

Revision nr. 1 Dated 08/09/2020

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

1.1. Product identifier

Mixture identification:

Product Name: INDURENT LAB Code: C100900

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

For professional use only. Catalyst for condensation silicone for the dental lab.

Avoid use: in article for supply to, or use by, the general public.

1.3. Details of the supplier of the safety data sheet

Name

Zhermack S.p.a

Via Bovazecchino 100

45021 Badia Polesine (RO)

Italy

tel. +39 0425-597611

fax +39 0425-597689

Competent person responsible for the safety data sheet:

msds@zhermack.com

1.4. Emergency telephone number

UK Emergency number: 999 (24 hours)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP)



Warning, Skin Irrit. 2, Causes skin irritation.

Warning, STOT RE 2, May cause damage to organs (blood) through prolonged or repeated exposure if swallowed.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard pictograms:



Warning

Hazard statements:

H315 Causes skin irritation.

H373 May cause damage to organs (blood) through prolonged or repeated exposure if swallowed.

Precautionary statements:

P264 Wash hands thoroughly after handling.

P280 Wear protective gloves.

P314 Get medical advice/attention if you feel unwell.

Special Provisions:

None

Contains

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Tetrakis(2-butoxyethyl)orthosilicate

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

None

2.3. Other hazards

vPvB Substances: None - PBT Substances: None

Other Hazards:

No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

Not Applicable

3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	Ident. Numb	er	Classification
>= 20% - < 30%	Tetrakis(2-butoxyethyl) orthosilicate	CAS: EC: REACH No.:	18765-38-3 242-560-0 01-21207615	3.9/2 STOT RE 2 H373 3.2/2 Skin Irrit. 2 H315
>= 3% - < 5%	Dioctyltin oxide		33-55-XXXX 870-08-6 212-791-1 01-21199712 68-27-XXXX	♦ 3.8/2 STOT SE 2 H371
>= 0,5% - < 1%	2-butoxyethanol; ethyleneglycol monobutyl ether; butyl cellosolve	Index number: CAS: EC:	603-014-00-0 111-76-2 203-905-0	 \$\int \text{3.1/4/Oral Acute Tox. 4 H302}\$ \$\int \text{3.1/4/Dermal Acute Tox. 4 H312}\$ \$\int \text{3.1/4/Inhal Acute Tox. 4 H332}\$ \$\int \text{3.2/2 Skin Irrit. 2 H315}\$ \$\int \text{3.3/2 Eye Irrit. 2 H319}\$

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 with plenty of running water and possibly with soap. Wash thoroughly the body (shower or bath).

Remove contaminated clothing immediatley and dispose off safely.

After contact with skin, wash immediately with soap and plenty of water.

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 contact with eyes, rinse immediately with plenty of water and seek medical advice. In case of Ingestion:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

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

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None

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).

Treatment:

None

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO2).

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

5.3. Advice for firefighters

Use suitable breathing apparatus.

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non emergency personnel:

Wear personal protection equipment.

Remove persons to safety.

See protective measures under point 7 and 8.

For emergency responders:

Wear personal protection equipment.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

6.3. Methods and material for containment and cleaning up

Wash with plenty of water.

6.4. Reference to other sections

See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

See also section 8 for recommended protective equipment.

Advice on general occupational hygiene:

Contamined clothing should be changed before entering eating areas.

Do not eat or drink while working.

7.2. Conditions for safe storage, including any incompatibilities

Keep away from food, drink and feed.

Incompatible materials:

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See section 10.5. Instructions as regards storage premises: Adequately ventilated premises.

