



Safety Data Sheet dated 7/4/2021, version 9.0, print date 29/4/2022

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

1.1. Product identifier

Mixture identification: Trade name: Trade code:

INDURITORE PER THIOVER All codes.

1.2. Relevant identified uses of the substance or mixture and uses advised against Recommended use: Two component insulating glass sealant. Industrial use only.

Use at industrial site leading to inclusion into/onto article.

Uses advised against: Professional, consumer.

- 1.3. Details of the supplier of the safety data sheet Company: Fenzi S.p.A. - Via Trieste 13/15 20067 - Tribiano (MI) - Italy Fenzi S.p.A. - Tel. +39 02 906221 - Fax +39 02 90631216
 Competent person responsible for the safety data sheet: safety@fenzigroup.com
- 1.4. Emergency telephone number Fenzi S.p.A. - Tel. +39 02 906221 (h.8.30-12.00 13.30-17.00)
 - National Poisons Information Service (NPIS): National Poisons Information Service (Birmingham Unit) City Hospital Dudley Rd B187QH - Birmingham (+44) 844 892 0111 - 0344 892 0111.

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, Eye Irrit. 2, Causes serious eye irritation.
- 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

Hazard pictograms:



Warning Hazard statements: H315 Causes skin irritation. H319 Causes serious eye irritation. H412 Harmful to aquatic life with long lasting effects. Precautionary statements: P264 Wash ... Thoroughly after handling. P273 Avoid release to the environment. P280 Wear protective gloves/protective clothing/eye protection/face protection.

INDURITORE PER THIOVER/version 9.0

Page n. 1 of 14



P314 Get medical advice/attention if you feel unwell. P337+P313 If eye irritation persists: Get medical advice/attention. P501 Dispose of contents/container in accordance with applicable regulations. Special Provisions: None Contains manganese dioxide disulfiram; tetraethylthiuramdisulfide: May produce an allergic reaction. 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
 - N.A.
- 3.2. Mixtures

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

Qty	Name	ldent. Numbe	r	Classification
>= 20% - < 25%	manganese dioxide	Index number: CAS: EC: REACH No.:	025-001-00-3 1313-13-9 215-202-6 01- 2119452801- 43-XXXX	
>= 0.5% - < 1%	disulfiram; tetraethylthiuramdisulfid e	Index number: CAS: EC: REACH No.:	006-079-00-8 97-77-8 202-607-8 01- 2119555278- 30-XXXX	
>= 0.5% - < 1%	1,3-diphenylguanidine	Index number: CAS: EC: REACH No.:	612-149-00-4 102-06-7 203-002-1 01- 2119519144- 47-XXXX	 3.1/4/Oral Acute Tox. 4 H302 3.2/2 Skin Irrit. 2 H315 3.3/2 Eye Irrit. 2 H319 3.7/2 Repr. 2 H361f 3.8/3 STOT SE 3 H335 4.1/C2 Aquatic Chronic 2 H411

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 immediately and dispose off safely.

INDURITORE PER THIOVER/version 9.0

Page n. 2 of 14



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 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.

- After contact with skin, wash immediately with soap and plenty of water.
- 4.2. Most important symptoms and effects, both acute and delayed

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 spray
 Carbon dioxide (CO2).
 Extinguishing media which must not be used for safety reasons:
 Waterjet
 Special hazards arising from the substance or mixture
 Do not inhale explosion and combustion gases.

- Burning produces heavy smoke. See also section 10.6.
- 5.3. Advice for firefighters
 - Use suitable protective clothing and 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
 - Wear personal protection equipment.
 - Remove persons to safety.
 - See protective measures under point 7 and 8.
- 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 Limit the spillage with absorbent barriers. Insulate the manhole to the spill site. Soak up with inert absorbent material (eg. sand, silica gel, pads). Dispose of as special waste in compliance with local and national regulations.
- 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.

INDURITORE PER THIOVER/version 9.0

Page n. 3 of 14



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: None in particular. Instructions as regards storage premises: Adequately ventilated premises. See, too, paragraph 8.2 below.

