

PT 310 PLUS Sensor activator

Revision date: 23.08.2019

Page 1 of 14

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

PT 310 PLUS Sensor activator

Further trade names

PT 310 PLUS Sensor-Aktivator
 PT 310 PLUS Activeur capteur
 PT 310 PLUS Activador para sensores

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

Primer / adhesion promoter

Uses advised against

No information available.

1.3. Details of the supplier of the safety data sheet

Company name:	PMA/TOOLS AG	
Street:	Siemensring 42	
Place:	D-47877 Willich - Germany	
Telephone:	+49 2154 922230	Telefax: +49 2154 922255
e-mail:	info@pma-tools.de	
Contact person:	Michael Münter	
e-mail:	msds@pma-tools.de	(Please DO NOT use for requesting Safety Data Sheets.)
Internet:	www.pma-tools.de	
Responsible Department:	Laboratory	

1.4. Emergency telephone number:

Telephone number of the company in case of emergencies (24 h):
 +49 (0) 700 / 24 112 112 (PMR)

Emergency information services / official advisory body:
 <UK> National Poisons Information Service (24 h): 0870 600 6266 (UK only)

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****Regulation (EC) No. 1272/2008**

Hazard categories:
 Flammable liquid: Flam. Liq. 2
 Serious eye damage/eye irritation: Eye Irrit. 2
 Hazard Statements:
 Highly flammable liquid and vapour.
 Causes serious eye irritation.

2.2. Label elements**Regulation (EC) No. 1272/2008****Signal word:** Danger**Pictograms:****Hazard statements**

H225 Highly flammable liquid and vapour.
 H319 Causes serious eye irritation.

PT 310 PLUS Sensor activator

Revision date: 23.08.2019

Page 2 of 14

Precautionary statements

- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P370+P378 In case of fire: Use Dry extinguishing powder, Carbon dioxide (CO₂) to extinguish.

2.3. Other hazards

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	
	GHS Classification			
64-17-5	ethanol; ethyl alcohol			85 - 100 %
	200-578-6	603-002-00-5		
	Flam. Liq. 2; H225			
2530-83-8	[3-(2,3-epoxypropoxy)propyl]trimethoxysilane			< 2,5 %
	219-784-2			
	Eye Dam. 1; H318			
78-93-3	butanone			0 - 2 %
	201-159-0	606-002-00-3	01-2119457290-43	
	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336 EUH066			

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

SECTION 4: First aid measures**4.1. Description of first aid measures****General information**

First aider: Pay attention to self-protection! Remove affected person from the danger area and lay down. Never give anything by mouth to an unconscious person or a person with cramps.

After inhalation

Remove affected person from the danger area and lay down. Provide fresh air. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). If unconscious place in recovery position and seek medical advice.

After contact with skin

Wash with plenty of water. Take off contaminated clothing and wash it before reuse. In case of skin irritation, consult a physician.

After contact with eyes

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately. Remove contact lenses, if present and easy to do. Continue rinsing.

After ingestion

Do NOT induce vomiting. Observe risk of aspiration if vomiting occurs. Rinse mouth immediately and drink plenty of water. Call a physician immediately.

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

Following inhalation: Irritation to respiratory tract, Cough, Headache, Dizziness, central nervous system, Unconsciousness.

PT 310 PLUS Sensor activator

Revision date: 23.08.2019

Page 3 of 14

Following skin contact: Prolonged or repeated skin contact may cause removal of natural fat from the skin resulting in dermatitis (skin inflammation).

After ingestion: Vomiting

After eye contact: Causes serious eye irritation. Conjunctival redness. Causes tears. Corneal opacity.

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**

Water spray jet, Carbon dioxide (CO₂), Foam, Extinguishing powder.

Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

In case of fire may be liberated: Carbon monoxide, Carbon dioxide (CO₂), Gases/vapours, toxic.

Highly flammable. Vapours can form explosive mixtures with air.

Heating causes rise in pressure with risk of bursting.

5.3. Advice for firefighters

Do not inhale explosion and combustion gases.

In case of fire: Wear self-contained breathing apparatus.

