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

1.1. Product identifier

Identification of the substance:

Tin(II) bis(2-ethylhexanoate)
Trade name: TJ-T9
Trade code: SB000136

Product type and use: mono-constituent substance-Organic metal salt

CAS number: 301-10-0
EC number: 206-108-6

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

Recommended use: Paints and general solvents

Uses advised against: N.A.

1.3. Details of the supplier of the safety data sheet

Company: Foam-Tech (Pty) Ltd -A GREENACRES HOLDINGS COMPANY in association with BORGHI SpA
Unit 11 Nordyk Park 5-Tegno Street
Western Cape-South Africa
Tel: +27-22-487 2233
Mob: +27-83-236 8589

Responsable: sds@borghispa.it

1.4. Emergency telephone number

IRELAND: National Poisons Information Centre (NPIC): +353 1 8092166

MALTA: Medicines & poisons info Office 112

UK: National Health Service (NHS) (999 emergency call; 111 non-emergency call)

Emergency Action: In the event of a medical enquiry involving this product, please contact your doctor or local hospital accident and emergency department

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) n. 1272/2008 (CLP)

Eye Dam. 1	Causes serious eye damage.
Skin Sens. 1	May cause an allergic skin reaction.
Repr. 1B	May damage fertility or the unborn child if inhaled and in contact with skin.
Aquatic Chronic 3	Harmful to aquatic life with long lasting effects.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Regulation (EC) No 1272/2008 (CLP):

Hazard pictograms and Signal Word

Danger

Hazard statements

H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.

H360	May damage fertility or the unborn child if inhaled and in contact with skin.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements

P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
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.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P310	Immediately call a POISON CENTER.
P405	Store locked up.
P501	Dispose of contents and container in accordance with applicable regulations.

Special provisions according to Annex XVII of REACH and subsequent amendments:

None.

2.3. Other hazards

This substance has no PBT, vPvB or endocrine disrupting properties

Other Hazards: No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

Substance Identifications:	Tin(II) bis(2-ethylhexanoate)
CAS number:	301-10-0
EC number:	206-108-6

3.2. Mixtures

N.A.

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately

OBTAIN IMMEDIATE MEDICAL ATTENTION.

Wash thoroughly the body (shower or bath).

Remove contaminated clothing immediatley and dispose off safely.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an opthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Do not induce vomiting, get medical attention showing the SDS and label hazardous.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

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

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water Foam Carbon dioxide (CO2) Dry powder.

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Special hazards arising from the substance or mixture

Carbon oxides

tin/tin oxides

Combustible.

The vapours are heavier than air and spread along the ground.

When heated strongly, it forms explosive mixtures with air.

In the event of a fire, formation of dangerous gases and vapours is possible.

5.3. Advice for firefighters

Do not stay in the danger zone without self-contained breathing apparatus. In order to avoid contact with the skin, keep an adequate safety distance and use suitable protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non emergency personnel:

Alert the personnel responsible for the management of such emergencies. Leave the accident area if you are not in possession of the personal protective equipment listed in section 8.

For emergency responders:

Remove all personnel not adequately equipped to deal with the emergency. Wear suitable personal protective equipment referred to in section 8 of the safety data sheet to prevent contamination of skin, eyes and personal clothing. Stop the leak if there is no danger. Make the area affected by the accident accessible to workers only after adequate reclamation has taken place. Ventilate the premises affected by the accident. Remove any metal containers and materials that may be damaged by the leak.

6.2. Environmental precautions

Do not allow product to enter drains.

6.3. Methods and material for containment and cleaning up

For containment:

Cover drains. Collect, cordon off and vacuum away spills. Observe any material restrictions (see sections 7 and 10). Remove carefully with liquid-absorbent material (e.g. Chemizorb®). Dispose of. Clean contaminated area.

6.4. Reference to other sections

See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Work under fume hood. Do not inhale the substance/mixture. Avoid generating vapours/aerosols.

Advice on general occupational hygiene:

Remove contaminated clothing immediately. Apply a protective skin cream. Wash hands and face after working with the substance.

For precautions see section 2.2.