7.3. Specific end use(s)

See section 1.2.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

INDURENT LAB

Tetrakis(2-butoxyethyl)orthosilicate - CAS: 18765-38-3

OEL Type	TWA	Duratio	STEL	Duratio	Notes	Country
		n		n		
No data available						

Dioctyltin oxide - CAS: 870-08-6

OEL Type	TWA		Duratio	STEL		Duratio	Notes	Country
			n			n		
AGW	0.01	0.002	8h	0.02	0.004	15min		GERMANY
	mg/m3	ppm		mg/m3	ppm			

2-butoxyethanol; ethyleneglycol monobutyl ether; butyl cellosolve - CAS: 111-76-2

OEL Type	TWA		Duratio	STEL		Duratio	Notes	Country
			n			n		-
AGW	49	10 ppm	8h	98	20 ppm	15min		GERMANY
	mg/m3			mg/m3				
MAK	49	10 ppm	8h	98	20 ppm	15min		GERMANY
	mg/m3			mg/m3				
VME/VLE	49	10 ppm	8h	98	20 ppm	15min		SWITZERLA
	mg/m3			mg/m3				ND
MV	98	20 ppm	8h	246	50 ppm	15min		SLOVENIA
	mg/m3			mg/m3				
MAK	49	10 ppm	8h	98	20 ppm	15min		SWITZERLA
	mg/m3			mg/m3				ND
AK	98		8h	246		15min		HUNGARY
	mg/m3			mg/m3				
ESD	98	20 ppm	8h	246	50 ppm	15min		TURKEY
	mg/m3			mg/m3				
GVI/KGVI	98	20 ppm	8h	246	50 ppm	15min		CROATIA
	mg/m3			mg/m3				
HTP	98	20 ppm	8h	250	50 ppm	15min		FINLAND
	mg/m3			mg/m3				
MAK	98	20 ppm	8h	200	40 ppm	15min		AUSTRIA
	mg/m3			mg/m3				
NDS/NDSCh	98		8h	200		15min		POLAND
	mg/m3			mg/m3				
NGV/KGV	50	10 ppm	8h	246	50 ppm	15min		SWEDEN
	mg/m3			mg/m3				
NPEL	98	20 ppm	8h	246	50 ppm	15min		SLOVAKIA
	mg/m3			mg/m3				(Slovak
								Republic)
EU	98	20 ppm	8h	246	50 ppm		Skin	



	mg/m3			mg/m3	Τ		1	
OELV	98	20 ppm	8h	246	50 ppm	15min		IRELAND
OLLV	mg/m3	Zo ppiii		mg/m3	oo ppiii	10111111		II (LL) (IVD
RD	50	10 ppm	8h	100	20 ppm	15min		LITHUANIA
	mg/m3			mg/m3				
RV	98	20 ppm	8h	246	50 ppm	15min		LATVIA
	mg/m3	''		mg/m3	''			
TGG	100		8h	246		15min		NETHERLAN
	mg/m3			mg/m3				DS
TLV	120	25 ppm	8h					GREECE
	mg/m3							
TLV	98	20 ppm	8h	246	50 ppm	15min		ESTONIA
	mg/m3			mg/m3				
TLV	98	20 ppm	8h	246	50 ppm	15min		MALTA
	mg/m3			mg/m3				
TLV	50	10 ppm	8h					NORWAY
	mg/m3							
TLV	98	20 ppm	8h	246	50 ppm	15min		ROMANIA
	mg/m3		ļ	mg/m3	ļ			
TLV	100	20.7	8h	200	41.4	15min		CZECH
	mg/m3	ppm	ļ	mg/m3	ppm			REPUBLIC
TLV	98	20 ppm	8h					DENMARK
T1.) /	mg/m3	00	01	0.40	50	45 .	-	0)/DD110
TLV	98	20 ppm	8h	246	50 ppm	15min		CYPRUS
TIV	mg/m3	00	01	mg/m3	50	45		DILLOADIA
TLV	98	20 ppm	8h	246	50 ppm	15min		BULGARIA
TLV ACCILL	mg/m3	20	8h	mg/m3	-		-	
TLV-ACGIH	98	20 ppm	8h	246	FO	15min		LUVEMBOUR
VL	I	20 ppm	on		50 ppm	Tomin		LUXEMBOUR
VLE	mg/m3 98	20 nnm	8h	mg/m3 246	EO nnm	15min		G
VLE	I	20 ppm	on	mg/m3	50 ppm	Tomin		PORTUGAL
VLEP	mg/m3 49	10 ppm	8h	246	50 nnm	15min	+	FRANCE
VLEP	mg/m3	то ррпі	011	mg/m3	50 ppm	13111111		FRANCE
VLEP	98	20 ppm	8h	246	50 ppm	15min		ITALY
VLLF	mg/m3	Zo ppili	011	mg/m3	30 ppiii	1311111		IIALI
VLEP	98	20 ppm	8h	246	50 ppm	15min		BELGIUM
V L L I	mg/m3	20 ppiii		mg/m3	Joo ppiii	10111111		DELOION
WEL	123	25 ppm	8h	246	50 ppm	15min	<u> </u>	UNITED
	mg/m3	PP		mg/m3	55 pp			KINGDOM
VLA	98	20 ppm	8h	245	50 ppm	15min		SPAIN
	mg/m3			mg/m3				
ACGIH	3	20 ppm	8h	J3			A3, BEI -	
							Eye and	
							URT irr	

