SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006 (REACH) as amended

PLASTIC FILLER

Creation date	28. January 2019		
Revision date		Version	2.0

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

1.1. Product identifier PLASTIC FILLER

Substance / mixture: mixture

Number: 1 35119

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

mixture's intended use: Plastic filler.

Mixture uses advised against: not available

1.3. Details of the supplier of the safety data sheet

Supplier

Name or trade name	RETECH, s.r.o.
Address	Vackova 1541/4, Praha 5 - Stodůlky, 155 00 Czech Republic
Identification number (CRN)	25018205
Phone	+420327596428
E-mail	info@retech.cz
Web address	www.retech.com

Competent person responsible for the safety data sheet

Name	RETECH, s.r.o.
E-mail	info@retech.cz

1.4. Emergency telephone number

RETECH, Suchdol 212, 285 02 Suchdol u Kutné Hory, Czech Republic; Telephone number: +420 327 596 128 (7.30-16.00 hour)

Poisoning information centre, Na Bojišti 1, Praha, Czech Republic, Tel.: non-stop +420 224 919 293 or +420 224 915 402, Information on health risks only - acute poisoning of humans and animals.

SECTION 2: Hazards identification

2.1. Substance or mixture classification

Classification of the mixture in accordance with Regulation (EC) No 1272/2008

The mixture is classified as dangerous.

Flam. Liq. 3, H226
Skin Irrit. 2, H315
Eye Irrit. 2, H319
STOT RE 1, H372
Aquatic Chronic 3, H412

Full text of all classifications and hazard statements is given in the section 16.

Most serious adverse physico-chemical effects

Flammable liquid and vapour.

Most serious adverse effects on human health and the environment

Causes skin irritation. Causes serious eye irritation. Causes damage to organs through prolonged or repeated exposure. Harmful to aquatic life with long lasting effects.

2.2. Label elements

Hazard pictogram

Signal word

Danger

Hazardous substances

styrene

Hazard statements

H226	Flammable liquid and vapour.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H372	Causes damage to organs through prolonged or repeated exposure.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P103	Read label before use.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260	Do not breathe vapours.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352	IF ON SKIN: Wash with plenty of water and soap.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P314	Get medical advice/attention if you feel unwell.
P403+P235	Store in a well-ventilated place. Keep cool.
P501	Dispose of contents/container to in accordance with national regulations.

2.3. Other hazards

Mixture does not contain any substance meet the criteria for PBT or vPvB in accordance with Annex XIII of Regulation (EC) No. 1907/2006 (REACH) as amended.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Mixture of substances and additives specified below.

Mixture contains these hazardous substances and substances with the highest permissible concentration in the working environment

Identification numbers	Substance name	Content in % weight	Classification according to Regulation (EC) No 1272/2008	Note.
Index: 601-026-00-0 CAS: 100-42-5 EC: 202-851-5 Registration number: 01-2119457861-32	styrene	<12,5	Flam. Liq. 3, H226 Asp. Tox. 1, H304 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Acute Tox. 4, H332 STOT SE 3, H335 STOT RE 1, H372	
Index: 030-011-00-6 CAS: 7779-90-0 EC: 231-944-3 Registration number: 01-2119485044-40-0000	trizinc bis(orthophosphate)	1-5	Aquatic Acute 1, H400 Aquatic Chronic 1, H410	

Full text of all classifications and hazard statements is given in the section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Take care of your own safety. If any health problems are manifested or if in doubt, inform a doctor and show him information from this safety data sheet. In case of unconsciousness place patient stably in side position for transportation.

Inhalation

Terminate the exposure immediately; move the affected person to fresh air. Provide medical treatment if irritation, dyspnoea or other symptoms persist.

Skin contact

Wash the affected area with plenty of water, lukewarm if possible. Soap, soap solution or shampoo should be used if there is no skin injury. Provide medical treatment if skin irritation persists.

Eye contact

Rinse eyes immediately with a flow of running water, open the eyelids (also using force if needed); remove contact lenses immediately if worn by the affected person. Provide medical treatment, specialized if possible.

Ingestion

Provide medical treatment if the person has any health problems.