7.2. Conditions for safe storage, including any incompatibilities

Keep in a well-ventilated place. Keep locked up or in an area accessible only to qualified or authorized personnel.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

German storage class (TRGS 510): 6.1C: Combustible, acutely toxic, Toxic compounds of Cat.3 or compounds causing chronic effects

7.3. Specific end use(s)

None in particular

Industrial sector specific solutions:

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Predicted No Effect Concentration (PNEC) values

Exposure Route: Fresh Water; PNEC Limit: 0.054 mg/l

Exposure Route: Marine water; PNEC Limit: 0.005 mg/l

Exposure Route: Microorganisms in sewage treatments; PNEC Limit: 3.99 mg/l

Exposure Route: Freshwater sediments; PNEC Limit: 0.417 mg/kg

Exposure Route: Marine water sediments; PNEC Limit: 0.042 mg/kg

Exposure Route: Soil; PNEC Limit: 0.052 mg/kg

Derived No Effect Level (DNEL) values

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects
Worker: 0.79 mg/m3; Worker Industry: 0.79 mg/m3; Worker Professional: 0.79 mg/m3; Consumer: 0.14 mg/m3

Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects
Worker: 0.16 mg/kg/day; Worker Industry: 0.16 mg/kg/day; Worker Professional: 0.16 mg/kg/day;
Consumer: 0.057 mg/kg/day

Exposure Route: Human Oral; Exposure Frequency: Long Term, systemic effects
Consumer: 0.055 mg/kg/day

8.2. Exposure controls

Eye protection:

Use eye protection devices tested and approved to the requirements of appropriate technical standards such as NIOSH (USA) or EN 166 (EU) Tightly fitting safety glasses

Protection for skin:

Chemical protection clothing.

Protection for hands:

Chemical resistant protective gloves (EN 374).

Respiratory protection:

required when vapours/aerosols are generated.

Our recommendations on filtering of respiratory protection are based on the

following standards: DIN EN 143, DIN 14387 and other associated standards relating to the respiratory protection system used.

Recommended filter type: Filter type ABEK

The entrepreneur must ensure that maintenance, cleaning and checks of

protective equipment are carried out according to the manufacturer's instructions.

These measures must be properly documented.

Thermal Hazards:

N.A.

Environmental exposure controls:

N.A.

Hygienic and Technical measures

N.A.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	colorless to yellow
Odour:	N.A.
pH:	N.A.
Kinematic viscosity:	N.A.
Melting point/freezing point:	9 °C (48 °F) The freeze point of the Tin bis(2-ethylhexanoate) liquid was determined using differential scanning calorimetry (DSC). The substance was first frozen at - 90 °C and temperature was increased at 10 °C/min. The melt transition began at -5.8 °C, and the sample was completely melted at 9.0 °C. Although melting occurred over a range of temperature, by definition, the melting point is reported at this temperature (9 °C)
Boiling point or initial boiling point and boiling range:	the study does not need to be conducted because chemical change occurred during the melting point study In accordance with Column 2 of REACh Annex VII, boiling point does not need to be determined for substances which decompose before reaching a boiling point. Available evidence indicates that the Tin bis(2-ethylhexanoate) substance decomposes in presence of atmospheric oxygen at temperatures > 150 °C
Flash point:	137 °C (279 °F)
Lower and upper explosion limit:	N.A.
Relative vapour density:	N.A.
Vapour pressure:	0.30(kPa 50°C).
Density and/or relative density:	1.26 g/cm3
Solubility in water:	Soluble 4.500 mg/l @ 20°C-OECD Test Guidelines 105
Solubility in oil:	N.A.
Partition coefficient n-octanol/water (log value):	2.64 No bioaccumulation is expected

Auto-ignition temperature:	The test material has been determined not to exhibit the potential for auto-ignition at temperatures below 400°C.
Decomposition temperature:	N.A.
Flammability:	Non-flammable Flash Point of 137 °C, which is > 93 °C Auto-ignition temperature > 400 °C Based on the physical state, the structural elements and the melting point the substance has neither to be classified as flammable in contact with air, nor as pyrophoric solid, nor as self-heating substance. Taking the above mentioned
Volatile Organic compounds - VOCs =	N.A.

Particle characteristics:

Particle size: N.A.

9.2. Other information

Explosive properties:	non explosive According to ECHA Chapter 7a guidance (May 2008), the substance does not posses any of the listed atoms/functional groups which contribute to explosive properties, therefore the substance must not be classified according EU GHS. Additional information
Oxidizing properties:	NO Testing according to EU Method A.21: Oxidizing Properties (liquids) showed no evidence of oxidizing properties. The test material has been determined not to have oxidising properties as the mean pressure rise time for the test material/cellulose mixtures was slower than the mean pressure rise time for the nitric acid/cellulose mixtures, therefore classification according to EU GHS does not apply.

