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

1.1 Product identifier

Primer 145

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

1.2.1 Relevant uses

Primer

1.2.2 Uses advised against

None known.

1.3 Details of the supplier of the safety data sheet

Company

Ramsauer GmbH & Co KG
Sarstein 17
4822 Bad Goisern / H. / AUSTRIA
Phone +43(0)6135 8205-0
Fax +43(0)6135 8205-250
Homepage www.ramsauer.at
E-mail office@ramsauer.at

Address enquiries to

Technical information office@ramsauer.at

Safety Data Sheet sdb@chemiebuero.de

1.4 Emergency telephone number

Advisory body Call NHS 111 or a doctor

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture [REGULATION (GB) CLP]

Flam. Liq. 2: H225 Highly flammable liquid and vapour.
Skin Irrit. 2: H315 Causes skin irritation.
Aquatic Chronic 2: H411 Toxic to aquatic life with long lasting effects.
Asp. Tox. 1: H304 May be fatal if swallowed and enters airways.
STOT SE 3: H336 May cause drowsiness or dizziness.
Eye Dam. 1: H318 Causes serious eye damage.
STOT RE 2: H373 May cause damage to organs through prolonged or repeated exposure through inhalation.

2.2 Label elements

The product is required to be labelled in accordance with regulation CLP.

Hazard pictograms

Signal word DANGER

Contains: Alkanes, C7-10-iso-

Titanium tetrabutanolate

4,4,7,7-Tetraethoxy-3,8-dioxa-4,7-disiladecane

Hazard statements

H225 Highly flammable liquid and vapour.
H315 Causes skin irritation.
H411 Toxic to aquatic life with long lasting effects.
H304 May be fatal if swallowed and enters airways.
H336 May cause drowsiness or dizziness.
H318 Causes serious eye damage.
H373 May cause damage to organs through prolonged or repeated exposure through inhalation.

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260 Do not breathe vapours / spray.
P280 Wear protective gloves / eye protection / face protection.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER / doctor.
P331 Do NOT induce vomiting.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER / doctor.

2.3 Other hazards

Physico-chemical hazards Contact with moisture liberates 1-Butanol and Ethanol.

Environmental hazards Does not contain any PBT or vPvB substances.
Contains no ingredients with endocrine-disrupting properties.

Other hazards Further hazards were not determined with the current level of knowledge.

SECTION 3: Composition / Information on ingredients

3.1 Substances

not applicable

3.2 Mixtures

The product is a mixture.

Range [%]	Substance
75 - <80	Alkanes, C7-10-iso-
	CAS: 90622-56-3, EINECS/ELINCS: 292-458-5, Reg-No.: 01-2119471305-42-XXXX
	GHS/CLP: Flam. Liq. 2: H225 - Skin Irrit. 2: H315 - Aquatic Chronic 2: H411 - Asp. Tox. 1: H304 - STOT SE 3: H336
5 - <10	Titanium tetrabutanolate
	CAS: 5593-70-4, EINECS/ELINCS: 227-006-8, Reg-No.: 01-2119967423-33-XXXX
	GHS/CLP: Flam. Liq. 3: H226 - STOT SE 3: H335 - Skin Irrit. 2: H315 - Eye Dam. 1: H318 - STOT SE 3: H336
<3	Tetraethyl silicate
	CAS: 78-10-4, EINECS/ELINCS: 201-083-8, EU-INDEX: 014-005-00-0, Reg-No.: 01-2119496195-28-XXXX
	GHS/CLP: Flam. Liq. 3: H226 - Acute Tox. 4: H332 - Eye Irrit. 2: H319 - STOT SE 3: H335
<3	4,4,7,7-Tetraethoxy-3,8-dioxa-4,7-disiladecane
	CAS: 16068-37-4, EINECS/ELINCS: 240-212-2, Reg-No.: 01-2120764364-51-XXXX
	GHS/CLP: Acute Tox. 3: H301 - Acute Tox. 4: H312 - Aquatic Chronic 3: H412 - STOT RE 1: H372 - EUH071
<0,2	1,1-Bis(triethoxysilyl)ethane
	CAS: 16068-36-3
	GHS/CLP: Acute Tox. 3: H301 - Acute Tox. 4: H312

Comment on component parts Substances of Very High Concern - SVHC: substances are not contained or are below 0.1%.
For full text of H-statements: see SECTION 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information Adhere to personal protective measures when giving first aid.
Remove contaminated soaked clothing immediately and dispose of safely.