7.3. Specific end use(s) Two component insulating glass sealant. Industrial use only. Use at industrial site leading to inclusion into/onto article.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters manganese dioxide - CAS: 1313-13-9 OEL - TWA(8h): 0.05 mg/m3 - STEL: 0.2 mg/m3 - Behaviour: Indicative - Notes: Directive UE/98/24/CE disulfiram; tetraethylthiuramdisulfide - CAS: 97-77-8 ACGIH - TWA(8h): 2 mg/m3 - Notes: A4 - Vasodilation, nausea **DNEL Exposure Limit Values** manganese dioxide - CAS: 1313-13-9 Worker Industry: 0.2 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects - Notes: Unlikely route of exposure in liquid mixture. Worker Industry: 0.00414 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects - Notes: bw/day disulfiram; tetraethylthiuramdisulfide - CAS: 97-77-8 Worker Industry: 31 mg/kg - Exposure: Human Dermal - Frequency: Short Term, systemic effects - Notes: bw/day Worker Industry: 0.592 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects - Notes: bw/day Worker Industry: 0.696 mg/m3 - Exposure: Human Inhalation - Frequency: Short Term (acute) - Notes: Unlikely route of exposure in liquid mixture. Worker Industry: 0.146 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects - Notes: Unlikely route of exposure in liquid mixture. 1,3-diphenylguanidine - CAS: 102-06-7 Worker Industry: 120 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, local effects - Notes: bw/day. Unlikely route of exposure in liquid mixture. Worker Industry: 1.7 mg/kg - Exposure: Human Dermal - Frequency: Long Term, local effects - Notes: bw/day **PNEC Exposure Limit Values** manganese dioxide - CAS: 1313-13-9 Target: Fresh Water - Value: 0.00014 mg/l Target: Marine water - Value: 0.000014 mg/l Target: Freshwater sediments - Value: 0.037 mg/kg - Notes:: dw Target: Marine water sediments - Value: 0.0037 mg/kg - Notes:: dw Target: Soil (agricultural) - Value: 0.027 mg/kg - Notes:: dw Target: Microorganisms in sewage treatments - Value: 100 mg/l disulfiram; tetraethylthiuramdisulfide - CAS: 97-77-8 Target: Fresh Water - Value: 0.00046 mg/l Target: Freshwater sediments - Value: 0.047 mg/kg Target: Marine water - Value: 0.000046 mg/l Target: Marine water sediments - Value: 0.0047 mg/kg Target: Soil (agricultural) - Value: 0.00912 mg/kg

INDURITORE PER THIOVER/version 9.0

Page n. 4 of 14



Target: Microorganisms in sewage treatments - Value: 0.0311 mg/l 1,3-diphenylguanidine - CAS: 102-06-7 Target: Fresh Water - Value: 0.030 mg/l Target: Marine water - Value: 0.003 mg/l Target: Freshwater sediments - Value: 14.9 mg/kg - Notes:: dw Target: Marine water sediments - Value: 1.49 mg/kg - Notes:: dw Target: Soil (agricultural) - Value: 0.404 mg/kg - Notes:: dw 8.2. Exposure controls Appropriate engineering controls: Control systems engineering: Provide a good level of general ventilation (no less than 3 air changes per hour) Individual protection measures Eye protection: Eye glasses with side protection EN 166. Protection for skin: Use appropriate protective clothing. (EN 340 - EN13034 - EN14605) Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton. Protection for hands: Suitable gloves type: EN 374-1, En 374-2, EN 374-3, EN 420 NBR (nitrile rubber) with minimum efficiency of 90%. Wear chemically resistant gloves (tested to EN 374) in combination with basic employee training., with minimum efficiency of 90%. Respiratory protection: Not needed for normal use. Thermal Hazards: None Environmental exposure controls: None Safe Use of Mixture.

This paragraph is intended to communicate the conditions for safe use based on the type of identified application..

General description of the process: Industrial use of reactive adhesives by low energy application. [for details see section 16]

Operational Conditions:

Indoor use.

Maximum duration of individual exposure: covers daily use up to 8 hours, 225 days per year.