No other relevant information

SECTION 10: Stability and reactivity

10.1. Reactivity

When heated strongly, it forms explosive mixtures with air.

A range starting from about 15 Kelvin below the flash point is considered critical.

10.2. Chemical stability

The product is chemically stable under standard environmental conditions (room temperature).

10.3. Possibility of hazardous reactions

None in particular.

10.4. Conditions to avoid

Strong heating.

10.5. Incompatible materials

Strong oxidizing agents

10.6. Hazardous decomposition products

Carbon oxides

tin/tin oxides

Combustible.

The vapours are heavier than air and spread along the ground.

When heated strongly, it forms explosive mixtures with air.

In the event of a fire, formation of dangerous gases and vapours is possible.

SECTION 11: Toxicological information

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

Toxicological Information of the Substance

a) acute toxicity	Not classified
	Based on available data, the classification criteria are not met
	LD50 Oral Rat = 5.87 mg/kg
	LD50 Skin Rat > 2000 mg/kg
b) skin corrosion/irritation	Not classified
	Based on available data, the classification criteria are not met
	Skin Irritant Rabbit - Utilizing a method for evaluating the skin irritation potential of an experimental material, it was found that M &T Chemicals, Inc., tin bis(2-ethylhexanoate) is a mild irritant to intact and abraded skin of the albino rabbit.

c) serious eye damage/irritation	The product is classified: Eye Dam. 1(H318) Eye Corrosive Rabbit Positive - Tin bis(2 -ethylhexanoate) elicited severe ocular responses involving the cornea and iris, as well as marked conjunctival responses.
d) respiratory or skin sensitisation	The product is classified: Skin Sens. 1(H317) Skin Sensitization Guineapig Positive - In a contact dermal irritation/skin sensitization study with guinea pigs, following the Modified Buehler method, tin bis(2-ethylhexanoate) (as Fomrez C-2) caused delayed contact hypersensitivity,
e) germ cell mutagenicity	Not classified Based on available data, the classification criteria are not met Genotoxicity Negative - Test type: Ames test Test system: S. typhimurium Metabolic activation: with or without metabolic activation Method: OECD Test Guideline 471
f) carcinogenicity	Not classified Based on available data, the classification criteria are not met Carcinogenicity Negative - Taken together, available data on carcinogenic and mutagenic potential of the hydrolysis products of tin bis(2 -ethylhexanoate) (stannous chloride and ethylhexanoic acid) as well as supporting information of the carcinogenic potential and mutagenic potential of tin bis (2 -ethylhexanoate) itself permit the conclusion that tin bis(2 -ethylhexanoate) is not carcinogenic.
g) reproductive toxicity	The product is classified: Repr. 1B(H360) Reproductive Toxicity Positive - In summary, 2-ethylhexanoic acid increased time to mating, inhibited implantation, and tended to decrease fertility in Wistar rats at 600 mg/kg. At this same dose level 2-EHA decreased pup weights during lactation and at and above 300 mg/kg delayed postnatal development of pups as noted in the reflex and physical parameters evaluated.
h) STOT-single exposure	Not classified Based on available data, the classification criteria are not met Respiratory Tract Irritant Negative
i) STOT-repeated exposure	Not classified Based on available data, the classification criteria are not met No Observed Adverse Effect Level Oral Rat = 250 mg/kg
j) aspiration hazard	Not classified Based on available data, the classification criteria are not met Respiratory Tract Irritant Negative

11.2. Information on other hazards

Endocrine disrupting properties:

This substance has no endocrine disrupting properties

SECTION 12: Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

Eco-Toxicological Information:

Harmful to aquatic life with long lasting effects.

List of Eco-Toxicological properties of the product

The product is classified: Aquatic Chronic 3(H412)

a) Aquatic acute toxicity: LC50 Fish Oncorhynchus mykiss > 116 mg/L 96h - (OECD Test Guideline 203)

a) Aquatic acute toxicity: EC50 Daphnia Daphnia magna > 100 mg/L 48h - (OECD Test Guidelines 202)

a) Aquatic acute toxicity: EC50 Algae Pseudokirchneriella subcapitata = 6.9 mg/L 72h - (OECD Test Guidelines 201)

b) Aquatic chronic toxicity: NOEC Fish = 10.1 mg/L - Read-across to SnCl2 calculated

b) Aquatic chronic toxicity: NOEC Daphnia = 18.01 mg/L 21d - Read-across to Sodium bis(2-ethylhexanoate) calculated

12.2. Persistence and degradability

Readily biodegradable	Duration: 28d; Value: = 99 Notes: aerobic

The tin bis(2 -ethylhexanoate) substance is known to dissociate into its 2-ethylhexanoate and Sn(II) components upon introduction to water. The 2-ethylhexanoate portion of the substance has been shown to be readily biodegradable, while the Sn(II) will speciate initially as Sn(OH)2, and spontaneously oxidize in oxygenated water to form the insoluble inorganic solid Sn(IV)O2.