Inhalation Ensure supply of fresh air.
In the event of symptoms seek medical treatment.

Skin contact In case of contact with skin wash off immediately with soap and water.
Consult a doctor if skin irritation persists.

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

Ingestion Consult a doctor immediately.
Rinse out mouth and give plenty of water to drink.
Do not induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

Irritant effects
If swallowed or in the event of vomiting, risk of product entering the lungs.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media Carbon dioxide.
Dry powder.
Foam.

Extinguishing media that must not be used Full water jet.

5.2 Special hazards arising from the substance or mixture

In the event of fire the following can be released:
Carbon monoxide (CO)

5.3 Advice for firefighters

Use self-contained breathing apparatus.

Fire residues and contaminated firefighting water must be disposed of in accordance within the local regulations.
Cool containers at risk with water spray jet.
Collect contaminated firefighting water separately, must not be discharged into the drains.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Keep away from all sources of ignition.
Ensure adequate ventilation.
Use personal protective equipment (protective gloves, safety glasses, protective clothing).
High risk of slipping due to leakage/spillage of product.

6.2 Environmental precautions

Prevent spread over a wide area (e.g. by containment or oil barriers).
Do not discharge into the drains/surface waters/groundwater.
In case the product spills into drains/surface waters/groundwater, immediately inform the authorities.

6.3 Methods and material for containment and cleaning up

Take up with absorbent material (f.ex. diatomaceous earth).
Dispose of absorbed material in accordance within the regulations.

6.4 Reference to other sections

See SECTION 8+13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Use only in well-ventilated areas.
Vacuuming in situ required.
Avoid formation of aerosols.

Keep away from all sources of ignition - Refrain from smoking.
Vapours can form an explosive mixture with air.
Take precautionary measures against static discharges.
Risk of explosion if the liquid enters the drains.

Do not eat, drink, smoke or take drugs at work.
After worktime and before work breaks the affected skin areas must be thoroughly cleaned.
Use barrier skin cream.
Remove contaminated soaked clothing immediately and dispose of safely.
Keep away from food and drink.

7.2 Conditions for safe storage, including any incompatibilities

Provide solvent-resistant and impermeable floor.
Keep only in original container.
Prevent penetration into the ground.
Provide floor with bunding.

Do not store together with oxidizing agents.

Keep container tightly closed.
Keep container in a well-ventilated place.
Keep in a cool place. Store in a dry place.
Do not keep at temperatures above 30 °C.

7.3 Specific end use(s)

See product use, SECTION 1.2

SECTION 8: Exposure controls / personal protection

8.1 Control parameters

Ingredients with occupational exposure limits to be monitored (GB)

Substance
Alkanes, C7-10-iso-
CAS: 90622-56-3, EINECS/ELINCS: 292-458-5, Reg-No.: 01-2119471305-42-XXXX
Long-term exposure: 1200 mg/m³
Tetraethyl silicate
CAS: 78-10-4, EINECS/ELINCS: 201-083-8, EU-INDEX: 014-005-00-0, Reg-No.: 01-2119496195-28-XXXX
Long-term exposure: 10 ppm, 85 mg/m³, ACGIH
Ethanol
CAS: 64-17-5, EINECS/ELINCS: 200-578-6, EU-INDEX: 603-002-00-5, Reg-No.: 01-2119457610-43-XXXX
Long-term exposure: 1000 ppm, 1920 mg/m³
Butan-1-ol
CAS: 71-36-3, EINECS/ELINCS: 200-751-6, EU-INDEX: 603-004-00-6
Long-term exposure: 50 ppm, Sk
Short-term exposure (15-minute): 50 ppm, 154 mg/m³

Ingredients with occupational exposure limits to be monitored (EU)

Substance / EC LIMIT VALUES
Tetraethyl silicate
CAS: 78-10-4, EINECS/ELINCS: 201-083-8, EU-INDEX: 014-005-00-0, Reg-No.: 01-2119496195-28-XXXX
Eight hours: 5 ppm, 44 mg/m³