Additional information

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Remove all sources of ignition. Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment. Special danger of slipping by leaking/spilling product.

6.2. Environmental precautions

Do not allow uncontrolled discharge of product into the environment. Danger of explosion.

Stop leak if safe to do so. Collect spillage. Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

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). Treat the recovered material as prescribed in the section on waste disposal.

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. Avoid contact with eyes and skin. Do not eat, drink or smoke when using this product. See information supplied by the manufacturer. If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges.

according to Regulation (EC) No 1907/2006

PT 310 PLUS Sensor activator

Revision date: 23.08.2019

Page 4 of 14

Vapours can form explosive mixtures with air.

Further information on handling

Keep away from food, drink and animal feedingstuffs. Wash hands before breaks and after work.
Contaminated work clothing should not be allowed out of the workplace.

7.2. Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

Keep container tightly closed. Keep in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Hints on joint storage

Do not store together with: Oxidising agent. Pyrophoric or self-heating substances.

7.3. Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****Exposure limits (EH40)**

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
78-93-3	Butan-2-one (methyl ethyl ketone)	200	600		TWA (8 h)	WEL
		300	899		STEL (15 min)	WEL
64-17-5	Ethanol	1000	1920		TWA (8 h)	WEL

Biological Monitoring Guidance Values (EH40)

CAS No	Substance	Parameter	Value	Test material	Sampling time
78-93-3	Butan-2-one	butan-2-one	70 µmol/L	urine	Post shift

PT 310 PLUS Sensor activator

Revision date: 23.08.2019

Page 5 of 14

DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
64-17-5	ethanol; ethyl alcohol			
Consumer DNEL, acute		inhalation	local	950 mg/m ³
Consumer DNEL, acute		dermal	local	950 ppm
Consumer DNEL, long-term		inhalation	systemic	114 mg/m ³
Consumer DNEL, long-term		oral	systemic	87 mg/kg bw/day
Consumer DNEL, long-term		dermal	systemic	206 mg/kg bw/day
Worker DNEL, acute		inhalation	local	1900 mg/m ³
Worker DNEL, long-term		inhalation	systemic	950 mg/m ³
Worker DNEL, long-term		dermal	systemic	343 mg/kg bw/day
2530-83-8	[3-(2,3-epoxypropoxy)propyl]trimethoxysilane			
Worker DNEL, long-term		inhalation	systemic	147 mg/m ³
Worker DNEL, acute		dermal	systemic	21 mg/kg bw/day
Worker DNEL, acute		inhalation	systemic	147 mg/m ³
Worker DNEL, long-term		dermal	systemic	21 mg/kg bw/day
78-93-3	butanone			
Consumer DNEL, long-term		dermal	systemic	412 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	106 mg/m ³
Consumer DNEL, long-term		oral	systemic	31 mg/kg bw/day
Worker DNEL, long-term		dermal	systemic	1161 mg/kg bw/day
Worker DNEL, long-term		inhalation	systemic	600 mg/m ³

according to Regulation (EC) No 1907/2006

PT 310 PLUS Sensor activator

Revision date: 23.08.2019

Page 6 of 14

PNEC values

CAS No	Substance	Value
Environmental compartment		
64-17-5	ethanol; ethyl alcohol	
Freshwater		0,96 mg/l
Freshwater (intermittent releases)		2,75 mg/l
Marine water		0,79 mg/l
Freshwater sediment		3,6 mg/kg
Marine sediment		2,9 mg/kg
Secondary poisoning		0,72 mg/kg
Micro-organisms in sewage treatment plants (STP)		580 mg/l
Soil		0,63 mg/kg
2530-83-8	[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	
Freshwater		1 mg/l
Freshwater (intermittent releases)		1 mg/l
Marine water		0,1 mg/l
Freshwater sediment		0,79 mg/kg
Soil		0,13 mg/kg
78-93-3	butanone	
Freshwater		55,8 mg/l
Marine water		55,8 mg/l
Freshwater sediment		284,74 mg/kg
Marine sediment		284,7 mg/kg
Soil		22,5 mg/kg

8.2. Exposure controls**Appropriate engineering controls**

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

Protective and hygiene measures

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme.

Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink.

Eye/face protection

Suitable eye protection: goggles.

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. 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.

Wear suitable gloves. (EN 374).

PT 310 PLUS Sensor activator

Revision date: 23.08.2019

Page 7 of 14

Recommended material: NBR (Nitrile rubber), Butyl caoutchouc (butyl rubber)
 Thickness of the glove material: $\geq 0,4$ mm
 Breakthrough time (maximum wearing time): > 480 Min.
 Replace when worn.

Skin protection

Wear anti-static footwear and clothing (EN 1149).

Respiratory protection

In case of inadequate ventilation wear respiratory protection. (occupational exposure limit value / exceeding exposure limit values). Combination filtering device (EN 14387) Filter type A, (brown). Observe the wear time limits according GefStoffV in combination with the rules for using respiratory protection apparatus (BGR 190).

Environmental exposure controls

No information available.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Liquid	
Colour:	clear	
Odour:	Alcohol	
pH-Value:		not applicable

Changes in the physical state

Melting point:		not determined
Initial boiling point and boiling range:		78 °C
Flash point:		9 °C
Sustaining combustion:		Sustaining combustion

Flammability

Solid:		not applicable
Gas:		not applicable

Explosive properties

Vapours may form explosive mixtures with air.

Lower explosion limits:		3,3 vol. %
Upper explosion limits:		19 vol. %

Auto-ignition temperature

Solid:		not applicable
Gas:		363 °C

Decomposition temperature:		not determined
----------------------------	--	----------------

Oxidizing properties

Not oxidising.

Vapour pressure: (at 20 °C)		42,663 hPa
--------------------------------	--	------------

Density:		0,8 g/cm ³
----------	--	-----------------------

Water solubility:		miscible
-------------------	--	----------

Solubility in other solvents

not determined

Partition coefficient:		not determined
------------------------	--	----------------

Viscosity / kinematic: (at 40 °C)		< 7 mm ² /s
--------------------------------------	--	--------------------------

Vapour density:		0,8
-----------------	--	-----

PT 310 PLUS Sensor activator

Revision date: 23.08.2019

Page 8 of 14

Evaporation rate: not determined
Solvent content: 98%

9.2. Other information

Solid content: not determined
Conductivity: not determined
Surface tension: not determined
Volatile organic compounds (VOC) content in percent by weight: 98 %

SECTION 10: Stability and reactivity**10.1. Reactivity**

Highly flammable.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Vapours can form explosive mixtures with air. Take action to prevent static discharges.

10.5. Incompatible materials

Strong acid
Oxidising agent, strong

10.6. Hazardous decomposition products

No known hazardous decomposition products.

SECTION 11: Toxicological information**11.1. Information on toxicological effects****Acute toxicity**

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

PT 310 PLUS Sensor activator

Revision date: 23.08.2019

Page 9 of 14

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
64-17-5	ethanol; ethyl alcohol				
	oral	LD50 mg/kg 6200	Rat	IUCLID	
	dermal	LD50 mg/kg >2000	Rabbit		OECD 402
	inhalation (4 h) vapour	LC50 95,6 mg/l	Rat	RTECS	
2530-83-8	[3-(2,3-epoxypropoxy)propyl]trimethoxysilane				
	oral	LD50 mg/kg 8025	Rat		OECD 401
	dermal	LD50 mg/kg >2000	Rabbit		OECD 402
	inhalation aerosol	LC50 5,3 mg/l	Rat		OECD 403
78-93-3	butanone				
	oral	LD50 mg/kg 3300	Rat		
	dermal	LD50 mg/kg 5000	Rabbit		
	inhalation (4 h) vapour	LC50 34,5 mg/l	Rat		

Irritation and corrosivity

Causes serious eye irritation.