DNEL Exposure Limit Values

Tetrakis(2-butoxyethyl)orthosilicate - CAS: 18765-38-3

Consumer: 12.5 mg/kg bw/d - Exposure: Human Oral - Frequency: Long Term, systemic effects

Consumer: 10.9 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

Worker Professional: 44 mg/m3 - Exposure: Human Inhalation - Frequency: Long

Term, systemic effects



Consumer: 12.5 mg/kg bw/d - Exposure: Human Dermal - Frequency: Long Term,

systemic effects

Worker Professional: 25 mg/kg bw/d - Exposure: Human Dermal - Frequency: Long

Term, systemic effects Dioctyltin oxide - CAS: 870-08-6

Worker Professional: 0.03 mg/m3 - Exposure: Human Inhalation - Frequency: Short

Term, local effects

Consumer: 0.001 mg/kg bw/d - Exposure: Human Oral - Frequency: Long Term,

systemic effects

Worker Professional: 0.03 mg/m3 - Exposure: Human Inhalation - Frequency: Short

Term, systemic effects

PNEC Exposure Limit Values

Tetrakis(2-butoxyethyl)orthosilicate - CAS: 18765-38-3

Target: Fresh Water - Value: 10 mg/l Target: Marine water - Value: 1 mg/l

Target: Freshwater sediments - Value: 63.6 mg/kg Target: Marine water sediments - Value: 6.4 mg/kg

Target: Microorganisms in sewage treatments - Value: 463 mg/l

Target: Soil (agricultural) - Value: 0.57 mg/kg

Biological Exposure Index

2-butoxyethanol; ethyleneglycol monobutyl ether; butyl cellosolve - CAS: 111-76-2

Value: 200 mg/g - medium: Creatinine - Biological Indicator: Butossiacetico acid (BAA)

in urine - Sampling Period: End of turn - Remark: With hydrolysis

8.2. Exposure controls

Precautionary measures:

Give adequate ventilation to the premises where the product is stored and/or handled.

Eye protection:

Wear airtight protective goggles.

Protection for skin:

Wear professional overalls and safety footwear.

Protection for hands:

Permeation resistant gloves A H J in PVA or fluorinated rubber.

The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability.

The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

Respiratory protection:

Mask with a type AP filter

Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered (e.g. TLV-TWA).

Thermal Hazards:

None

Environmental exposure controls:

None

Appropriate engineering controls:

None

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes
Appearance and colour:	Putty,red		
Odour:	Characteristic		
Odour threshold:	Not available		



pH:	Not Relevant		
Melting point / freezing	Not available		
point:			
Initial boiling point and	Not available		
boiling range:			
Flash point:	>100°C ° C	EN ISO 3679	
Evaporation rate:	Not available		
Solid/gas flammability:	Not Relevant		
Upper/lower flammability	Not available		
or explosive limits:			
Vapour pressure:	Not available		
Vapour density:	Not available		
Relative density:	0.95 g/cm3 (@23°C)		
Solubility in water:	Insoluble		
Solubility in oil:	Not available		
Partition coefficient	Not Relevant		
(n-octanol/water):			
Auto-ignition temperature:	Not available		
Decomposition	Not available		
temperature:			
Viscosity:	Not available		
Explosive properties:	Not available		
Oxidizing properties:	Not available		

9.2. Other information

Properties	Value	Method:	Notes
Miscibility:	Not available		
Fat Solubility:	Not available		
Conductivity:	Not available		
Substance Groups	Not available		
relevant properties			

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions

10.2. Chemical stability

Stable under normal conditions

10.3. Possibility of hazardous reactions

The vapours may also form explosive mixtures with the air.