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

Inhalation

Breathing problems, dizziness, headaches, nausea.

Skin contact

Causes skin irritation.

Eye contact

Causes serious eye irritation.

Ingestion

Irritation, nausea.

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

If swallowed, gastric irrigation with added, activated carbon.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Alcohol-resistant foam, carbon dioxide, powder, water mist.

Unsuitable extinguishing media

Water - full jet.

5.2. Special hazards arising from the substance or mixture

In the event of fire, carbon monoxide, carbon dioxide and other toxic gases may arise.

5.3. Advice for firefighters

Do not breathe smoke. Use a self-contained breathing apparatus and full-body protective clothing. Closed containers with the product near the fire should be cooled with water. Do not allow run-off of contaminated fire extinguishing material to enter drains or surface and ground water. Dispose of contaminated extinguishing water and remains after the fire in accordance with the official regulations.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Provide sufficient ventilation. Flammable liquid and vapour. Remove all ignition sources. Use personal protective equipment for work. Prevent contact with skin and eyes.

6.2. Environmental precautions

Do not allow product to reach sewage system or any water course. Inform respective authorities in case of seepage into water course or sewage system.

6.3. Methods and material for containment and cleaning up

Provide sufficient ventilation. Spilled product should be covered with suitable (non-flammable) absorbing material (sand, diatomaceous earth, earth and other suitable absorption materials); to be contained in well closed containers and removed as per the Section 13.

6.4. Reference to other sections

See the Section 7, 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Store in tightly closed containers in a cool, dry place intended for this purpose. Keep away from sources of heating, ignition and direct sunlight. Use only outdoors or in a well-ventilated area. Ensure good ventilation/exhaustion at the workplace. Solvent vapours are heavier than air and accumulate especially near the floor where they may form an explosive mixture with the air. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharge.

7.2. Conditions for safe storage, including any incompatibilities

Keep only in original container. Store in tightly closed containers in cold, dry and well ventilated areas designated for this purpose. Keep container tightly closed. Do not store together with food, drink and animal feed. Protect against strong oxidizing agents.

7.3. Specific end use(s)

not available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

The mixture contains substances for which occupational exposure limits are set.

United Kingdom of Great Britain and Northern Ireland

Substance name (component)	Type	Time of exposure	Value	Note	Source
styrene (CAS: 100-42-5)	WEL	8 hours	430 mg/m³		GBR
	WEL	15 minutes	1080 mg/m³		
	WEL	8 hours	100 ppm		
	WEL	15 minutes	250 ppm		

DNEL

styrene

Workers / consumers	Route of exposure	Value	Effect	Determining method
Workers	Inhalation	85 mg/m³	Systemic chronic effects	
Workers	Inhalation	289 mg/m³	Systemic acute effects	
Workers	Inhalation	306 mg/m³	Local acute effects	
Workers	Dermal	406 mg/kg bw/day	Systemic chronic effects	
Consumers	Inhalation	10.2 mg/m³	Systemic chronic effects	
Consumers	Inhalation	174.25 mg/m³	Systemic acute effects	
Consumers	Inhalation	182.75 mg/m³	Local acute effects	
Consumers	Dermal	343 mg/kg bw/day	Systemic chronic effects	
Consumers	Oral	2.1 mg/kg bw/day	Systemic chronic effects	

PNEC

styrene

Route of exposure	Value	Determining method
Freshwater environment	0.028 mg/l	

styrene

Route of exposure	Value	Determining method
Water (occasional leak)	0.04 mg/l	
Seawater	0.014 mg/l	
Microorganisms in wastewater treatment plants	5 mg/l	
Freshwater sediment	0.614 mg/kg of dry substance of sediment	
Sea sediments	0.307 mg/kg of dry substance of sediment	
Sea sediments	0.2 mg/kg of dry substance of soil	

8.2. Exposure controls

Follow the usual measures intended for health protection at work and especially for good ventilation. Do not eat, drink and smoke during work. Remove contaminated clothes. Wash your hands thoroughly with water and soap after work and before breaks for a meal and rest. Use barrier creams for skin protection. Do not inhale gases and vapours. Do not inhale aerosols.

Eye/face protection

Tightly sealed goggles.