DNEL

Substance
Tetraethyl silicate, CAS: 78-10-4
Industrial, inhalative, Acute - systemic effects, 85 mg/m³
Industrial, dermal, Acute - systemic effects, 12,1 mg/kg bw/d
Industrial, inhalative, Acute - local effects, 85 mg/m³
Industrial, dermal, Long-term - systemic effects, 12,1 mg/kg bw/d
Industrial, inhalative, Long-term - local effects, 85 mg/m³
Industrial, inhalative, Long-term - systemic effects, 85 mg/m³
general population, inhalative, Acute - local effects, 25 mg/m³
general population, inhalative, Acute - systemic effects, 25 mg/m³
general population, inhalative, Long-term - local effects, 25 mg/m³
general population, dermal, Long-term - systemic effects, 8,4 mg/kg bw/d
general population, inhalative, Long-term - systemic effects, 25 mg/m³
general population, dermal, Acute - systemic effects, 8,4 mg/kg bw/d
4,4,7,7-Tetraethoxy-3,8-dioxa-4,7-disiladecane, CAS: 16068-37-4
Industrial, inhalative, Long-term - local effects, 6 µg/m³
general population, inhalative, Long-term - local effects, 1 µg/m³
Alkanes, C7-10-iso-, CAS: 90622-56-3
Industrial, inhalative, Long-term - systemic effects, 2 035 mg/m³
Industrial, dermal, Long-term - systemic effects, 773 mg/kg bw/day
general population, dermal, Long-term - systemic effects, 699 mg/kg bw/day

general population, oral, Long-term - systemic effects, 699 mg/kg bw/day
general population, inhalative, Long-term - systemic effects, 608 mg/m³
Titanium tetrabutanolate, CAS: 5593-70-4
Industrial, inhalative, Long-term - systemic effects, 127 mg/m³
general population, inhalative, Long-term - systemic effects, 152 mg/m³
general population, oral, Long-term - systemic effects, 3,75 mg/kg bw/day
general population, dermal, Long-term - systemic effects, 37,5 mg/kg bw/day

PNEC

Substance
Tetraethyl silicate, CAS: 78-10-4
soil, 0,05 mg/kg dw
sediment (freshwater), 0,83 mg/kg dw
sediment (seawater), 0,083 mg/kg dw
sediment (seawater), 0,018 mg/kg
sediment (freshwater), 0,18 mg/kg
sediment, 0,18 mg/kg dw
seawater, 0,0192 mg/l
freshwater, 0,192 mg/l
sewage treatment plants (STP), 4000 mg/l
4,4,7,7-Tetraethoxy-3,8-dioxa-4,7-disiladecane, CAS: 16068-37-4
soil, 6,2 - 7,2 µg/kg soil dw
freshwater, 16 µg/L
seawater, 1,6 µg/L
sewage treatment plants (STP), 8 g/L
sediment (seawater), 7,8 - 19 µg/kg sediment dw
sediment (freshwater), 78 - 190 µg/kg sediment dw
Titanium tetrabutanolate, CAS: 5593-70-4
freshwater, 80 µg/L
soil, 16,8 µg/kg soil dw
sediment (seawater), 6,9 µg/kg sediment dw
sediment (freshwater), 68,7 µg/kg sediment dw
sewage treatment plants (STP), 65 mg/L
seawater, 8 µg/L

8.2 Exposure controls

Additional advice on system design	Ensure adequate ventilation on workstation. Measurement methods for taking workplace measurements must meet the performance requirements of DIN EN 482. For example, recommendations are given in the IFA's list of hazardous substances.
Eye protection	Tightly fitting goggles. (EN 166:2001)
Hand protection	0,7 mm Viton, >480 min (EN 374-1/-2/-3). The details concerned are recommendations. Please contact the glove supplier for further information.
Skin protection	Solvent-resistant protective clothing (EN 340)
Other	Avoid contact with eyes and skin. Do not inhale gases/vapours/aerosols. Personal protective equipment should be selected specifically for the working place, depending on concentration and quantity handled. The resistance of this equipment to chemicals should be ascertained with the respective supplier.
Respiratory protection	In the event of occupational exposure limits being exceeded or of inadequate ventilation: wear appropriate respiratory protection. Multi-purpose filter ABEK. (DIN EN 14387)
Thermal hazards	not applicable
Delimitation and monitoring of the environmental exposition	Protect the environment by applying appropriate control measures to prevent or limit emissions.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	liquid
Color	yellowish
Odor	characteristic
Odour threshold	not determined
pH-value	ca. 7
pH-value [1%]	not determined
Boiling point [°C]	113
Flash point [°C]	ca. 3 (DIN 51755)
Flammability (solid, gas) [°C]	not applicable
Lower explosion limit	0,8 Vol.-%
Upper explosion limit	6,5 Vol.-%
Oxidising properties	no
Vapour pressure/gas pressure [kPa]	2,0 (25°C)
Density [g/cm³]	0,75 (DIN 12791) (25°C / 77,0°F)
Relative density	not determined
Bulk density [kg/m³]	not applicable
Solubility in water	partially soluble
Solubility other solvents	No information available.
Partition coefficient [n-octanol/water]	not determined
Kinematic viscosity	ca. 1,0 mm²/s (25°C)
Relative vapour density	not determined
Evaporation speed	not determined
Melting point [°C]	not determined
Auto-ignition temperature	380
Decomposition temperature [°C]	not determined
Particle characteristics	No information available.