10.4. Conditions to avoid

Avoid moisture and high temperature.

10.5. Incompatible materials

Water

Avoid contact with strong oxidizing materials.

10.6. Hazardous decomposition products

May develop: 2-Butoxyethanol.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological information of the product: INDURENT LAB

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a) acute toxicity

Not classified

b) skin corrosion/irritation

The product is classified: Skin Irrit. 2 H315

c) serious eye damage/irritation

Not classified

d) respiratory or skin sensitisation Not classified

e) germ cell mutagenicity Not classified

f) carcinogenicity Not classified

g) reproductive toxicity Not classified

h) STOT-single exposure Not classified

i) STOT-repeated exposure

The product is classified: STOT RE 2 H373

j) aspiration hazard

Not classified

Toxicological information of the main substances found in the product:

Tetrakis(2-butoxyethyl)orthosilicate - CAS: 18765-38-3

a) acute toxicity:

Test: LD50 - Route: Skin - Species: Rat > 2000 mg/kg - Source: (OECD TG 402, MSDS supplier).

Test: LD50 - Route: Oral - Species: Rat > 2000 mg/kg - Source: (OECD TG 401, MSDS supplier).

b) skin corrosion/irritation:

Species: Rabbit - Skin Irritant - Source: (OECD 404, MSDS supplier).

c) serious eye damage/irritation:

Species: Rabbit - Based on available data, the classification criteria are not met - Source: (OECD 405, MSDS supplier).

d) respiratory or skin sensitisation:

Test: Skin Sensitization - Species: Rat - Based on available data, the classification criteria are not met - Source: (OECD 406, Buehler test, MSDS supplier).

e) germ cell mutagenicity:

Test: In vitro - Negative - Source: (OECD 471, 490, OECD 473, MSDS supplier).

g) reproductive toxicity:

Route: Oral - Species: Rat - Based on available data, the classification criteria are not met - Source: (OECD 422, MSDS supplier).

i) STOT-repeated exposure:

Test: NOAEL - Route: Oral - Species: Rat 25 mg/kg - Notes: Target organ: blood. - Positive - Source: (OECD 422, MSDS supplier).

Dioctyltin oxide - CAS: 870-08-6

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat > 2500 mg/kg - Source: (MSDS supplier)
Test: LD50 - Route: Skin - Species: Rat > 2000 mg/kg - Source: (OECD 402, ECHA dossier).



d) respiratory or skin sensitisation:

Test: Skin Sensitization - Based on available data, the classification criteria are not met - Source: (LLNA, ECHA dossier).

e) germ cell mutagenicity:

Test: In vitro - Species: Salmonella Typhimurium - Negative - Source: (ECHA dossier). Test: In vivo - Species: Mouse - Negative - Source: (OECD 474, ECHA dossier).

i) STOT-repeated exposure:

Route: Oral - Species: Rat - Notes: Target organ: Immune system - Positive - Source: (ECHA dossier).

SECTION 12: Ecological information

12.1. Toxicity

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

Not classified for environmental hazards

Based on available data, the classification criteria are not met

Tetrakis(2-butoxyethyl)orthosilicate - CAS: 18765-38-3

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish > 201 mg/l - Duration h: 96h (Danio rerio, MSDS supplier).

Endpoint: EC50 - Species: Daphnia > 90 mg/l - Duration h: 48h (Daphnia magna, MSDS supplier).

b) Aquatic chronic toxicity:

Endpoint: NOEC - Species: Fish > 100 mg/l - Duration h: 21d (Danio rerio, MSDS supplier).

Endpoint: NOEC - Species: Daphnia 100 mg/l - Duration h: 21d (Daphnia magna, MSDS supplier).

