



# Tenax Spa

## RESINA 5010

Revision nr.9  
Dated 04/07/2019  
Printed on 04/07/2019  
Page n. 1 / 10  
Replaced revision:8 (Dated 14/11/2018)

## Safety Data Sheet

According to Annex II to REACH - Regulation 2015/830

### SECTION 1. Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product name **RESINA 5010**  
Chemical name and synonym **EPOXY RESIN FROM BISPHENOL A**

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

Intended use **LIQUID EPOXY RESIN FOR STONES.**

Identified Uses	Industrial	Professional	Consumer
<b>ADHESIVE SYSTEM/TREATMENT FOR STONE SECTOR</b>	-	✓	-

#### 1.3. Details of the supplier of the safety data sheet

Name **Tenax Spa**  
Full address **Via I Maggio, 226**  
District and Country **37020 Volargne Italy (VR)**  
Tel. **+39 045 6887593**  
Fax **+39 045 6862456**  
e-mail address of the competent person responsible for the Safety Data Sheet **msds@tenax.it**

#### 1.4. Emergency telephone number

For urgent inquiries refer to **800.883300 (24h) Centro Antiveleni (Bergamo)**  
**0 800 314 7900 (Turkey) only, or +90 0312 433 70 01 Toxicology Department and Poisons Centre**  
**+98 21 6419306 / +98 21 6405569 Poisons Information Centre (Tehran)**  
**+91 484 4008056 Poison Control Centre (South India)**  
**(011) 642 2417 / (011) 488 3108 Anti-Poison Centre (Johannesburg)**

### SECTION 2. Hazards identification

#### 2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in (EC) Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of (EU) Regulation 2015/830.

Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard classification and indication:

Germ cell mutagenicity, category 2	H341	Suspected of causing genetic defects.
Eye irritation, category 2	H319	Causes serious eye irritation.
Skin irritation, category 2	H315	Causes skin irritation.
Skin sensitization, category 1	H317	May cause an allergic skin reaction.
Hazardous to the aquatic environment, chronic toxicity, category 2	H411	Toxic to aquatic life with long lasting effects.

#### 2.2. Label elements

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms:





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### SECTION 2. Hazards identification ... / >>

Signal words: Warning

Hazard statements:

**H341** Suspected of causing genetic defects.  
**H319** Causes serious eye irritation.  
**H315** Causes skin irritation.  
**H317** May cause an allergic skin reaction.  
**H411** Toxic to aquatic life with long lasting effects.  
**EUH205** Contains epoxy constituents. May produce an allergic reaction.

Precautionary statements:

**P501** Dispose of contents / container according to applicable law.  
**P102** Keep out of reach of children.  
**P280** Wear protective gloves/ protective clothing / eye protection / face protection.  
**P101** If medical advice is needed, have product container or label at hand.

**Contains:** 2,3-epoxypropyl o-tolyl ether  
REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN)

#### 2.3. Other hazards

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

### SECTION 3. Composition/information on ingredients

#### 3.2. Mixtures

Contains:

Identification	x = Conc. %	Classification 1272/2008 (CLP)
<b>REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN)</b>		
CAS	25068-38-6 50 ≤ x < 100	Eye Irrit. 2 H319, Skin Irrit. 2 H315, Skin Sens. 1 H317, Aquatic Chronic 2 H411
EC	500-033-5	
INDEX	603-074-00-8	
Reg. no.	01-2119456619-26	
<b>2,3-epoxypropyl o-tolyl ether</b>		
CAS	2210-79-9 25 ≤ x < 35	Muta. 2 H341, Skin Irrit. 2 H315, Skin Sens. 1 H317, Aquatic Chronic 2 H411, Classification note according to Annex VI to the CLP Regulation: C
EC	218-645-3	
INDEX	603-056-00-X	
Reg. no.	01-2119966907-18-0003	

The full wording of hazard (H) phrases is given in section 16 of the sheet.

### SECTION 4. First aid measures

#### 4.1. Description of first aid measures

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. If problem persists, seek medical advice.

SKIN: Remove contaminated clothing. Wash immediately with plenty of water. If irritation persists, get medical advice/attention. Wash contaminated clothing before using it again.

INHALATION: Remove to open air. In the event of breathing difficulties, get medical advice/attention immediately.

INGESTION: Get medical advice/attention. Induce vomiting only if indicated by the doctor. Never give anything by mouth to an unconscious person, unless authorised by a doctor.

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

Specific information on symptoms and effects caused by the product are unknown.

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

Information not available



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### SECTION 5. Firefighting measures

#### 5.1. Extinguishing media

##### SUITABLE EXTINGUISHING EQUIPMENT

The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.

##### UNSUITABLE EXTINGUISHING EQUIPMENT

None in particular.

#### 5.2. Special hazards arising from the substance or mixture

##### HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Do not breathe combustion products.

#### 5.3. Advice for firefighters

##### GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

##### SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

### SECTION 6. Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

Block the leakage if there is no hazard.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

#### 6.2. Environmental precautions

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

#### 6.3. Methods and material for containment and cleaning up

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.

Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

#### 6.4. Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

### SECTION 7. Handling and storage

#### 7.1. Precautions for safe handling

Before handling the product, consult all the other sections of this material safety data sheet. Avoid leakage of the product into the environment. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat.

#### 7.2. Conditions for safe storage, including any incompatibilities

Store only in the original container. Store the containers sealed, in a well ventilated place, away from direct sunlight. Keep containers away from any incompatible materials, see section 10 for details.

#### 7.3. Specific end use(s)

Information not available



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### SECTION 8. Exposure controls/personal protection

#### 8.1. Control parameters

#### REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN)

##### Predicted no-effect concentration - PNEC

Normal value in fresh water	0,006	mg/l
Normal value in marine water	0,0006	mg/l
Normal value for fresh water sediment	0,996	mg/kg
Normal value for marine water sediment	0,0996	mg/kg
Normal value for water, intermittent release	0,018	mg/l
Normal value of STP microorganisms	10	mg/l
Normal value for the terrestrial compartment	0,196	mg/kg

##### Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers			Effects on workers			
	Acute	Acute	Chronic	Chronic	Acute	Chronic	Chronic
	local	systemic	local	systemic	local	systemic	systemic
Oral		0,75	0,75	0,75			
		mg/kg bw/d		mg/kg bw/d			
Inhalation					12,25	12,25	12,25
					mg/m3		mg/m3
Skin		3,571	3,571	3,571	8,33	8,33	8,33
		mg/kg bw/d		mg/kg bw/d	mg/kg		mg/kg
					bw/d		bw/d

VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified.

#### 8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.

When choosing personal protective equipment, ask your chemical substance supplier for advice.

Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye wash station.

##### HAND PROTECTION

Protect hands with category III work gloves (see standard EN 374).

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.

##### SKIN PROTECTION

Wear category II professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

##### EYE PROTECTION

Wear airtight protective goggles (see standard EN 166).

##### RESPIRATORY PROTECTION

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, use a mask with a type A filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.

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. The protection provided by masks is in any case limited.

If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

##### ENVIRONMENTAL EXPOSURE CONTROLS

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

Product residues must not be indiscriminately disposed of with waste water or by dumping in waterways.

### SECTION 9. Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

Properties	Value	Information
Appearance	liquid	



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### SECTION 9. Physical and chemical properties ... / >>

Colour	colourless
Odour	typical
Odour threshold	Not available
pH	Not available
Melting point / freezing point	Not available
Initial boiling point	Not available
Boiling range	Not available
Flash point	160 °C
Evaporation Rate	Not available
Flammability of solids and gases	Not available
Lower inflammability limit	Not available
Upper inflammability limit	Not available
Lower explosive limit	Not available
Upper explosive limit	Not available
Vapour pressure	Not available
Vapour density	Not available
Relative density	1,1
Solubility	SOLUBLE IN AROMATIC
Partition coefficient: n-octanol/water	Not available
Auto-ignition temperature	Not available
Decomposition temperature	Not available
Viscosity	Not available
Explosive properties	Not available
Oxidising properties	Not available

#### 9.2. Other information

Total solids (250°C / 482°F)	100,00 %
VOC (Directive 2010/75/EC) :	0
VOC (volatile carbon) :	0

### SECTION 10. Stability and reactivity

#### 10.1. Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

#### 10.2. Chemical stability

The product is stable in normal conditions of use and storage.

#### 10.3. Possibility of hazardous reactions

No hazardous reactions are foreseeable in normal conditions of use and storage.

#### 10.4. Conditions to avoid

None in particular. However the usual precautions used for chemical products should be respected.

#### 10.5. Incompatible materials

Information not available

#### 10.6. Hazardous decomposition products

Information not available

### SECTION 11. Toxicological information

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification.

It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

#### 11.1. Information on toxicological effects

Metabolism, toxicokinetics, mechanism of action and other information

Information not available



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### SECTION 11. Toxicological information ... / >>

#### Information on likely routes of exposure

Information not available

#### Delayed and immediate effects as well as chronic effects from short and long-term exposure

Information not available

#### Interactive effects

Information not available

#### ACUTE TOXICITY

LC50 (Inhalation) of the mixture:	Not classified (no significant component)
LD50 (Oral) of the mixture:	Not classified (no significant component)
LD50 (Dermal) of the mixture:	Not classified (no significant component)

#### 2,3-epoxypropyl o-tolyl ether

LD50 (Oral)	2800 mg/kg Ratto
LD50 (Dermal)	> 2000 mg/kg Ratto

#### REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN)

LD50 (Oral)	> 15000 mg/kg Ratto
LD50 (Dermal)	23000 mg/kg Coniglio

#### SKIN CORROSION / IRRITATION

Causes skin irritation

#### SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye irritation

#### RESPIRATORY OR SKIN SENSITISATION

Sensitising for the skin

#### GERM CELL MUTAGENICITY

Suspected of causing genetic defects

#### CARCINOGENICITY

Does not meet the classification criteria for this hazard class

#### REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

#### STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

#### STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

#### ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

### SECTION 12. Ecological information

This product is dangerous for the environment and is toxic for aquatic organisms. In the long term, it have negative effects on acquatic environment.