12.3. Bioaccumulative potential

The log Kow for the 2-ethylhexanoate component of the tin bis(2 -ethylhexanoate) salt is log Kow = 2.64 (un-ionized species at pH < 2.8). The estimated log D at pH 7 is approximately 0.6. These values of log Kow and log D indicate a low potential for bioaccumulation in aquatic organisms, such that testing of this potential is not necessary or required. The Sn(II) portion of the salt is inorganic and insoluble, therefore testing of bioaccumulation is not relevant or necessary.

12.4. Mobility in soil

The tin bis(2 -ethylhexanoate) substance is dissociated into its 2-ethylhexanoate and Sn(II) components upon contact with water in the environment. The Sn(II) component has been shown to be speciated initially in water as Sn(OH)2 at pH encountered in the environment (pH 6 - 8); and this species will spontaneously oxidize in oxygenated water to form the insoluble inorganic solid Sn(IV)O2. The transport/distribution of this component will be governed by the same processes affecting other insoluble particles in the environment. The transport and distribution of the 2-ethylhexanoate component will be governed by pH, which influences its speciation among the free acid and anionic forms. The measured log Kow for the free acid form (predominant at pH < 2.8) is 2.64, while the log D for the anion form (predominant at pH > 6.8) is approximately 0.6. Based on this latter, environmentally-relevant value, the 2-ethylhexanoate substance is not expected to partition significantly to organic matter of soil or sediments, or to bioaccumulate in aquatic organisms. This low potential for adsorption to soil and sediment is evidenced the by predicted log Koc value of 1.61 (Koc = 41.3). Because this component of the tin bis(2 -ethylhexanoate) salt occurs as an ion at environmentally-relevant pH, it is moderately soluble in water and has low potential for volatilization from soil or water to the atmosphere.

12.5. Results of PBT and vPvB assessment

This substance has no PBT or vPvB properties

12.6 Endocrine disrupting properties

This substance has no endocrine disrupting properties

12.7 Other adverse effects

N.A.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

Additional disposal information:

The methods of waste management must be assessed case by case, in relation to the composition of the waste itself, in the light of the provisions of the Community and national legislation in force.

For handling and measures in the event of accidental waste dispersion, the indications provided in points 6 and 7 apply in general; however, precautions and specific actions must be assessed in relation to the composition of the waste.

Resort to the disposal of the waste constituted by the substance after evaluating the possibilities of reuse or reuse in the same or in another production cycle, or start recovery in companies authorized pursuant to Legislative Decree 152/2006.

The waste made up of emptied containers must be placed in an area specifically identified for their collection pending disposal. The area must be paved and covered in order to avoid run-off by atmospheric precipitation.

The containers of the substance as it is, duly emptied, can be disposed of in landfills for special waste authorized, pursuant to Legislative Decree 36/2003, to withdraw the waste code attributed to them, provided that they comply with the limits and conditions for acceptability established by the same Legislative Decree 36/2003 and by the D.M. 27/09/2010.

The substance, in case of disposal as it is, pursuant to Directive 2008/98 / EC, can be disposed of in chemical-physical treatment plants authorized, pursuant to Legislative Decree 152/2006, to withdraw the waste code attributed to substance.

Disposal via the wastewater drain is not permitted.

SECTION 14: Transport information

Not classified as dangerous in the meaning of transport regulations.

14.1. UN number or ID number

N.A.

14.2. UN proper shipping name

N.A.

14.3. Transport hazard class(es)

N.A.

14.4. Packing group

N.A.

14.5. Environmental hazards

N.A.

14.6. Special precautions for user

N.A.

Road and Rail (ADR-RID):

N.A.

Air (IATA):

N.A.

Sea (IMDG):

N.A.

14.7. Maritime transport in bulk according to IMO instruments

N.A.

