisationpolyether polyol
Skin sensitisation:
Species: guinea pig
Result: negative
Classification: Does not cause skin sensitizationtriethyle phosphate
Skin sensitisation:
Species: mouse
Result: negative
Classification: Does not cause skin sensitizationdiphenyle tolylphosphate
Skin sensitisation:
Species: mouse
Result: negative
Classification: Does not cause skin sensitization.**Subacute, subchronic and prolonged toxicity**

Product/ingredient name	application route	Result type	result	exposition
triethyle phosphate	oral	NOAEL	1000 mg/kg	28 days
diphenyle tolylphosphate	oral	NOAEL	62,5 mg/kg	28 days, 7 days a week

Carcinogenicity:

No data available.

Material Safety Data Sheet**WEVO-CHEMIE GmbH**

according to regulation (EC) 1907/2006

Version : 2.0
Revision date: 02.02.2015

Number of page : 11

Trade name : WEVOPUR 552 FL**#11. Toxicological information****Mutagenicity**

Product/ingredient name	Test	result
triethyle phosphate	OECD 476 in vitro Mammalian Cell Gene Mutation Test	negative

Product/ingredient name	Test	result
Diphenyle tolylphosphate	OECD 473 In vitro Mammalian Chromosomal Aberration Test	positive
	OECD 474 Mammalian Erythrocyte Micronucleus Test	negative

Reproductive toxicity/fertility

No data available

Reproductive toxicity/Teratogenicity:

Product/ingredient name	Dose	Species	Result/Result type
triethyle phosphate	625 mg/kg	rat	Negative - oral
diphenyle tolylphosphate	900 mg/kg day/NOEL	rat	Negative –oral
	100 mg/kg day/NOAEL	rat	Negative - oral

Genotoxicity in vitro

polyether polyol

Test type: Salmonella/microsome test (Ames test)

Metabolic activation: with/without

Result: No indication of mutagenic effects.

Genotoxicity in vivo:

No data available.

STOT evaluation – one-time exposure

polyether polyol

No data available..

STOT evaluation – repeated exposure:

polyether polyol

No data available..

Aspiration toxicity:

polyether polyol

No data available..

#12. Ecological information

Ecotoxicological studies of the product are not available.

Do not allow to escape into waterways, wastewater or soil.

Please find below the ecotoxicological data available to us for the components

Toxicity

Trade name : WEVOPUR 552 FL

#12. Ecological information

Acute Fish toxicity:

Product/ingredient name	method	Endpoint	Exposure	Species	result
polyether polyol	OECD 203 Fish, Acute Toxicity Test	Acute LC50	96 h	Oncorhynchus mykiss	> 100 mg/l
Triethylphosphat	OECD 203 Fish, Acute Toxicity Test	Acute LC50	96 h	Danio rerio	> 100 mg/l

Akute Daphnientoxizität

Product/ingredient name	method	Endpoint	Exposure	Species	result
polyether polyol	OECD 202 Daphnia sp. Acute Immobilisation Test	Acute EC50	48 h	Daphnia magna (Water flea)	> 100 mg/l
triethyle phosphate	OECD 203	Acute EC50	96 h	Daphnia magna (Water flea)	> 100 mg/l
diphenyle tolylphosphate	OECD 202 Daphnia sp. Acute Immobilisation Test	Acute EC50	24 h	Daphnia magna (Water flea)	3,7 mg/l

Acute toxicity for algae

Product/ingredient name	method	Endpoint	Exposure	Species	result
polyether polyol	OECD Test Guideline 201	ErC50	72 h	Pseudokirchneriella subcapitata	> 100 mg/l
triethyle phosphate	OECD Test Guideline 201	ErC50	72 h	Pseudokirchneriella subcapitata	900 mg/l
diphenyle tolylphosphate	EU C.3	NOEC	72 h	Desmodesmus Subspicatus	0,11 mg/l

Acute bacterial toxicity:

Product/ingredient name	method	Endpoint	Exposure	Species	result
polyether polyol	Directive 67/548/EEC, Annex V, C.11.	EC10	3 h	Respiration inhibition	> 10.000 mg/l
triethyle phosphate	OECD Test Guideline 209	EC50	30 min.	Pseudomonas putida	> 2985 mg/l
diphenyle tolylphosphate	OECD Test Guideline 209	EC50	3 h	Respiration inhibition	> 10.000 mg/l

Material Safety Data Sheet**WEVO-CHEMIE GmbH**

according to regulation (EC) 1907/2006

Version : 2.0
Revision date: 02.02.2015

Number of page : 11

Trade name : WEVOPUR 552 FL

#12. Ecological information**Ecotoxicology Assessment:**

polyether polyol

Acute aquatic toxicity: The substance is graded as non-critical to water organisms.