Risk Management Measures:

- For risk management measures associated with the following activities:
- Loading of application equipment.
- Application.
- Polymerization.
- Cleaning of equipment
- Waste management

INDURITORE PER THIOVER/version 9.0 Page n. 5 of 14





SECTION 9: Physical and chemical properties 9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes:
Appearance and colour:	Liquid Black		at 20°C and 101,3 kPa
Odour:	none		
Odour threshold:	Not Relevant		
pH:	N.A.		
Melting point / freezing point:	<-20 °C	Regulation (EC) No. 440/ 2008, Annex, A.1	at 101,3 kPa. No measurable thermal phenomenon was observed up to -20 °C.
Initial boiling point and boiling range:	>200 °C	Regulation (EC) No. 440/ 2008, Annex, A.2	at 101,3 kPa. No measurable thermal phenomenon was observed up to 200 °C.
Flash point:	Not Relevant		Literature data show the mixture as non-flammable.
Evaporation rate:	Not Relevant		Does not apply for mixture.
Solid/gas flammability:	N.A.		Does not apply. The mixture is not flammable.
Upper/lower flammability or explosive limits:	Not Relevant		Does not apply. Mixture is not explosive.
Vapour pressure:	N.A.		Does not apply for mixture.
Vapour density:	N.A.		Does not apply for mixture.
Relative density:	1.71 g/cm3	Regulation (EC) No. 440/ 2008, Annex, A.3	at 20°C and 101.3 kPa
Solubility in water:	none		
Solubility in oil:	none		
Partition coefficient (n- octanol/water):	N.A.		Does not apply for mixture.
Auto-ignition temperature:	N.A.		

Auto-ignition temperature: N.A. INDURITORE PER THIOVER/version 9.0



Decomposition temperature:	N.A.		
Viscosity:	30	Pa.s	at 25°C.
Explosive properties:	N.A.		There are no chemical groups associated with explosive properties.
Oxidizing properties:	N.A.		There are no chemical groups associated with oxidising properties.

9.2. Other information

Properties	Value	Method:	Notes:
Miscibility:	Not Relevant		
Fat Solubility:	none		
Conductivity:	N.A.		
Substance Groups relevant properties	Not Relevant		

Appropriate engineering controls:

Control systems engineering: Provide a good level of general ventilation (no less than 3 air changes per hour)

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
- None
- 10.4. Conditions to avoid
 - Stable under normal conditions.
- 10.5. Incompatible materials None in particular.
- 10.6. Hazardous decomposition products
 - HCI, CO, CO2.

Thermal decomposition products depend upon temperature, air supply and the presence of other materials.

SECTION 11: Toxicological information

- 11.1. Information on toxicological effects
- Toxicological information of the product:
 - N.Ă.
- Toxicological information of the main substances found in the product:
 - manganese dioxide CAS: 1313-13-9
 - a) acute toxicity:
 - Test: LD50 Route: Oral = 509 mg/kg
 - Test: LC50 Route: Inhalation = 1.53 mg/l Duration: 4h Source: Unlikely route of exposure in liquid mixture.

INDURITORE PER THIOVER/version 9.0

Page n. 7 of 14



disulfiram; tetraethylthiuramdisulfide - CAS: 97-77-8 a) acute toxicity: Test: LD50 - Route: Oral - Species: Rat > 1300 mg/kg Test: LD50 - Route: Skin - Species: Rabbit > 2000 mg/kg 1,3-diphenylguanidine - CAS: 102-06-7 a) acute toxicity: Test: LC50 - Route: Inhalation = 0.5 mg/l Test: LD50 - Route: Oral - Species: Rat = 107 mg/kg - Notes: OECD TEST 401 Test: LD50 - Route: Skin - Species: Rabbit > 2000 mg/kg b) skin corrosion/irritation: Test: Skin Irritant - Species: Rabbit Negative Test: Eye Irritant - Species: Rabbit Positive

If not differently specified, the information required in Regulation (EU)2015/830 listed below must be considered as N.A.:

a) acute toxicity;

b) skin corrosion/irritation;

c) serious eye damage/irritation;

d) respiratory or skin sensitisation;

e) germ cell mutagenicity;

f) carcinogenicity;

g) reproductive toxicity;

h) STOT-single exposure;

i) STOT-repeated exposure;

j) aspiration hazard.