SECTION 15: Regulatory information

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

Dir. 98/24/EC (Risks related to chemical agents at work)

Dir. 2000/39/EC (Occupational exposure limit values)

Regulation (EC) n. 1907/2006 (REACH)

Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013

Regulation (EU) n. 286/2011 (ATP 2 CLP)

Regulation (EU) n. 618/2012 (ATP 3 CLP)

Regulation (EU) n. 487/2013 (ATP 4 CLP)

Regulation (EU) n. 944/2013 (ATP 5 CLP)

Regulation (EU) n. 605/2014 (ATP 6 CLP)

Regulation (EU) n. 2015/1221 (ATP 7 CLP)

Regulation (EU) n. 2016/918 (ATP 8 CLP)

Regulation (EU) n. 2016/1179 (ATP 9 CLP)

Regulation (EU) n. 2017/776 (ATP 10 CLP)

Regulation (EU) n. 2018/669 (ATP 11 CLP)

Regulation (EU) n. 2018/1480 (ATP 13 CLP)

Regulation (EU) n. 2019/521 (ATP 12 CLP)

Regulation (EU) n. 2020/217 (ATP 14 CLP)

Regulation (EU) n. 2020/1182 (ATP 15 CLP)

Regulation (EU) n. 2021/643 (ATP 16 CLP)

Regulation (EU) n. 2021/849 (ATP 17 CLP)

Regulation (EU) n. 2022/692 (ATP 18 CLP)

Regulation (EU) n. 2020/878

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product: None.

Restrictions related to the substances contained: None.

Provisions related to directive EU 2012/18 (Seveso III):

N.A.

Regulation (EU) No 649/2012 (PIC regulation)

No substances listed

German Water Hazard Class.

Class 2: hazardous for water.

SVHC Substances:

No SVHC substances present in concentration >= 0.1%

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the substance.

SECTION 16: Other information

Code	Description
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H360	May damage fertility or the unborn child if inhaled and in contact with skin.
H412	Harmful to aquatic life with long lasting effects.

Code	Hazard class and hazard category	Description
3.3/1	Eye Dam. 1	Serious eye damage, Category 1
3.4.2/1	Skin Sens. 1	Skin Sensitisation, Category 1
3.7/1B	Repr. 1B	Reproductive toxicity, Category 1B

4.1/C3	Aquatic Chronic 3	Chronic (long term) aquatic hazard, category 3

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

Legend to abbreviations and acronyms used in the safety data sheet:

ACGIH: American Conference of Governmental Industrial Hygienists

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

AND: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

ATE: Acute Toxicity Estimate

ATEmix: Acute toxicity Estimate (Mixtures)

BCF: Biological Concentration Factor

BEI: Biological Exposure Index

BOD: Biochemical Oxygen Demand

CAS: Chemical Abstracts Service (division of the American Chemical Society).

CAV: Poison Center

CE: European Community

CLP: Classification, Labeling, Packaging.

CMR: Carcinogenic, Mutagenic and Reprotoxic

COD: Chemical Oxygen Demand

COV: Volatile Organic Compound

CSA: Chemical Safety Assessment

CSR: Chemical Safety Report

DMEL: Derived Minimal Effect Level

DNEL: Derived No Effect Level.

DPD: Dangerous Preparations Directive

DSD: Dangerous Substances Directive

EC50: Half Maximal Effective Concentration

ECHA: European Chemicals Agency

EINECS: European Inventory of Existing Commercial Chemical Substances.

ES: Exposure Scenario

GefStoffVO: Ordinance on Hazardous Substances, Germany.

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

IARC: International Agency for Research on Cancer

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

IC50: half maximal inhibitory concentration

ICAO: International Civil Aviation Organization.

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).

IMDG: International Maritime Code for Dangerous Goods.

INCI: International Nomenclature of Cosmetic Ingredients.

IRCCS: Scientific Institute for Research, Hospitalization and Health Care

KAFH: KAFH

KSt: Explosion coefficient.

LC50: Lethal concentration, for 50 percent of test population.

LD50: Lethal dose, for 50 percent of test population.

LDLo: Leathal Dose Low

N.A.: Not Applicable

N/A: Not Applicable

N/D: Not defined/ Not available

NA: Not available

NIOSH: National Institute for Occupational Safety and Health

NOAEL: No Observed Adverse Effect Level

OSHA: Occupational Safety and Health Administration

PBT: Persistent, Bioaccumulative and Toxic

PGK: Packaging Instruction

PNEC: Predicted No Effect Concentration.

PSG: Passengers
RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL: Short Term Exposure limit.
STOT: Specific Target Organ Toxicity.
TLV: Threshold Limiting Value.
TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).
vPvB: Very Persistent, Very Bioaccumulative.
WGK: German Water Hazard Class.