Dioctyltin oxide - CAS: 870-08-6

a) Aquatic acute toxicity:

Endpoint: EC50 - Species: Daphnia > 0.21 mg/l - Duration h: 48h (Daphnia magna, Immobilisation Test, MSDS supplier).

Endpoint: LC50 - Species: Fish > 0.09 mg/l - Duration h: 96h (Brachydanio rerio, MSDS supplier).

Endpoint: NOEC - Species: Algae 0.0097 mg/l (OECD 201, ECHA dossier).

12.2. Persistence and degradability

Tetrakis(2-butoxyethyl)orthosilicate - CAS: 18765-38-3

Biodegradability: Readily biodegradable

Dioctyltin oxide - CAS: 870-08-6

Biodegradability: Non-readily biodegradable

12.3. Bioaccumulative potential

Not available

12.4. Mobility in soil

Not available

12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None

12.6. Other adverse effects

None

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.

SECTION 14: Transport information

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14.1. UN number

Not classified as dangerous in the meaning of transport regulations.

14.2. UN proper shipping name

Not available

14.3. Transport hazard class(es)

Not available

14.4. Packing group

Not available

14.5. Environmental hazards

ADR-Enviromental Pollutant: No IMDG-Marine pollutant: No

14.6. Special precautions for user

Not available

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

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) 2015/830

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)

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:

Restriction 3

Restrictions related to the substances contained:

Restriction 20

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

Seveso III category according to Annex 1, part 1

None

Lagerklasse according to TRGS 510:

LGK 10: Combustible liquids

WGK Classification (Water hazard class - Verwaltungsvorschrift wassergefährdende Stoffe)

WGK1 - Slightly hazardous for water

Lagerklasse according to TRGS 510:

LGK 10: Combustible liquids

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Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012: Dioctyltin oxide.

California Proposition 65

Substance(s) listed under California Proposition 65:

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture. Substances for which a Chemical Safety Assessment has been carried out:

Dioctyltin oxide

SECTION 16: Other information

Full text of phrases referred to in Section 3:

H373 May cause damage to organs (blood) through prolonged or repeated exposure if swallowed.

H315 Causes skin irritation.

H371 May cause damage to organs (immune system) if swallowed.

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H332 Harmful if inhaled.

H319 Causes serious eye irritation.

Hazard class and hazard category	Code	Description
Acute Tox. 4	3.1/4/Dermal	Acute toxicity (dermal), Category 4
Acute Tox. 4	3.1/4/Inhal	Acute toxicity (inhalation), Category 4
Acute Tox. 4	3.1/4/Oral	Acute toxicity (oral), Category 4
Skin Irrit. 2	3.2/2	Skin irritation, Category 2
Eye Irrit. 2	3.3/2	Eye irritation, Category 2
STOT SE 2	3.8/2	Specific target organ toxicity - single exposure, Category 2
STOT RE 2	3.9/2	Specific target organ toxicity - repeated exposure, Category 2

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
Skin Irrit. 2, H315	Calculation method
STOT RE 2, H373	Calculation method

This document was prepared by a competent person who has received appropriate training. Main bibliographic sources:

ECHA - European Chemical Agency

GESTIS - Information system on hazardous substances of the German Social Accident Insurance

IARC - International Agency for Research on Cancer

IPCS INCHEM - International Programme on Chemical Safety

ISS - Istituto Superiore di Sanità

PubChem - open chemistry database at the National Institutes of Health (NIH)

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The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality. 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.

ADR: European Agreement concerning the International Carriage of

Dangerous Goods by Road.

ATE: Acute Toxicity Estimate

ATEmix: Acute toxicity Estimate (Mixtures)

CAS: Chemical Abstracts Service (division of the American Chemical

Society).

CLP: Classification, Labeling, Packaging.

DNEL: Derived No Effect Level.

EINECS: European Inventory of Existing Commercial Chemical Substances.

GefStoffVO: Ordinance on Hazardous Substances, Germany.

GHS: Globally Harmonized System of Classification and Labeling of

Chemicals.

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport

Association" (IATA).

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.

KSt: Explosion coefficient.

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

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

PNEC: Predicted No Effect Concentration.

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.
TWA: Time-weighted average
WGK: German Water Hazard Class.