Chronic aquatic toxicity: There is no evidence of a chronic aquatic toxicity.

Toxicity Data on Soil: Not expected to adsorb on soil.

Impact on Sewage Treatment: Because of the low bacterial toxicity, there is no risk of an adverse effect on the performance of biological waste water treatment plants.

Persistence and degradability**Biodegradability**

Product/ingredient name	method	period	result
polyether polyol	OECD Test Guideline 301 F	28 days	0%
triethyle phosphate	OECD 302 B	28 days	97 %
diphenyle tolylphosphate			No data available

Bioaccumulation

Product/ingredient name	LogP _{ow}	BCF	Potential
polyether polyol			No data available
triethyle phosphate	1,11	< 1,3	low
diphenyle tolylphosphate	4,5	220	high

Mobility in soil

No data available

Results of PBT and vPvB assessment

No data available

Additional information on ecotoxicology:

No data available

13. Disposal considerations**Waste treatment methods****Product****Methods of disposal**

The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and nonrecyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Material Safety Data Sheet

according to regulation (EC) 1907/2006

WEVO-CHEMIE GmbH

Version : 2.0
Revision date: 02.02.2015

Number of page : 11

Trade name : WEVOPUR 552 FL

13. Disposal considerations

European waste catalogue (EWC)

Waste code : 080409

Packaging

Methods of disposal

The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Special precautions

This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

14. Transport information

ADR/RID : not dangerous goods

ADNR : not dangerous goods

IATA : not dangerous goods

IMDG : not dangerous goods

Special precautions for user

Additional information: Not dangerous cargo.
Keep dry.
Keep separated from foodstuffs.

#15. Regulatory information

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

Water contaminating class (Germany): 1 - slightly water endangering

Candidate List of Substances of Very High Concern for Authorisation

This product does not contain substances of very high concern (Regulation (EC) No 1907/2006 (REACH), Article 57).

#16. Other information

Full text of hazardous (H) warnings referred to under sections 2 and 3 of the CLP classification (1272/2008/CE).

H302 Harmful if swallowed.
H319 Causes serious eye irritation
H400 Very toxic to aquatic life
H412 Harmful to aquatic life with long lasting effects

Material Safety Data Sheet

according to regulation (EC) 1907/2006

WEVO-CHEMIE GmbH

Version : 2.0
Revision date: 02.02.2015

Number of page : 11

Trade name : WEVOPUR 552 FL

#16. Other information

Full text of R-phrases referred to under sections 2 and 3 of the EU classification (67/548/EEC,1999/45/EC).

R22	Harmful if swallowed.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety precautions for handling freshly molded polyurethane parts:

Depending on the production parameters, any uncovered surfaces of freshly molded polyurethane parts using this raw material may contain traces of substances (e. g. starting and reaction products, catalysts, release agents) with hazardous characteristics. Skin contact with traces of these substances must be avoided. Therefore, during demolding or other handling of fresh molded parts, protective gloves tested according to DIN-EN 374 (e.g. nitrile rubber ≥ 1.3 mm thick, breakthrough time ≥ 480 min, or according to recommendations from glove makers thinner gloves that need to be changed in compliance with breakthrough times more frequently) must be used. Depending on formulation and processing conditions, the requirements may be different from handling of the pure substances. Closed protective clothing is required for the protection of other areas of skin.

All chapters in the MSDS which have been changed since last edition are marked with an asterisk (#) in front of the Chapter number.

All information is based on results gained from experience and tests and is believed to be accurate but is given without acceptance of liability for loss or damage attributable to reliance thereon as conditions of use lie outside our control. Users should always carry out sufficient tests to establish the suitability of any products for their intended applications. No statements shall be incorporated in any contract unless expressly agreed in writing nor construed as recommending the use of any product in conflict of any patent.