9.2 Other information

none

SECTION 10: Stability and reactivity

10.1 Reactivity

No dangerous reactions known if used as directed.

10.2 Chemical stability

The product is stable under standard conditions.

10.3 Possibility of hazardous reactions

Reactions with water.
Evolution of flammable mixtures possible in air when heated above flash point and/or during spraying or misting.
Reactions with acids, alkalies and oxidizing agents.

10.4 Conditions to avoid

See SECTION 7.2.
Strong heating.

10.5 Incompatible materials

Water

10.6 Hazardous decomposition products

Contact with moisture liberates 1-Butanol and Ethanol.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

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

Product
ATE-mix, oral, Rat, > 2000 mg/kg

Substance
Tetraethyl silicate, CAS: 78-10-4
LD50, oral, Rat, > 2500 mg/kg (OECD TG 423)
NOAEL, oral, Rat, 10 mg/kg (28 d) (OECD TG 422)
4,4,7,7-Tetraethoxy-3,8-dioxa-4,7-disiladecane, CAS: 16068-37-4
LD50, oral, Rat, 161 mg/kg bw
Alkanes, C7-10-iso-, CAS: 90622-56-3
LD50, oral, Rat, 7100 - 7800 mg/kg bw
Titanium tetrabutanolate, CAS: 5593-70-4
LD50, oral, Rat, 2000 mg/kg bw
NOAEL, oral, Rat, 125 mg/kg bw/day

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

Product
ATE-mix, dermal, Rabbit, > 2000 mg/kg

Substance
4,4,7,7-Tetraethoxy-3,8-dioxa-4,7-disiladecane, CAS: 16068-37-4
LD50, dermal, Rat, 1971 mg/kg bw
Alkanes, C7-10-iso-, CAS: 90622-56-3
LD50, dermal, Rabbit, 2200 - 2500 mg/kg bw

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

Product
ATE-mix, inhalation (vapour), Rat, > 20 mg/l

Substance
Tetraethyl silicate, CAS: 78-10-4
LC50, inhalative, Rat, 10 - 16 mg/l (OECD TG 403)
4,4,7,7-Tetraethoxy-3,8-dioxa-4,7-disiladecane, CAS: 16068-37-4
LC50, inhalative, Rat, 377 mg/m³ (4 h)
Alkanes, C7-10-iso-, CAS: 90622-56-3
LC50, inhalative, Rat, 4240 - 4450 ppm (4h)
Titanium tetrabutanolate, CAS: 5593-70-4
NOAEL, inhalative, Rat, 2,35 mg/L

Serious eye damage/irritation Based on the available information, the classification criteria are fulfilled.
Risk of serious damage to eyes.

Skin corrosion/irritation Based on the available information, the classification criteria are fulfilled.
Irritant

Respiratory or skin sensitisation Does not contain a relevant substance that meets the classification criteria.

Specific target organ toxicity — Based on the available information, the classification criteria are fulfilled.

single exposure	Vapours may cause drowsiness and dizziness.
Specific target organ toxicity — repeated exposure	May cause damage to organs through prolonged or repeated exposure through inhalation.
Mutagenicity	Does not contain a relevant substance that meets the classification criteria.
Reproduction toxicity	Does not contain a relevant substance that meets the classification criteria.
Carcinogenicity	Does not contain a relevant substance that meets the classification criteria.
Aspiration hazard	Based on the available information, the classification criteria are fulfilled. v < 20,5 mm²/s (40 °C)
General remarks	
	Toxicological data of complete product are not available.