Skin protection

Hand protection: Protective gloves resistant to the product. When choosing appropriate thickness, material and permeability of the gloves, observe recommendations of their particular manufacturer. Observe other recommendations of the manufacturer. Material of gloves: Nitrile rubber, NBR. Fluororubber. Not suitable are gloves made of the following materials: leather gloves, strong material gloves. Chloroprene rubber. Penetration time of glove material: ≤ 480 min. The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
Other protection: protective workwear. Contaminated skin should be washed thoroughly.

Respiratory protection

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self□-containedespiratory protective device. Filter A/P2.

Thermal hazard

Not available.

Environmental exposure controls

Observe usual measures for protection of the environment, see Section 6.2.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	
Physical state	liquid at 20°C
color	grey
Odour	characteristic
Odour threshold	data not available
pH	data not available
Melting point/freezing point	data not available
Initial boiling point and boiling range	145 °C
Flash point	31 °C
Evaporation rate	data not available
Flammability (solid, gas)	Flammable liquid and vapour.
Upper/lower flammability or explosive limits	
flammability limits	data not available
explosive limits	
bottom	1.2 %
upper	8.9 %
Vapour pressure	6 hPa at 20 °C

Vapour density	data not available
Relative density	data not available
Solubility(ies)	
solubility in water	almost insoluble
solubility in fats	data not available
Partition coefficient: n-octanol/water	data not available
Auto-ignition temperature	data not available
Decomposition temperature	data not available
Viscosity	viscous
Explosive properties	The product does not have explosive properties but can be explosive when blended with air.
Oxidising properties	data not available

9.2. Other information

Density	1.98 g/cm^3 at 20 °C
ignition temperature	480 °C
content of organic solvents (VOC)	86.8 %
solid content (dry matter)	11.4 % volume

Product is not selfigniting.

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is stable and no degradation occurs under normal use.

10.2. Chemical stability

not available

10.3. Possibility of hazardous reactions

Exothermic polymerization. Reacts with strong oxidizing agents. Reacts with acids. Reacts with alkalis. Reacts with peroxides and other radicals.

10.4. Conditions to avoid

not available

10.5. Incompatible materials

Protect against strong acids, bases and oxidizing agents.

10.6. Hazardous decomposition products

Not developed under normal uses. Dangerous outcomes such as carbon monoxide and carbon dioxide are formed at high temperature and in fire. Phosphorus compounds.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

No toxicological data is available for the mixture.

Acute toxicity

Based on available data the classification criteria are not met.

styrene

Route of exposure	Parameter	Method	Value	Time of exposure	Species	Sex
Oral	LD_{50}		5000 mg/kg		Rat	
Dermal	LD_{50}	OECD 402	>2000 mg/kg		Rat	
Inhalation	LC_{50}		11.8 mg/l	4 hour	Rat	
Inhalation	LC_{50}		9.5 mg/m³	4 hour	Mouse	

trizinc bis(orthophosphate)

Route of exposure	Parameter	Method	Value	Time of exposure	Species	Sex
Oral	LD_{50}		>5000 mg/kg		Rat	

Skin corrosion/irritation
Causes skin irritation.

Serious eye damage/irritation
Causes serious eye irritation.

Respiratory or skin sensitisation
Based on available data the classification criteria are not met.

Germ cell mutagenicity
Based on available data the classification criteria are not met.

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

Reproductive toxicity
Based on available data the classification criteria are not met.

Toxicity for specific target organ - single exposure
Based on available data the classification criteria are not met.

Toxicity for specific target organ - repeated exposure
Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard
Based on available data the classification criteria are not met.