SECTION 12: Ecological information

12.1. Toxicity Adopt good working practices, so that the product is not released into the environment. disulfiram; tetraethylthiuramdisulfide - CAS: 97-77-8 a) Aquatic acute toxicity: Endpoint: EC50 - Species: Daphnia = 0.12 mg/l - Duration h: 48 Endpoint: EC50 - Species: Algae = 1.8 mg/l - Duration h: 96 Endpoint: LC50 - Species: Fish = 0.32 mg/l - Duration h: 96 f) Effects in sewage plants: Endpoint: LC50 - Species: BACTERIA = 1.21 mg/l - Duration h: 0.25 1,3-diphenylguanidine - CAS: 102-06-7 a) Aquatic acute toxicity: Endpoint: LC50 - Species: Fish = 4.2 mg/l - Duration h: 96 Endpoint: EC50 - Species: Daphnia = 17 mg/l - Duration h: 48 b) Aquatic chronic toxicity: Endpoint: NOEC - Species: Fish 1.3 mg/l - Duration h: 34 - Notes: day Endpoint: NOEC - Species: Daphnia 0.6 mg/l - Duration h: 21 - Notes: day Endpoint: NOEC - Species: Algae 0.3 mg/l - Duration h: 96 e) Plant toxicity: Endpoint: EC50 - Species: Algae = 1.7 mg/l - Duration h: 96 f) Effects in sewage plants: Endpoint: EC50 = 147 mg/l - Duration h: 3 12.2. Persistence and degradability 1,3-diphenylguanidine - CAS: 102-06-7 Biodegradability: Readily biodegradable - Test: Dissolved organic carbon - %: 85 - Notes: % 12.3. Bioaccumulative potential 1,3-diphenylguanidine - CAS: 102-06-7 Bioaccumulation: Not bioaccumulative - Test: Kow - Partition coefficient 2.42 12.4. Mobility in soil N.A. **INDURITORE PER THIOVER/version 9.0**

Page n. 8 of 14



- 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

Follow the provisions of Directive 2008/98/EU on waste management.

For assignment of code for the waste follow the Decision 2014/955/EU and national legislation. Disposal must be entrusted to a waste management company, subject to national and, where appropriate, local legislation.

Residues and containers used must be handled, recovered or disposed of according to local, national, national legislation.

It is advisable to send to waste management company all the safety information of the material contained in the packaging.

Do not discharge waste into sewers or watercourses.

Waste transport may be according to ADR regulation.

Additional disposal information:

E.W.C. 08 04 09* waste adhesives and sealants containing organic solvents or other dangerous substances

Packaging: Packaging containing residues of hazardous substances must be sent to recovery or disposal in accordance with national waste management regulations.

For the verification and attribution of Hazardous Properties (HP) to hazardous waste, please follow Regulation n.1357/2014/EU.

SECTION 14: Transport information

14.1. UN number

- Not classified as dangerous in the meaning of transport regulations.
- 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 Marine pollutant: none
- 14.6. Special precautions for user N.A.
- 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code Environmental Pollutant: N.A.
- 14.8 Exemptions

N.A.

SECTION 15: Regulatory information

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

This product does not contain substances (SVHC) included in the list established in accordance with Article 59, paragraph 1, a concentrations equal to or greater than 0.1%.

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

INDURITORE PER THIOVER/version 9.0 Page n. 9 of 14



Regulation (EU) n. 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) 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: No restriction. Volatile Organic compounds - VOCs = 0.00 g/l (0.00%)Volatile CMR substances = 0.00 % Organic Carbon - C = 0.00 Where applicable, refer to the following regulatory provisions : Directive 2012/18/EU (Seveso III) Regulation (EC) nr 648/2004 (detergents). Dir. 2004/42/EC (VOC directive) Provisions related to directive EU 2012/18 (Seveso III): Seveso III category according to Annex 1, part 1 None

15.2. Chemical safety assessment A Chemical Safety Assessment has been carried out for the mixture. (Sec. 8.2)

SECTION 16: Other information

Text of phrases referred to under heading 3:

H302 Harmful if swallowed.