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### SECTION 12. Ecological information ... / >>

#### 12.1. Toxicity

REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN)

LC50 - for Fish	2 mg/l/96h Oncorhynchus mykiss
EC50 - for Crustacea	1,8 mg/l/48h Daphnia
EC50 - for Algae / Aquatic Plants	> 11 mg/l/72h Scenedesmus capricornutum
Chronic NOEC for Crustacea	0,3 mg/l Daphnia
Chronic NOEC for Algae / Aquatic Plants	4,2 mg/l Scenedesmus capricornutum

#### 12.2. Persistence and degradability

REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN)

Solubility in water	0,1 - 100 mg/l
NOT rapidly degradable	

#### 12.3. Bioaccumulative potential

REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN)

Partition coefficient: n-octanol/water	> 2,918
BCF	31

#### 12.4. Mobility in soil

REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN)

Partition coefficient: soil/water	2,65
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#### 12.5. Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

#### 12.6. Other adverse effects

Information not available

### SECTION 13. Disposal considerations

#### 13.1. Waste treatment methods

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.  
Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.  
Waste transportation may be subject to ADR restrictions.  
CONTAMINATED PACKAGING  
Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

### SECTION 14. Transport information

#### 14.1. UN number

ADR / RID, IMDG, IATA: 3082

ADR / RID: In accordance with Special Provision 375, this product, when is packed in receptacles of a capacity  $\leq$  5Kg or 5L, is not submitted to ADR provisions.

IMDG: In accordance with Section 2.10.2.7 of IMDG Code, this product, when is packed in receptacles of a capacity  $\leq$  5Kg or 5L, is not submitted to IMDG Code provisions.

IATA: In accordance with SP A197, this product, when is packed in receptacles of a capacity  $\leq$  5Kg or 5L, is not submitted to IATA dangerous goods regulations.







# Tenax Spa

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### SECTION 15. Regulatory information ... / >>

Substances subject to authorisation (Annex XIV REACH)

None

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

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

Healthcare controls

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

#### 15.2. Chemical safety assessment

A chemical safety assessment has been performed for the following contained substances

REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN)

### SECTION 16. Other information

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

<b>Muta. 2</b>	Germ cell mutagenicity, category 2
<b>Eye Irrit. 2</b>	Eye irritation, category 2
<b>Skin Irrit. 2</b>	Skin irritation, category 2
<b>Skin Sens. 1</b>	Skin sensitization, category 1
<b>Aquatic Chronic 2</b>	Hazardous to the aquatic environment, chronic toxicity, category 2
<b>H341</b>	Suspected of causing genetic defects.
<b>H319</b>	Causes serious eye irritation.
<b>H315</b>	Causes skin irritation.
<b>H317</b>	May cause an allergic skin reaction.
<b>H411</b>	Toxic to aquatic life with long lasting effects.
<b>EUH205</b>	Contains epoxy constituents. May produce an allergic reaction.

LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX NUMBER: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: EC Regulation 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA STEL: Short-term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

GENERAL BIBLIOGRAPHY



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### SECTION 16. Other information ... / >>

1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
3. Regulation (EU) 790/2009 (I Atp. CLP) of the European Parliament
4. Regulation (EU) 2015/830 of the European Parliament
5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
12. Regulation (EU) 2016/1179 (IX Atp. CLP)
13. Regulation (EU) 2017/776 (X Atp. CLP)
14. Regulation (EU) 2018/1480 (XIII Atp. CLP)

- The Merck Index. - 10th Edition
- Handling Chemical Safety
- INRS - Fiche Toxicologique (toxicological sheet)
- Patty - Industrial Hygiene and Toxicology
- N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
- IFA GESTIS website
- ECHA website
- Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

#### Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.

#### Changes to previous review:

The following sections were modified:

08 / 09 / 11 / 12.



# Tenax Spa

## INDURENTE BM25G

Revision nr.18  
Dated 28/08/2019  
Printed on 28/08/2019  
Page n. 1 / 13  
Replaced revision:17 (Dated 27/04/2018)

### Safety Data Sheet

According to Annex II to REACH - Regulation 2015/830

#### SECTION 1. Identification of the substance/mixture and of the company/undertaking

##### 1.1. Product identifier

Product name **INDURENTE BM25G**  
Chemical name and synonym **LIQUID POLYAMINO EPOXY HARDENER**

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

Intended use **LIQUID EPOXY HARDENER.**

Identified Uses	Industrial	Professional	Consumer
<b>ADHESIVE SYSTEM/TREATMENT FOR STONE SECTOR</b>	-	✓	-

##### 1.3. Details of the supplier of the safety data sheet

Name **Tenax Spa**  
Full address **Via I Maggio, 226**  
District and Country **37020 Volargne Italy (VR)**  
Tel. **+39 045 6887593**  
Fax **+39 045 6862456**  
e-mail address of the competent person responsible for the Safety Data Sheet **msds@tenax.it**

##### 1.4. Emergency telephone number

For urgent inquiries refer to **800.883300 (24h) Centro Antiveleni (Bergamo)**  
**0 800 314 7900 (Turkey) only, or +90 0312 433 70 01 Toxicology Department and Poisons Centre**  
**+98 21 6419306 / +98 21 6405569 Poisons Information Centre (Tehran)**  
**+91 484 4008056 Poison Control Centre (South India)**  
**(011) 642 2417 / (011) 488 3108 Anti-Poison Centre (Johannesburg)**

#### SECTION 2. Hazards identification

##### 2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in (EC) Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of (EU) Regulation 2015/830.

Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard classification and indication:

Reproductive toxicity, category 1B	H360F	May damage fertility.
Acute toxicity, category 3	H331	Toxic if inhaled.
Acute toxicity, category 4	H302	Harmful if swallowed.
Skin corrosion, category 1B	H314	Causes severe skin burns and eye damage.
Serious eye damage, category 1	H318	Causes serious eye damage.
Specific target organ toxicity - single exposure, category 3	H335	May cause respiratory irritation.
Skin sensitization, category 1	H317	May cause an allergic skin reaction.
Hazardous to the aquatic environment, chronic toxicity, category 3	H412	Harmful to aquatic life with long lasting effects.

### SECTION 2. Hazards identification ... / >>

#### 2.2. Label elements

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms:



Signal words:                      Danger

Hazard statements:

- |               |  |
|---------------|--|
| <b>H360F</b>  | May damage fertility.  |
| <b>H331</b>   | Toxic if inhaled.  |
| <b>H302</b>   | Harmful if swallowed.  |
| <b>H314</b>   | Causes severe skin burns and eye damage.                                 |
| <b>H335</b>   | May cause respiratory irritation.  |
| <b>H317</b>   | May cause an allergic skin reaction.                                     |
| <b>H412</b>   | Harmful to aquatic life with long lasting effects.                       |
| <b>EUH071</b> | Corrosive to the respiratory tract.<br>Restricted to professional users. |

Precautionary statements:

- |                       |  |
|-----------------------|--|
| <b>P260</b>           | Do not breathe dust / fume / gas / mist / vapours / spray.   |
| <b>P201</b>           | Obtain special instructions before use.  |
| <b>P305+P351+P338</b> | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| <b>P303+P361+P353</b> | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].                         |

- Contains:**
- 4,4'-ISOPROPYLIDENEDIPHENOL
  - 2,2'-DIAMINODIETHYLAMINE
  - METAXYLENDIAMINE
  - 3-AMINOMETHYL 3,5,5-TRIMETHYLCYCLOHEXYLAMINE
  - AMINOETHYL AMINOPROPYL TRIMETHOXYSILANE

#### 2.3. Other hazards

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

### SECTION 3. Composition/information on ingredients

#### 3.2. Mixtures

Contains:

Identification	x = Conc. %	Classification 1272/2008 (CLP)
<b>2,2'-DIAMINODIETHYLAMINE</b>		
CAS	111-40-0     20 ≤ x < 30	<b>Acute Tox. 2 H330, Acute Tox. 4 H302, Acute Tox. 4 H312, Skin Corr. 1B H314, Eye Dam. 1 H318, STOT SE 3 H335, Skin Sens. 1 H317</b>
EC	203-865-4	
INDEX	612-058-00-X	
Reg. no.	01-2119473793-27-0000	
<b>METAXYLENDIAMINE</b>		
CAS	1477-55-0     25 ≤ x < 35	<b>Acute Tox. 4 H302, Acute Tox. 4 H332, Skin Corr. 1B H314, Eye Dam. 1 H318, Skin Sens. 1 H317, Aquatic Chronic 3 H412, EUH071</b>
EC	216-032-5	
INDEX		
Reg. no.	01-2119480150-50-0000	



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### SECTION 3. Composition/information on ingredients ... / >>

#### BENZYL ALCOHOL

CAS 100-51-6 10 ≤ x < 20 Acute Tox. 4 H302, Acute Tox. 4 H332  
EC 202-859-9  
INDEX 603-057-00-5  
Reg. no. 01-2119492630-38

#### 4,4'-ISOPROPYLIDENEDIPHENOL

CAS 80-05-7 10 ≤ x < 20 Repr. 1B H360F, Eye Dam. 1 H318, STOT SE 3 H335, Skin Sens. 1 H317, Aquatic Chronic 2 H411  
EC 201-245-8  
INDEX 604-030-00-0

Reg. no. 01-2119457856-23-0005

#### 3-AMINOMETHYL 3,5,5-TRIMETHYLCYCLOHEXYLAMINE

CAS 2855-13-2 2,5 ≤ x < 5 Acute Tox. 4 H302, Acute Tox. 4 H312, Skin Corr. 1B H314, Eye Dam. 1 H318, Skin Sens. 1 H317, Aquatic Chronic 3 H412

EC 220-666-8

INDEX 612-067-00-9

Reg. no. 01-2119514687-32-0000

#### AMINOETHYL AMINOPROPYL TRIMETHOXYSILANE

CAS 1760-24-3 1 ≤ x < 3 Acute Tox. 4 H302, Acute Tox. 4 H332, Eye Dam. 1 H318, Skin Irrit. 2 H315, Skin Sens. 1 H317

EC 217-164-6

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Reg. no. 01-2119970215-39

The full wording of hazard (H) phrases is given in section 16 of the sheet.

