



Indur K-33

Safety data sheet

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

1.1. Product identifier

Code: 002556EN
Product name: Indur K-33
CAS number: 666723-27-9

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

Intended use: Cross-linking additive

1.3. Details of the supplier of the safety data sheet

Name: NEW CHEMICAL PREVENTION S.N.C. DI GAVIOLI GABRIELE & C.
Full address: VIA MAESTRI DEL LAVORO, 10
District and Country: 41034 FINALE EMILIA (MO)
ITALIA
Tel.: 0535/91336
Fax: 0535/93763

e-mail address of the competent person responsible for the Safety Data Sheet: info@newchemical.it

1.4. Emergency telephone number

For urgent inquiries refer to 24 HOURS ON 24
CENTRO ANTIVELENI AZIENDA OSPEDALIERA "S.G.BATTISTA" – MOLINETTE DI TORINO CORSO A.M. DOGLIOTTI, 14 TORINO 011/6637637 011/6672149
CENTRO ANTIVELENI OSPEDALE NIGUARDA CA***** GRANDA P.ZZA
OSPEDALE MAGGIORE, 3 MILANO 02/66101029 02/64442769
CEN.NAZ.INFORM.TOSSIC.FOND. S.MAUGERI CLINICA DEL LAVORO E DELLA RIABILITAZIONE VIA A.FERRATA, 8 PAVIA 0382/24444 0382/24605
SERV. ANTIV. - CEN.INTERDIPARTIMENTALE DI RICERCA SULLE INTOSSICAZIONI ACUTE DIP.DI FARMAC."E.MENEGHETTI" UNIVERSITÀ DEGLI STUDI DI PADOVA LARGO E.MENEGHETTI,2 PADOVA 049/8275078 049/8270593
SERVIZIO ANTIVELENI SERV.PR.SOCC.,ACCETT. E OSS. ISTITUTO SCIENTIFICO "G. GASLINI" LARGO G. GASLINI, 5 GENOVA 010/5636245 010/3760873
CENTRO ANTIVELENI - U.O. TOSSICOLOGIA MEDICA AZIENDA OSPEDALIERA CAREGGI VIALE G.B. MORGAGNI, 65 FIRENZE 055/4277238 055/4277925
CENTRO ANTIVELENI POLICLINICO A.GEMELLI - UNIVERSITA***** CATTOLICA DEL SACRO CUORE LARGO F.VITO, 1 ROMA 06/3054343 06/3051343
CENTRO ANTIVELENI AZIENDA OSPEDALIERA A. CARDARELLI VIA CARDARELLI, 9 NAPOLI 081/7472870 081/7472880
CENTRO ANTIVELENI - ISTITUTO DI ANESTESIOLOGIA E RIANIMAZIONE UNIVERSITÀ DEGLI STUDI DI ROMA "LA SAPIENZA" VIALE DEL POLICLINICO, 155 ROMA 06/49970698 06/4461967 ACTIVE FROM MONDAY FRIDAY FROM 8,00 TO 20,00

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 EC Regulation 1907/2006 and subsequent amendments.

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:

Acute toxicity, category 4	H332	Harmful if inhaled.
Specific target organ toxicity - single exposure, category 3	H335	May cause respiratory irritation.
Skin sensitization, category 1B	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.



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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: Warning

Hazard statements:

H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H317	May cause an allergic skin reaction.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements:

P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective gloves.
P304+P340	IF INHALED: remove person to fresh air and keep comfortable for breathing.
P312	Call a POISON CENTER / doctor / . . . / if you feel unwell.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.

CAS. 666723-27-9

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.

3.1. Substances.

Contains:

Identification.	Conc. %.	Classification 1272/2008 (CLP).
poliisocianato alifatico		
CAS. 666723-27-9	100	Acute Tox. 4 H332, STOT SE 3 H335, Skin Sens. 1B H317, Aquatic Chronic 3 H412
EC.		
INDEX.		

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

3.2. Mixtures.

Information not relevant.

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.

For symptoms and effects caused by the contained substances, see chap. 11.

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. Check incompatibility for container material in section 7. 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.

Information not available.

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.



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

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 Directive 89/686/EEC 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 B 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.