SECTION 12: Ecological information

12.1. Toxicity

Acute toxicity
Harmful to aquatic life with long lasting effects.

styrene

Parameter	Method	Value	Time of exposure	Species	Environment	Source
EC 10	EPA OTS 797.1050	0.28 mg/l		Algae (Pseudokirchneriella subcapitata)		
EC 10	EPA OTS 797.1050	72 mg/l	16 hour	Microorganisms (Psedomonas putida)		
EC 20	OECD 209	140 mg/l	0,5 hour	BES		
EC_{50}		500 mg/l		BES		ISO 8192 -1986 E
EC_{50}		5.5 mg/l		Bacteria (Salmonella typhimurium)		
EC_{50}		>72 mg/l	16 hour	Bacteria (Pseudomonas putida)		
EC_{50}		0.56 mg/l	48 hour	Algae		
EC_{50}		4.7 mg/l	48 hour	Invertebrates (Daphnia magna)		

styrene

Parameter	Method	Value	Time of exposure	Species	Environment	Source
EC_{50}		0.46-4.3 mg/l	72 hour	Algae (Pseudokirchneriella subcapitata)		
EC_{50}		>1-<10 mg/l	72 hour	Algae		
EC_{50}		>200 mg/l	8 day	Algae (Scenedesmus quadricauda)		
EC_{50}		0.15-3.2 mg/l	96 hour	Algae (Pseudokirchneriella subcapitata)		
IC_{50}		>200 mg/l	8 day	Algae (Scenedesmus quadricauda)		
IC_{50}		4.9 mg/l	72 hour	Algae		
IC_{50}		1.4 mg/l	72 hour	Algae (Selenastrum capricornutum)		
LC_{50}		4.9 mg/l	72 hour	Algae		
LC_{50}		>1-<10 mg/l	96 hour	Fishes		
LC_{50}		25 mg/l	96 hour	Lem		
LC_{50}		32 mg/l	96 hour	Fishes (Pimephales promelas)		
LC_{50}		4.02 mg/l	96 hour	Fishes (Pimephales promelas)		
LC_{50}		58.75-95.32 mg/l	96 hour	Fishes (Poecilia reticulata)		

trizinc bis(orthophosphate)

Parameter	Method	Value	Time of exposure	Species	Environment	Source
EC_{50}		0.04-0.86 mg/l	48 hour	Daphnia (Daphnia magna)		
EC_{50}		0.136-0.15 mg/l	72 hour	Algae (Selenastrum capricornutum)		
ErC_{50}		11 mg/l	72 hour	Algae (Desmodesmus subspicatus)		
LC_{50}		0.14-2.6 mg/l	96 hour	Fishes (Oncorhynchus mykiss)		

12.2. Persistence and degradability

Data not available.

12.3. Bioaccumulative potential

Not available.

12.4. Mobility in soil

Not available.

12.5. Results of PBT and vPvB assessment

Product does not contain any substance meeting the criteria for PBT or vPvB in accordance with the Annex XIII of Regulation (EC) No 1907/2006 (REACH) as amended.

12.6. Other adverse effects

Additional ecological information:

General notes: Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water. Do not allow product to reach ground water, water course or sewage system. Danger to drinking water if even small quantities leak into the ground.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Proceed in accordance with valid regulations on waste disposal. Any unused product and contaminated packaging should be put in labelled containers for waste collection and submitted for disposal to a person authorised for waste removal (a specialized company) that is entitled for such activity. Do not empty unused product in drainage systems. The product must not be disposed of with municipal waste. Empty containers may be used at waste incinerators to produce energy or deposited in a dump with appropriate classification. Perfectly cleaned containers can be submitted for recycling. Recommended cleansing agents: Alcohol.

Waste management legislation

Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste, as amended. Decision 2000/532/EC establishing a list of wastes, as amended.

Waste type code

20 01 27 paint, inks, adhesives and resins containing dangerous substances *

Packaging waste type code

15 01 04 metallic packaging

15 01 10 packaging containing residues of or contaminated by dangerous substances

(*) - Hazardous waste according to Directive 2008/98/EC on hazardous waste

SECTION 14: Transport information

14.1. UN number

UN 3269

14.2. UN proper shipping name

POLYESTER RESIN KIT

14.3. Transport hazard class(es)

3 Flammable liquids

14.4. Packing group

III - substances presenting low danger

14.5. Environmental hazards

not available

14.6. Special precautions for user

Reference in the Sections 4 to 8.

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

not available

Additional information

ADR: Without hardener component: no dangerous goods < 450 l. IMDG: Without hardener component: no dangerous goods < 30 l. IATA: Without hardener component: 3/III UN 1866 Resin Solution.