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Sensitising effects

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

Carcinogenic/mutagenic/toxic effects for reproduction

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

STOT-single exposure

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

STOT-repeated exposure

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

Aspiration hazard

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

Additional information on tests

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

SECTION 12: Ecological information**12.1. Toxicity**

The product is not: Ecotoxic.

according to Regulation (EC) No 1907/2006

PT 310 PLUS Sensor activator

Revision date: 23.08.2019

Page 10 of 14

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
64-17-5	ethanol; ethyl alcohol					
	Acute fish toxicity	LC50 mg/l	13000	96 h	Oncorhynchus mykiss (Rainbow trout)	OECD 203
	Acute algae toxicity	ErC50	275 mg/l	72 h	Chlorella vulgaris	OECD 201
	Acute crustacea toxicity	EC50	9268 - 14221 mg/l	48 h	Daphnia magna	IUCLID
2530-83-8	[3-(2,3-epoxypropoxy)propyl]trimethoxysilane					
	Acute fish toxicity	LC50	55 mg/l	96 h	Brachydanio rerio (zebra-fish)	
	Acute algae toxicity	ErC50	350 mg/l	96 h	Chlorella vulgaris	
	Acute crustacea toxicity	EC50	324 mg/l	48 h	Daphnia magna (Big water flea)	
78-93-3	butanone					
	Acute fish toxicity	LC50	1690	96 h	Lepomis macrochirus (Bluegill)	
	Acute algae toxicity	ErC50	1972	72 h	Pseudokirchneriella subcapitata	OECD 201
	Acute crustacea toxicity	EC50	308 mg/l	48 h	Daphnia magna (Big water flea)	OECD 202

12.2. Persistence and degradability

The product has not been tested.

CAS No	Chemical name				
	Method	Value	d	Source	
	Evaluation				
64-17-5	ethanol; ethyl alcohol				
	OECD 301B	97%			
2530-83-8	[3-(2,3-epoxypropoxy)propyl]trimethoxysilane				
		37%	28	DOC	
	Not readily biodegradable (according to OECD criteria)				
78-93-3	butanone				
	OECD 301D	98%	28		
	Readily biodegradable (according to OECD criteria).				

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
64-17-5	ethanol; ethyl alcohol	-0,31
2530-83-8	[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	0,5
78-93-3	butanone	0,29

BCF

CAS No	Chemical name	BCF	Species	Source
64-17-5	ethanol; ethyl alcohol	0,66 - 3,2		

12.4. Mobility in soil

The product has not been tested.

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.

PT 310 PLUS Sensor activator

Revision date: 23.08.2019

Page 11 of 14

12.6. Other adverse effects

No information available.

Further information

Avoid release to the environment.

SECTION 13: Disposal considerations**13.1. Waste treatment methods****Advice on disposal**

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation. The waste key according to the European Waste Catalogue (EWC number) refers to the real wastes origin and therefore is not product- but use-oriented. The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process. Recommendation: EAK 070104

Waste disposal number of waste from residues/unused products

070104 WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the manufacture, formulation, supply and use (MFSU) of basic organic chemicals; other organic solvents, washing liquids and mother liquors; hazardous waste

Contaminated packaging

Dispose of waste according to applicable legislation. Handle contaminated packages in the same way as the substance itself. Completely emptied packages can be recycled.

SECTION 14: Transport information**Land transport (ADR/RID)**

14.1. UN number:	UN 1170
14.2. UN proper shipping name:	ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)
14.3. Transport hazard class(es):	3
14.4. Packing group:	II
Hazard label:	3



Classification code:	F1
Special Provisions:	144 601
Limited quantity:	1 L
Excepted quantity:	E2
Transport category:	2
Hazard No:	33
Tunnel restriction code:	D/E

Inland waterways transport (ADN)

14.1. UN number:	UN 1170
14.2. UN proper shipping name:	ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)
14.3. Transport hazard class(es):	3
14.4. Packing group:	II
Hazard label:	3



Classification code:	F1
Special Provisions:	144 601

according to Regulation (EC) No 1907/2006

PT 310 PLUS Sensor activator

Revision date: 23.08.2019

Page 12 of 14

Limited quantity: 1 L
 Excepted quantity: E2

Marine transport (IMDG)

14.1. UN number: UN 1170
14.2. UN proper shipping name: ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)
14.3. Transport hazard class(es): 3
14.4. Packing group: II
 Hazard label: 3



Special Provisions: 144
 Limited quantity: 1 L
 Excepted quantity: E2
 EmS: F-E, S-D

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number: UN 1170
14.2. UN proper shipping name: ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)
14.3. Transport hazard class(es): 3
14.4. Packing group: II
 Hazard label: 3



Special Provisions: A3 A58 A180
 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: no

14.6. Special precautions for user

Warning: Combustible liquid.