### SECTION 4. First aid measures

#### 4.1. Description of first aid measures

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 30-60 minutes, opening the eyelids fully. Get medical advice/attention.

SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention.

INGESTION: Have the subject drink as much water as possible. Get medical advice/attention. Do not induce vomiting unless explicitly authorised by a doctor.

INHALATION: Get medical advice/attention immediately. Remove victim to fresh air, away from the accident scene. If the subject stops breathing, administer artificial respiration. Take suitable precautions for rescue workers.

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

Specific information on symptoms and effects caused by the product are unknown.

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

Information not available

### SECTION 5. Firefighting measures

#### 5.1. Extinguishing media

##### SUITABLE EXTINGUISHING EQUIPMENT

The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.

##### UNSUITABLE EXTINGUISHING EQUIPMENT

None in particular.

#### 5.2. Special hazards arising from the substance or mixture

##### HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Do not breathe combustion products.

#### 5.3. Advice for firefighters

##### GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

##### SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).



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### SECTION 6. Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

Block the leakage if there is no hazard.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

#### 6.2. Environmental precautions

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

#### 6.3. Methods and material for containment and cleaning up

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.

Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

#### 6.4. Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

### SECTION 7. Handling and storage

#### 7.1. Precautions for safe handling

Before handling the product, consult all the other sections of this material safety data sheet. Avoid leakage of the product into the environment. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat.

#### 7.2. Conditions for safe storage, including any incompatibilities

Store only in the original container. Store the containers sealed, in a well ventilated place, away from direct sunlight. Keep containers away from any incompatible materials, see section 10 for details.

#### 7.3. Specific end use(s)

Information not available

### SECTION 8. Exposure controls/personal protection

#### 8.1. Control parameters

Regulatory References:

CZE	Česká Republika	Nařízení vlády č. 246/2018 Sb. Nařízení vlády, kterým se mění nařízení vlády č. 361/2007 Sb., kterým se stanoví podmínky ochrany zdraví při práci, ve znění pozdějších předpisů
DEU	Deutschland	TRGS 900 - Seite 1 von 69 (Fassung 29.03.2019)- Liste der Arbeitsplatzgrenzwerte und Kurzzeitwerte
DNK	Danmark	Bekendtgørelse om ændring af bekendtgørelse om grænseværdier for stoffer og materialer1- BEK nr 655 af 31/05/2018
ITA	Italia	DIRETTIVA (UE) 2017/164 DELLA COMMISSIONE del 31 gennaio 2017
POL	Polska	ROZPORZĄDZENIE MINISTRA RODZINY, PRACY I POLITYKI SPOŁECZNEJ z dnia 12 czerwca 2018 r
SVN	Slovenija	Uradni list Republike Slovenije 04.12.2018 - Uradnem listu RS št. 78 -PRAVILNIK o varovanju delavcev pred tveganji zaradi izpostavljenosti kemičnim snovem pri delu
	TLV-ACGIH	ACGIH 2019



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### SECTION 8. Exposure controls/personal protection ... / >>

#### METAXYLENDIAMINE

##### Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		
		mg/m3	ppm	mg/m3	ppm	
TLV	DNK	0,1	0,02	0,1	0,02	
VLEP	ITA	0,1				SKIN
MV	SVN	0,1				
TLV-ACGIH				0,1		

##### Predicted no-effect concentration - PNEC

Normal value in fresh water	0,094	mg/l
Normal value in marine water	0,009	mg/l
Normal value for fresh water sediment	0,43	mg/kg
Normal value for marine water sediment	0,043	mg/kg
Normal value for water, intermittent release	0,152	mg/l
Normal value of STP microorganisms	10	mg/l
Normal value for the terrestrial compartment	0,045	mg/kg

##### Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Inhalation							0,2 mg/m3	1,2 mg/m3
Skin								0,33 mg/kg bw/d

#### BENZYL ALCOHOL

##### Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		
		mg/m3	ppm	mg/m3	ppm	
TLV	CZE	40	9,04	80	18,08	
AGW	DEU	22	5	44	10	SKIN 11
NDS/NDSch	POL	240				
MV	SVN	22	5	44	10	SKIN

##### Predicted no-effect concentration - PNEC

Normal value in fresh water	1	mg/l
Normal value in marine water	0,1	mg/l
Normal value for fresh water sediment	5,27	mg/kg
Normal value for marine water sediment	0,527	mg/kg
Normal value for water, intermittent release	2,3	mg/l
Normal value of STP microorganisms	39	mg/l
Normal value for the terrestrial compartment	0,45	mg/kg

##### Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral	VND	20 mg/kg bw/d	VND	4 mg/kg bw/d				
Inhalation	VND	27 mg/m3	VND	5,4 mg/m3	VND	110 mg/m3	VND	22 mg/m3
Skin	VND	20 mg/kg bw/d	VND	4 mg/kg bw/d	VND	40 mg/kg bw/d	VND	8 mg/kg bw/d

#### 3-AMINOMETHYL 3,5,5-TRIMETHYLCYCLOHEXYLAMINE

##### Predicted no-effect concentration - PNEC

Normal value in fresh water	0,06	mg/l
Normal value in marine water	0,006	mg/l
Normal value for fresh water sediment	5,784	mg/kg
Normal value for marine water sediment	0,578	mg/kg
Normal value for water, intermittent release	0,23	mg/l
Normal value of STP microorganisms	3,18	mg/l
Normal value for the terrestrial compartment	1,121	mg/kg

##### Legend:

(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.  
VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified.