H332 Harmful if inhaled.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H373 May cause damage to organs through prolonged or repeated exposure.

H317 May cause an allergic skin reaction.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

H361f Suspected of damaging the unborn child.

H335 May cause respiratory irritation.

H411 Toxic to aquatic life with long lasting effects.

Hazard class and hazard category	Code	Description
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

INDURITORE PER THIOVER/version 9.0 Page n. 10 of 14



Skin Sens. 1	3.4.2/1	Skin Sensitisation, Category 1
Repr. 2	3.7/2	Reproductive toxicity, Category 2
STOT SE 3	3.8/3	Specific target organ toxicity - single exposure, Category 3
STOT RE 2	3.9/2	Specific target organ toxicity - repeated exposure, Category 2
Aquatic Acute 1	4.1/A1	Acute aquatic hazard, category 1
Aquatic Chronic 1	4.1/C1	Chronic (long term) aquatic hazard, category 1
Aquatic Chronic 2	4.1/C2	Chronic (long term) aquatic hazard, category 2
Aquatic Chronic 3	4.1/C3	Chronic (long term) aquatic hazard, category 3

Paragraphs modified from the previous revision:

SECTION 1: Identification of the substance/mixture and of the company/undertaking SECTION 7: Handling and storage SECTION 8: Exposure controls/personal protection SECTION 9: Physical and chemical properties SECTION 15: Regulatory information SECTION 16: Other information

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
Eye Irrit. 2, H319	Calculation method
Aquatic Chronic 3, H412	Calculation method

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 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

INDURITORE PER THIOVER/version 9.0

Page n. 11 of 14



CEPE: CLP: DNEL: EINECS: GefStoffVO: GHS:	Society). European Council of the Paint, Printing Ink and Artists' Colours Industry. Classification, Labeling, Packaging. Derived No Effect Level. European Inventory of Existing Commercial Chemical Substances. Ordinance on Hazardous Substances, Germany. Globally Harmonized System of Classification and Labeling of
010.	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.
SWEDs:	Sector-specific Workers Exposure Descriptions.
TLV:	Threshold Limiting Value.
TWA:	Time-weighted average
WGK:	German Water Hazard Class.

Poison center:

Austria:

Umweltbundesamt GmbH Abteilung Chemikalien Spittelauer Lände 51090 Wien Tel: +43 1 313045620

Belgium

Centre antipoisons / Antigif Centrum Hôpital Militaire Reine Astrid Rue Bruyn 1, 1120 Bruxelles Tel: +32 02 264 96 36

Bulgaria:

National Toxicology Information Center, Hospital for Active Medical Treatment and Emergency Medicine "N.I.Pirogov" Sofia – 1000, 21 Totleben Boulevard - 1606 Sofia, Tel/ fax: +359 2 9154 409

Croatia:

Croatian Institute for Toxicology and Antidoping 10000 Zagreb Borongajska cesta 83 g Fax: + 385 01 46 41 368

Cyprus:

Department of Labour Inspection Ministry of Labour Welfare and Social Insurance 12, Apelli street, Nicosia 1493, Cyprus Tel: +35722405611

Czech Republic:

Department of Chemicals and Biocides Ministry of Health, Palackého námestí 4 CZ - 128 01 Prague 2, Tel: +420 2 2497 1111

Denmark:

The Danish Environmental Protection Agency, Haraldsgade 53 - 2100 København Ø, INDURITORE PER THIOVER/version 9.0

Page n. 12 of 14



Tel: +45 72 54 40 00.

Estonia:

Poisoning Information Centre Health Board Gonsiori 29, 15027 Tallinn, Estonia Tel: +372 62 69 379

Finland:

Chemical Products Register, Finnish Safety and Chemicals Agency (Tukes), Yliopistonkatu 38 FI-33100 Tampere, Finland (Attila Building), Tel: (+358) 29 5052 000.