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

not applicable

SECTION 15: Regulatory information
15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**EU regulatory information**

Restrictions on use (REACH, annex XVII):

Entry 3: ethanol; ethyl alcohol

2010/75/EU (VOC): 98 % (784 g/l)

National regulatory information

according to Regulation (EC) No 1907/2006

PT 310 PLUS Sensor activator

Revision date: 23.08.2019

Page 13 of 14

Employment restrictions: Observe restrictions to employment for juvenils according to the 'juvenil work protection guideline' (94/33/EC).

Water contaminating class (D): 1 - slightly water contaminating

15.2. Chemical safety assessment

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

SECTION 16: Other information**Changes**

This data sheet contains changes from the previous version in section(s): 1,2,3,4,5,8,9,13,15,16.

Abbreviations and acronyms

ADN: Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways).

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road).

ATE: Acute Toxicity Estimate.

AwSV: Anlagenverordnung wassergefährdender Stoffe (Regulation on facilities handling substances dangerous to water).

BGI: Berufsgenossenschaftliche Informationen (trade association information).

CAS: Chemical Abstracts Service.

CEN: Comité Européen de Normalisation European (Committee for Standardization).

CLP: Classification, Labelling and Packaging of substances and mixtures (REGULATION (EC) No 1272/2008).

DIN: Deutsches Institut für Normung (German institute for standardization).

DMEL: Derived Minimum Effect Level.

DNEL: Derived No Effect Level.

EC: European Community.

EC50: Half maximal effective concentration.

ECHA: European Chemicals Agency.

EG: Europäische Gemeinschaft (European Community).

EINECS: European Inventory of Existing Commercial Chemical Substances.

ELINCS: European List of Notified Chemical Substances.

EN: European Norms.

GHS: Globally Harmonized System of Classification and Labelling of Chemicals.

IATA-DGR: International Air Transport Association - Dangerous Goods Regulations.

IBC: Intermediate Bulk Container.

IC50 / ErC50: Inhibitory concentration, 50 %.

ICAO-TI: International Civil Aviation Organization - Technical Instructions for the Safe Transport of Dangerous Goods by Air.

IMDG: International Maritime Code for Dangerous Goods.

ISO: International Organization for Standardization.

IUPAC: International Union for Pure and Applied Chemistry.

LC50: Lethal concentration, 50 %.

LD50: Lethal dose, 50 %.

log Kow (Pow): Partition coefficient n-octanol/water.

LQ: Limited Quantities.

MARPOL: International Convention for the Prevention of Marine Pollution from Ships.

OECD: Organisation for Economic Co-operation and Development.

PBT: persistent, bioaccumulative and toxic.

PNEC: Predicted No Effect Concentration.

REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals (REGULATION (EC) No 1907/2006).

RID: Règlement concernant le transport International ferroviaire de marchandises Dangereuses (Regulation concerning the International Carriage of Dangerous Goods by Rail).

SVHC: Substances of Very High Concern.

according to Regulation (EC) No 1907/2006

PT 310 PLUS Sensor activator

Revision date: 23.08.2019

Page 14 of 14

STOT - RE: Specific Target Organ Toxicity - Repeated Exposure.

STOT - SE: Specific Target Organ Toxicity - Single Exposure.

TRGS: Technische Regel für Gefahrstoffe (technical guideline for the handling of hazardous materials).

UN: Untitled Nations.

VOC: Volatile organic compounds.

vPvB: very persistent and very bioaccumulative.

WGK: Wassergefährdungsklasse (water hazard class).

Relevant H and EUH statements (number and full text)

H225	Highly flammable liquid and vapour.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
EUH066	Repeated exposure may cause skin dryness or cracking.

Further Information

The information is based on present level of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

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.)