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### SECTION 8. Exposure controls/personal protection ... / >>

#### 8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.

When choosing personal protective equipment, ask your chemical substance supplier for advice.

Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye wash station.

##### HAND PROTECTION

Protect hands with category III work gloves (see standard EN 374).

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.

##### SKIN PROTECTION

Wear category II professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

##### EYE PROTECTION

Wear airtight protective goggles (see standard EN 166).

In the presence of risks of exposure to splashes or squirts during work, adequate mouth, nose and eye protection should be used to prevent accidental absorption.

##### RESPIRATORY PROTECTION

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, use a mask with a type A filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.

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. The protection provided by masks is in any case limited.

If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

##### ENVIRONMENTAL EXPOSURE CONTROLS

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

Product residues must not be indiscriminately disposed of with waste water or by dumping in waterways.

### SECTION 9. Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

Properties	Value	Information
Appearance	liquid	
Colour	yellowish	
Odour	amino	
Odour threshold	Not available	
pH	Not available	
Melting point / freezing point	Not available	
Initial boiling point	Not available	
Boiling range	Not available	
Flash point	> 88 °C	
Evaporation Rate	Not available	
Flammability of solids and gases	Not available	
Lower inflammability limit	Not available	
Upper inflammability limit	Not available	
Lower explosive limit	Not available	
Upper explosive limit	Not available	
Vapour pressure	Not available	
Vapour density	Not available	
Relative density	1	
Solubility	partially soluble in water	
Partition coefficient: n-octanol/water	Not available	
Auto-ignition temperature	Not available	
Decomposition temperature	Not available	
Viscosity	Not available	
Explosive properties	Not available	
Oxidising properties	Not available	

#### 9.2. Other information





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### SECTION 9. Physical and chemical properties ... / >>

VOC (Directive 2010/75/EC) :	16,88 %	-	168,80	g/litre
VOC (volatile carbon) :	13,11 %	-	131,12	g/litre

### SECTION 10. Stability and reactivity

#### 10.1. Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

##### BENZYL ALCOHOL

Decomposes at temperatures above 870°C/1598°F.Possibility of explosion.

#### 10.2. Chemical stability

The product is stable in normal conditions of use and storage.

#### 10.3. Possibility of hazardous reactions

No hazardous reactions are foreseeable in normal conditions of use and storage.

##### BENZYL ALCOHOL

May react dangerously with: hydrobromic acid,iron,oxidising agents,sulphuric acid.Risk of explosion on contact with: phosphorus trichloride.

##### 3-AMINOMETHYL 3,5,5-TRIMETHYLCYCLOHEXYLAMINE

May react dangerously with: strong oxidising agents,concentrated inorganic acids.

#### 10.4. Conditions to avoid

None in particular. However the usual precautions used for chemical products should be respected.

##### BENZYL ALCOHOL

Avoid exposure to: air,sources of heat,naked flames.

##### 3-AMINOMETHYL 3,5,5-TRIMETHYLCYCLOHEXYLAMINE

Avoid contact with: strong acids,strong oxidants.

#### 10.5. Incompatible materials

##### BENZYL ALCOHOL

Incompatible with: sulphuric acid,oxidising substances,aluminium.

#### 10.6. Hazardous decomposition products

Information not available

### SECTION 11. Toxicological information

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification.

It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

#### 11.1. Information on toxicological effects

##### Metabolism, toxicokinetics, mechanism of action and other information

Information not available

##### Information on likely routes of exposure

Information not available

##### Delayed and immediate effects as well as chronic effects from short and long-term exposure

Information not available

##### Interactive effects

Information not available

##### ACUTE TOXICITY

LC50 (Inhalation - mists / powders) of the mixture:	Acute Tox. 3
LC50 (Inhalation - vapours) of the mixture:	Acute Tox. 3



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### SECTION 11. Toxicological information ... / >>

LD50 (Oral) of the mixture: 1328,13 mg/kg  
LD50 (Dermal) of the mixture: >2000 mg/kg

Corrosive to the respiratory tract.