France:

Institut national de recherche et de sécurité (INRS), 65 boulevard Richard Lenoir, 75011 Paris, Tel: +33 1 40 44 30 00. Centre antipoison et de toxicovigilance de Nancy, Hôpital Central 29 avenue du Maréchal de Lattre de Tassigny 54035 Nancy Cedex, Tel : +33 3 83 22 50 50.

Germany:

Federal Institute for Risk Assessment (BfR) Unit: Poison and Product Documentation Centre, Max-Dohrn-Str. 8-10 10589 Berlin, Tel. +49 30-18412-3460

Greece:

General Chemical State Laboratory Directorate of Energy, Industrial and Chemical Products Section B - Environment, An. Tsoha 16, GR-115 21, Athens, Tel: +30 210 6479409.

Hungary:

National Institute of Chemical Safety (HU: Országos Kémiai Biztonsági Intézet, OKBI), Nagyvárad tér 2 BUDAPEST H-1096.

Ireland:

Beaumont Hospital - National Poisons Information Centre Beaumont Road, Dublin 9, PO Box 1297 Tel: +353 1 8092566

Iceland:

Umhverfisstofnun (Environment Agency of Iceland) Suðurlandsbraut 24 108 Reykjvik Tel: (+354) 591 2000

Italy:

Istituto Superiore di Sanità, National Center for Chemicals Viale Regina Elena, 299 I-00161 ROMA Tel: +39 0649906140

Latvia:

Latvian Environment, Geology and Meteorology Centre (LEGMC)Maskavas Street 165, Riga, LV-1019 Tel: +371 67032600

Lithuania:

Environmental Protection Agency, Juozapaviciaus st. 9, LT09311 Vilnius, Lithuania Tel: + 370 70662008

Luxembourg:

Ministère de la Santé Allée Marconi, L-2120, Luxembourg Tel: + 352 24785551

Malta:

Malta Competition and consumer affairs authority (MCCAA) Mizzi House, National Road Blata I-Bajda INDURITORE PER THIOVER/version 9.0

Page n. 13 of 14



HMR9010 - Malta Tel: +356 2395 2000

Netherlands:

National Poisons Information Center University Medical Center Utrecht PO Box 85500, 3508 GA Utrecht Tel: +31 88 75 585 61

Norway:

Norwegian Environment Agency, Brattørkaia 15, 7010 Trondheim - Grensesvingen 7, 0663 - Oslo, Tel: +47 73 58 05 00

Poland:

Department for Dangerous Substances and Preparations / Bureau for Chemical Substances and Preparations, Dowborczykow Street 30/34 90-019 Lodz, Tel: +48 42 25 38 400.

Portugal:

Centro de Informação Antivenenos - Instituto Nacional de Emergência Médica, Rua Almirante Barroso, 36 1000-013 Lisboa -Portugal, Tel: + 351 213 303 271.

Romania:

National Institute for Public Health, Str. Dr. Leonte Anastasievici Nr.1-3, Sector 5 Bucuresti, 050463, Tel: +40 21 318 36 06.

Slovakia:

National toxicological information centre University Hospital Bratislava Department of Occupational Medicine and Toxicology Limbova 5, 833 05 Bratislava Tel: + 421 2 5465 2307

Slovenia:

Chemicals Office of the Republik of Slovenia (CORS), Ministry of Health, Ajdovšcina 4, SI - 1000 Ljubljana

Tel: +386 1 400 60 51

Spain: Instituto Nacional de Toxicología y Ciencias Forenses, Calle José Echegaray, 4 28032 Las Rozas de Madrid, Madrid, Tel: +34 917689800.

Sweden: The Swedish Poison Information Center at the Medical Product Agency, Karolinska Universitetssjukhuset, S-171 76 Stockholm, Tel: +46 8 331231.

United Kingdom: National Poisons Information Service (NPIS): National Poisons Information Service (Birmingham Unit) City Hospital Dudley Rd B187QH - Birmingham Tel: (+44) 844 892 0111 - 0344 892 0111

Value of the COV for Swiss legislation (federal law of 7.10.1983 and decree of 12.11.1997): 0.00 %