11.2 Information on other hazards

Endocrine disrupting properties	Contains no ingredients with endocrine-disrupting properties.
Other information	none

SECTION 12: Ecological information

12.1 Toxicity

Substance
Tetraethyl silicate, CAS: 78-10-4
LC50, (96h), Brachidanio rerio, > 245 mg/l (OECD TG 203)
EC50, (72h), Pseudokirchneriella subcapitata, > 100 mg/l (OECD TG 201)
EC50, (48h), Daphnia magna, > 75 mg/l (OECD TG 202)
NOEC, (96h), Brachidanio rerio, > 245 mg/l (OECD TG 203)
NOEC, (48h), Daphnia magna, > 75 mg/l (OECD TG 202)
NOEC, (72h), Pseudokirchneriella subcapitata, > 100 mg/l (OECD TG 201)
4,4,7,7-Tetraethoxy-3,8-dioxa-4,7-disiladecane, CAS: 16068-37-4
LC50, (96h), Danio rerio, 16 mg/L
EC50, (48h), Crustacea, 72,6 - 92,2 mg/L
EC50, (72h), Algae, 53 - 671 mg/L
EC50, (16h), Pseudomonas putida, 8 g/L
NOEC, (72h), Algae, 102 mg/L
Alkanes, C7-10-iso-, CAS: 90622-56-3
LC50, (96h), fish, 110 µg/L
EC50, (48h), Crustacea, 400 µg/L
EL50, (72h), Algae, 10 - 30 mg/L
NOELR, (28d), fish, 778 µg/L
Titanium tetrabutanolate, CAS: 5593-70-4
LC50, (96h), fish, 1,74 - 2,3 g/L
EC50, (72h), Algae, 225 mg/L
EC50, (48h), Crustacea, 1,3 g/L
EC10, (96h), Algae, 134 mg/L

12.2 Persistence and degradability

Behaviour in environment compartments	not determined
Behaviour in sewage plant	not determined
Biological degradability	not determined

12.3 Bioaccumulative potential

not determined

12.4 Mobility in soil

not determined

12.5 Results of PBT and vPvB assessment

Based on all available information not to be classified as PBT or vPvB respectively.

12.6 Endocrine disrupting properties

Contains no ingredients with endocrine-disrupting properties.

12.7 Other adverse effects

Ecological data of complete product are not available.
Do not discharge product unmonitored into the environment.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. It is not possible to determine a waste code for this product in accordance with the European Waste Catalogue (EWC) since it is only possible to classify it according to how it is used by the customer. The waste code is to be determined within the EU in liaison with the waste-disposal operator.

Product

Dispose of as hazardous waste.

Waste no. (recommended) 080111*

Contaminated packaging

Uncontaminated packaging may be taken for recycling.

Waste no. (recommended) 150110* packaging containing residues of or contaminated by hazardous substances

SECTION 14: Transport information

14.1 UN number or ID number

Transport by land according to ADR/RID 1993

Inland navigation (ADN) 1993

Marine transport in accordance with IMDG 1993

Air transport in accordance with IATA 1993

14.2 UN proper shipping name

Transport by land according to ADR/RID	Flammable liquid, n.o.s. (contains Isoalkanes)
- Classification Code	F1
- Label	
- ADR LQ	1 l
- ADR 1.1.3.6 (8.6)	Transport category (tunnel restriction code) 2 (D/E)
Inland navigation (ADN)	Flammable liquid, n.o.s. (contains Isoalkanes)
- Classification Code	F1
- Label	
Marine transport in accordance with IMDG	Flammable liquid, n.o.s. (contains Isoalkanes)
- EMS	F-E, S-E
- Label	
- IMDG LQ	1 l
Air transport in accordance with IATA	Flammable liquid, n.o.s. (contains Isoalkanes)
- Label	

14.3 Transport hazard class(es)

Transport by land according to ADR/RID	3 (N)
Inland navigation (ADN)	3 (N)
Marine transport in accordance with IMDG	3
Air transport in accordance with IATA	3

14.4 Packing group

Transport by land according to ADR/RID	II
Inland navigation (ADN)	II
Marine transport in accordance with IMDG	II
Air transport in accordance with IATA	II

14.5 Environmental hazards

Transport by land according to ADR/RID	yes
Inland navigation (ADN)	yes
Marine transport in accordance with IMDG	MARINE POLLUTANT
Air transport in accordance with IATA	yes

14.6 Special precautions for user

Relevant information under SECTION 6 to 8.