#### BENZYL ALCOHOL

LD50 (Oral) 1230 mg/kg Rat  
LD50 (Dermal) 2000 mg/kg Rabbit  
LC50 (Inhalation) > 4,1 mg/l/4h Rat

#### 2,2'-DIAMINODIETHYLAMINE

LD50 (Oral) 1620 mg/kg Rat  
LD50 (Dermal) 1045 mg/kg Rabbit  
LC50 (Inhalation) 0,3 mg/l/4h Rat

#### 3-AMINOMETHYL 3,5,5-TRIMETHYLCYCLOHEXYLAMINE

LD50 (Oral) 1030 mg/kg rat

#### 4,4'-ISOPROPYLIDENEDIPHENOL

LD50 (Oral) 3250 mg/kg Ratto  
LD50 (Dermal) 3000 mg/kg Rabbit

#### METAXYLENDIAMINE

LD50 (Oral) 1180 mg/kg ratto  
LD50 (Dermal) > 3100 mg/kg ratto  
LC50 (Inhalation) 1,34 mg/l rat (fog)

#### SKIN CORROSION / IRRITATION

Corrosive for the skin

#### SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye damage

#### RESPIRATORY OR SKIN SENSITISATION

Sensitising for the skin

#### GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

#### CARCINOGENICITY

Does not meet the classification criteria for this hazard class

#### REPRODUCTIVE TOXICITY

May damage fertility

#### STOT - SINGLE EXPOSURE

May cause respiratory irritation

#### STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

#### ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

### SECTION 12. Ecological information

This product is dangerous for the environment and the aquatic organisms. In the long term, it have negative effects on aquatic environment.

#### 12.1. Toxicity



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### SECTION 12. Ecological information ... / >>

#### 2,2'-DIAMINODIETHYLAMINE

LC50 - for Fish	430 mg/l/96h pimephales promelas
EC50 - for Crustacea	32 mg/l/48h daphnia magna
EC50 - for Algae / Aquatic Plants	1164 mg/l/72h algae
Chronic NOEC for Fish	> 10 mg/l pesce
Chronic NOEC for Crustacea	5,6 mg/l daphnia magna
Chronic NOEC for Algae / Aquatic Plants	10 mg/l algae

#### 3-AMINOMETHYL 3,5,5-TRIMETHYLCYCLOHEXYLAMINE

LC50 - for Fish	110 mg/l/96h Leuciscus idus
EC50 - for Crustacea	23 mg/l/48h Daphnia magna
EC50 - for Algae / Aquatic Plants	> 50 mg/l/72h Scenedesmus subspicatus
EC10 for Algae / Aquatic Plants	11,2 mg/l/72h Scenedesmus subspicatus
Chronic NOEC for Crustacea	3 mg/l 21 d

#### 4,4'-ISOPROPYLIDENEDIPHENOL

LC50 - for Fish	4,6 mg/l/96h Pimephales promelas
EC50 - for Crustacea	16 mg/l/48h Daphnia magna
EC50 - for Algae / Aquatic Plants	2,73 mg/l/72h Microalgae
Chronic NOEC for Fish	0,016 mg/l Pimephales promelas
Chronic NOEC for Crustacea	1,8 mg/l Dafnia

#### METAXYLENDIAMINE

LC50 - for Fish	87,6 mg/l/96h oryzias latipes
EC50 - for Crustacea	15,2 mg/l/48h daphnia magna
EC50 - for Algae / Aquatic Plants	20,3 mg/l/72h selenastrum capricornutum
Chronic NOEC for Crustacea	4,7 mg/l 21d
Chronic NOEC for Algae / Aquatic Plants	10,5 mg/l 72 h

#### 12.2. Persistence and degradability

##### BENZYL ALCOHOL

Rapidly degradable

##### 2,2'-DIAMINODIETHYLAMINE

Solubility in water	1000 - 10000 mg/l
Degradability: information not available	
Rapidly degradable	

##### 3-AMINOMETHYL 3,5,5-TRIMETHYLCYCLOHEXYLAMINE

Solubility in water	1000 - 10000 mg/l
NOT rapidly degradable	

##### 4,4'-ISOPROPYLIDENEDIPHENOL

Solubility in water	301 mg/l
Rapidly degradable	

##### METAXYLENDIAMINE

NOT rapidly degradable

#### 12.3. Bioaccumulative potential

##### BENZYL ALCOHOL

Partition coefficient: n-octanol/water	1,1
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##### 2,2'-DIAMINODIETHYLAMINE

Partition coefficient: n-octanol/water	-5,58
--	-------

##### 4,4'-ISOPROPYLIDENEDIPHENOL

Partition coefficient: n-octanol/water	3,4
--	-----

#### 12.4. Mobility in soil



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### SECTION 12. Ecological information ... / >>

2,2'-DIAMINODIETHYLAMINE Partition coefficient: soil/water	3,4
4,4'-ISOPROPYLIDENEDIPHENOL Partition coefficient: soil/water	2,95

#### 12.5. Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

#### 12.6. Other adverse effects

Information not available

### SECTION 13. Disposal considerations

#### 13.1. Waste treatment methods

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

Waste transportation may be subject to ADR restrictions.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

### SECTION 14. Transport information

#### 14.1. UN number

ADR / RID, IMDG, IATA: 2735

#### 14.2. UN proper shipping name

ADR / RID: AMINES, LIQUID, CORROSIVE, N.O.S. (2,2'-DIAMINODIETHYLAMINE; METAXYLENDIAMINE)