Hazard identification No.	(Kemler Code)
UN number	**3269**
Safety signs	3

Road transport - ADR

Limited quantities	5 L
Excepted quantities	E0
Transport category	3
Tunnel restriction code	(E)

Marine transport - IMDG

EmS (emergency plan)	F-E, S-D
Marine Pollutant	No

SECTION 15: Regulatory information

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

Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18th December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing the European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No. 793/93 and Commission Regulation (EC) No. 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, as amended. Regulation (EC) No. 1272/2008 of the European Parliament and of the Council of 16th December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No. 1907/2006, as amended.

15.2. Chemical safety assessment

not available

SECTION 16: Other information

A list of standard risk phrases used in the safety data sheet

H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H372	Causes damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Guidelines for safe handling used in the safety data sheet

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P103	Read label before use.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260	Do not breathe vapours.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P314	Get medical advice/attention if you feel unwell.
P302+P352	IF ON SKIN: Wash with plenty of water and soap.
P403+P235	Store in a well-ventilated place. Keep cool.
P501	Dispose of contents/container to in accordance with national regulations.

Other important information about human health protection

The product must not be - unless specifically approved by the manufacturer/importer - used for purposes other than as per the Section 1. The user is responsible for adherence to all related health protection regulations.

Key to abbreviations and acronyms used in the safety data sheet

ADR	European agreement concerning the international carriage of dangerous goods by road
BCF	Bioconcentration Factor
CAS	Chemical Abstracts Service
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substance and mixtures
DNEL	Derived no-effect level
EC	Identification code for each substance listed in EINECS
EC_{50}	Concentration of a substance when it is affected 50% of the population
EINECS	European Inventory of Existing Commercial Chemical Substances
EmS	Emergency plan
EU	European Union
IATA	International Air Transport Association
IBC	International Code For The Construction And Equipment of Ships Carrying Dangerous Chemicals
IC_{50}	Concentration causing 50% blockade
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
INCI	International Nomenclature of Cosmetic Ingredients
ISO	International Organization for Standardization
IUPAC	International Union of Pure and Applied Chemistry
LC_{50}	Lethal concentration of a substance in which it can be expected death of 50% of the population
LD_{50}	Lethal dose of a substance in which it can be expected death of 50% of the population
LOAEC	Lowest observed adverse effect concentration
LOAEL	Lowest observed adverse effect level
log Kow	Octanol-water partition coefficient
MARPOL	International Convention for the Prevention of Pollution From Ships
NOAEC	No observed adverse effect concentration
NOAEL	No observed adverse effect level
NOEC	No observed effect concentration
NOEL	No observed effect level
OEL	Occupational Exposure Limits
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted no-effect concentration
ppm	Parts per million
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Agreement on the transport of dangerous goods by rail
UN	Four-figure identification number of the substance or article taken from the UN Model Regulations
UVCB	Substances of unknown or variable composition, complex reaction products or biological materials
VOC	Volatile organic compounds
vPvB	Very Persistent and very Bioaccumulative

Acute Tox.	Acute toxicity
Aquatic Acute	Hazardous to the aquatic environment
Aquatic Chronic	Hazardous to the aquatic environment
Asp. Tox.	Aspiration hazard
Eye Irrit.	Eye irritation
Flam. Liq.	Flammable liquid
Skin Irrit.	Skin irritation

STOT RE	Specific target organ toxicity - repeated exposure
STOT SE	Specific target organ toxicity - single exposure

Training guidelines

Inform the personnel about the recommended ways of use, mandatory protective equipment, first aid and prohibited ways of handling the product.

Recommended restrictions of use

not available

Information about data sources used to compile the Safety Data Sheet

REGULATION (EC) No. 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL (REACH) as amended. REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. Data from the manufacturer of the substance / mixture, if available - information from registration dossiers.

The changes (which information has been added, deleted or modified)

2, 3, 8, 11, 12, 15, 16

Statement

The safety data sheet provides information aimed at ensuring safety and health protection at work and environmental protection. The provided information corresponds to the current status of knowledge and experience and complies with valid legal regulations. The information should not be understood as guaranteeing the suitability and usability of the product for a particular application.