14.7 Maritime transport in bulk according to IMO instruments

not determined

SECTION 15: Regulatory information

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

EEC-REGULATIONS	2008/98/EC 2000/532/EC); 2010/75/EU; 2004/42/EC; (EC) 648/2004; (EC) 1907/2006 (REACH); (EU) 1272/2008; 75/324/EEC ((EC) 2016/2037); (EU) 2020/878; (EU) 2016/131; (EU) 517/2014
TRANSPORT-REGULATIONS	ADR (2021); IMDG-Code (2021, 40. Amdt.); IATA-DGR (2021)
NATIONAL REGULATIONS (GB):	EH40/2005 Workplace exposure limits (Second edition, published December 2011); UK REACH; GB CLP.
- Observe employment restrictions for people	Observe employment restrictions for young people. Observe employment restrictions for mothers-to-be and nursing mothers.
- VOC (2010/75/CE)	ca. 80 %

15.2 Chemical safety assessment

not applicable

SECTION 16: Other information

16.1 Hazard statements (SECTION 3)

H319 Causes serious eye irritation.
H332 Harmful if inhaled.
EUH071 Corrosive to the respiratory tract.
H372 Causes damage to lung through prolonged or repeated exposure if inhaled.
H412 Harmful to aquatic life with long lasting effects.
H312 Harmful in contact with skin.
H301 Toxic if swallowed.
H318 Causes serious eye damage.
H335 May cause respiratory irritation.
H226 Flammable liquid and vapour.
H336 May cause drowsiness or dizziness.
H304 May be fatal if swallowed and enters airways.
H411 Toxic to aquatic life with long lasting effects.
H315 Causes skin irritation.
H225 Highly flammable liquid and vapour.

16.2 Abbreviations and acronyms:

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route
RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses
ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure
ATE = acute toxicity estimate
CAS = Chemical Abstracts Service
CLP = Classification, Labelling and Packaging
DMEL = Derived Minimum Effect Level
DNEL = Derived No Effect Level
EC50 = Median effective concentration
ECB = European Chemicals Bureau
EEC = European Economic Community
EINECS = European Inventory of Existing Commercial Chemical Substances
EL50 = Median effective loading
ELINCS = European List of Notified Chemical Substances
EmS = Emergency Schedules
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC-Code = International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
IC50 = Inhibition concentration, 50%
IMDG = International Maritime Code for Dangerous Goods
IUCLID = International Uniform ChemicaL Information Database
IVIS = In vitro irritation score
LC50 = Lethal concentration, 50%
LD50 = Median lethal dose
LC0 = lethal concentration, 0%
LOAEL = lowest-observed-adverse-effect level
LL50 = Median lethal loading
LQ = Limited Quantities
MARPOL = International Convention for the Prevention of Marine Pollution from Ships
NOAEL = No Observed Adverse Effect Level
NOEC = No Observed Effect Concentration
PBT = Persistent, Bioaccumulative and Toxic substance
PNEC = Predicted No-Effect Concentration
REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals
STP = Sewage Treatment Plant
TLV®/TWA = Threshold limit value – time-weighted average
TLV®STEL = Threshold limit value – short-time exposure limit
VOC = Volatile Organic Compounds
vPvB = very Persistent and very Bioaccumulative

16.3 Other information

Classification procedure

Flam. Liq. 2: H225 Highly flammable liquid and vapour. (On basis of test data)
Skin Irrit. 2: H315 Causes skin irritation. (Calculation method)
Aquatic Chronic 2: H411 Toxic to aquatic life with long lasting effects. (Calculation method)
Asp. Tox. 1: H304 May be fatal if swallowed and enters airways. (On basis of test data)
STOT SE 3: H336 May cause drowsiness or dizziness. (Calculation method)
Eye Dam. 1: H318 Causes serious eye damage. (Calculation method)
STOT RE 2: H373 May cause damage to organs through prolonged or repeated exposure through inhalation. (Calculation method)

Modified position

SECTION 2 been added: 4,4,7,7-Tetraethoxy-3,8-dioxa-4,7-disiladecane

SECTION 2 been added: Contact with moisture liberates 1-Butanol and Ethanol.

SECTION 2 been added: Contains no ingredients with endocrine-disrupting properties.

SECTION 6 been added: Use personal protective equipment (protective gloves, safety glasses, protective clothing).

SECTION 11 been added: Contains no ingredients with endocrine-disrupting properties.

SECTION 11 been added: Based on available data, the classification criteria are not met.

SECTION 11 been added: Based on available data, the classification criteria are not met.

SECTION 11 been added: Based on available data, the classification criteria are not met.

SECTION 12 been added: Contains no ingredients with endocrine-disrupting properties.