IMDG: AMINES, LIQUID, CORROSIVE, N.O.S. (2,2'-DIAMINODIETHYLAMINE; METAXYLENDIAMINE)

IATA: AMINES, LIQUID, CORROSIVE, N.O.S. (2,2'-DIAMINODIETHYLAMINE; METAXYLENDIAMINE)

#### 14.3. Transport hazard class(es)

ADR / RID: Class: 8 Label: 8



IMDG: Class: 8 Label: 8



IATA: Class: 8 Label: 8



#### 14.4. Packing group

ADR / RID, IMDG, IATA: II

#### 14.5. Environmental hazards

ADR / RID: NO

IMDG: NO

IATA: NO



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### SECTION 14. Transport information ... / >>

#### 14.6. Special precautions for user

ADR / RID:	HIN - Kemler: 80	Limited Quantities: 1 L	Tunnel restriction code: (E)
IMDG:	Special Provision: -	Limited Quantities: 1 L	
IATA:	EMS: F-A, S-B	Maximum quantity: 30 L	Packaging instructions: 855
	Cargo:	Maximum quantity: 1 L	Packaging instructions: 851
	Pass.:	A3, A803	
	Special Instructions:		

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

Information not relevant

### SECTION 15. Regulatory information

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

Seveso Category - Directive 2012/18/EC: H2

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006

Product		
Point	3	
Contained substance		
Point	30-66	4,4'-ISOPROPYLIDENEDIPHENOL Reg. no.: 01-2119457856-23-0005

Substances in Candidate List (Art. 59 REACH)

4,4'-ISOPROPYLIDENEDIPHENOL  
Reg. no.: 01-2119457856-23-0005

Substances subject to authorisation (Annex XIV REACH)

None

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

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

Healthcare controls

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

#### 15.2. Chemical safety assessment

A chemical safety assessment has been performed for the following contained substances

2,2'-DIAMINODIETHYLAMINE  
BENZYL ALCOHOL  
3-AMINOMETHYL 3,5,5-TRIMETHYLCYCLOHEXYLAMINE

### SECTION 16. Other information

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

Repr. 1B	Reproductive toxicity, category 1B
Acute Tox. 2	Acute toxicity, category 2
Acute Tox. 3	Acute toxicity, category 3
Acute Tox. 4	Acute toxicity, category 4
Skin Corr. 1B	Skin corrosion, category 1B
Eye Dam. 1	Serious eye damage, category 1
Skin Irrit. 2	Skin irritation, category 2
STOT SE 3	Specific target organ toxicity - single exposure, category 3
Skin Sens. 1	Skin sensitization, category 1
Aquatic Chronic 2	Hazardous to the aquatic environment, chronic toxicity, category 2
Aquatic Chronic 3	Hazardous to the aquatic environment, chronic toxicity, category 3
H360F	May damage fertility.



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### SECTION 16. Other information ... / >>

<b>H330</b>	Fatal if inhaled.
<b>H331</b>	Toxic if inhaled.
<b>H302</b>	Harmful if swallowed.
<b>H312</b>	Harmful in contact with skin.
<b>H332</b>	Harmful if inhaled.
<b>H314</b>	Causes severe skin burns and eye damage.
<b>H318</b>	Causes serious eye damage.
<b>H315</b>	Causes skin irritation.
<b>H335</b>	May cause respiratory irritation.
<b>H317</b>	May cause an allergic skin reaction.
<b>H411</b>	Toxic to aquatic life with long lasting effects.
<b>H412</b>	Harmful to aquatic life with long lasting effects.
<b>EUH071</b>	Corrosive to the respiratory tract.

#### LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX NUMBER: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: EC Regulation 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA STEL: Short-term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

#### GENERAL BIBLIOGRAPHY

1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
3. Regulation (EU) 790/2009 (I Atp. CLP) of the European Parliament
4. Regulation (EU) 2015/830 of the European Parliament
5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
12. Regulation (EU) 2016/1179 (IX Atp. CLP)
13. Regulation (EU) 2017/776 (X Atp. CLP)
14. Regulation (EU) 2018/669 (XI Atp. CLP)
15. Regulation (EU) 2018/1480 (XIII Atp. CLP)
16. Regulation (EU) 2019/521 (XII Atp. CLP)

- The Merck Index. - 10th Edition
- Handling Chemical Safety
- INRS - Fiche Toxicologique (toxicological sheet)
- Patty - Industrial Hygiene and Toxicology
- N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition



# Tenax Spa

## INDURENTE BM25G

Revision nr.18  
Dated 28/08/2019  
Printed on 28/08/2019  
Page n. 13 / 13  
Replaced revision:17 (Dated 27/04/2018)

### SECTION 16. Other information ... / >>

- IFA GESTIS website- ECHA website
- Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

#### Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.

Product's classification is based on the calculation methods set out in Annex I of the CLP Regulation, unless otherwise indicated in sections 11 and 12.

The data for evaluation of chemical-physical properties are reported in section 9.

#### Changes to previous review:

The following sections were modified:

02 / 03 / 08 / 09 / 11 / 12 / 15.

Changed TLVs in section 8.1 for following countries:

DNK,