PROTEZIONE RESPIRATORIA: negli ambienti di lavoro con insufficiente ventilazione e durante la lavorazione a spruzzo è necessario proteggere le vie respiratorie. Si consiglia una maschera con alimentazione d'aria o per lavori di breve durata, una maschera con filtro combinato A2-P2.

ipersensibilità (asma, bronchite cronica, dermatosi croniche) si sconsiglia la manipolazione del prodotto. PROTEZIONE DELLE MANI:

Materiali adatti per guanti protettivi: EN 374 Gomma butile - IIR: spessore $\geq 0,5$ mm; tempo d'insorgenza ≥ 480 min. Gomma fluorurata - FKM ($\geq 0,4$ mm) Raccomandazione: smaltire in modo adeguato i guanti contaminati

SECTION 9. Physical and chemical properties.

9.1. Information on basic physical and chemical properties.

Appearance		dense liquid
Colour		transparent
Odour		imperceptible
Odour threshold.		Not available.
pH.		*
Melting point / freezing point.		Not available.
Initial boiling point.	>	300 °C.
Boiling range.		Not available.
Flash point.		192 °C.
Evaporation Rate		Not available.
Flammability of solids and gases		not applicable
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.		1,160 Kg/l
Solubility		Not available.
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.

VOC (Directive 1999/13/EC) :	0
VOC (volatile carbon) :	0

SECTION 10. Stability and reactivity.

Reazione esotermica con ammine ed alcoli; con acqua graduale sviluppo di CO₂, in contenitori chiusi aumento di pressione; pericolo di scoppio.

10.1. Reactivity.

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



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SECTION 10. Stability and reactivity. ... / >>

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.

Durante l'essiccamento/indurimento del prodotto si libera il neutralizzante.

SECTION 11. Toxicological information.

11.1. Information on toxicological effects.

Acute effects: inhalation of this product is harmful.

Exposure symptoms may include: stinging and irritated eyes, mouth, nose, throat; cough, respiratory disorders, dizziness, headache, nausea and sickness. In the most serious cases, inhalation of this product may cause larynx and bronchial tube edema and irritation, chemical pneumonia and pulmonary edema.

Acute effects: inhalation of this product may irritate the lower and upper respiratory tract and cause cough and respiratory disorders; at higher concentrations it can also cause pulmonary edema. Ingestion may cause health problems, including stomach pain and sting, nausea and sickness.

Upon contact with skin, this product causes sensitization (dermatitis). Dermatitis derives from skin irritation on the areas which repeatedly come into contact with the sensitizing agent. Cutaneous lesions may include: erythemas, edemas, papules, vesicles, pustules, scurvies, ulcerations and exudative phenomena, whose intensity varies according to illness seriousness and affected areas. Erythemas, edemas and exudative phenomena prevail during the acute phase. Scurfy skin, dryness, ulcerations and skin thickening prevail during the chronic phase.

poliisocianato alifatico

LD50 (Oral).

> 5000 mg/kg Specie: ratto

LC50 (Inhalation).

0,39 mg/l Specie: ratto femmina. Atmosfera di prova: polvere/nebbia

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.

poliisocianato alifatico

LC50 - for Fish.

35,2 mg/l 96h Specie: Danio rerio (pesce zebra)

EC50 - for Crustacea.

> 100 mg/l/48h Specie: Daphnia magna (pulce d'acqua grande)

EC50 - for Algae / Aquatic Plants.

72 mg/l/72h Specie: Desmodesmus subspicatus (alga verde)

12.2. Persistence and degradability.

poliisocianato alifatico

NOT rapidly biodegradable.

12.3. Bioaccumulative potential.

Information not available.

12.4. Mobility in soil.

Information not available.

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.



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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.

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.

Not applicable.

14.2. UN proper shipping name.

Not applicable.

14.3. Transport hazard class(es).

Not applicable.

14.4. Packing group.

Not applicable.

14.5. Environmental hazards.

Not applicable.

14.6. Special precautions for user.

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL73/78 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. None.

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

Product.

Point. 3

Substances in Candidate List (Art. 59 REACH).

None.

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.

Product not intended for uses provided for by Dir. 2004/42/CE.



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

15.2. Chemical safety assessment.

No chemical safety assessment has been processed for the mixture and the substances it contains.

SECTION 16. Other information.

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

Acute Tox. 4	Acute toxicity, category 4
STOT SE 3	Specific target organ toxicity - single exposure, category 3
Skin Sens. 1B	Skin sensitization, category 1B
Aquatic Chronic 3	Hazardous to the aquatic environment, chronic toxicity, category 3
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H317	May cause an allergic skin reaction.
H412	Harmful to aquatic life with long lasting effects.

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 (EU) 1907/2006 (REACH) of the European Parliament
2. Regulation (EU) 1272/2008 (CLP) of the European Parliament
3. Regulation (EU) 790/2009 (I Atp. CLP) of the European Parliament
4. Regulation (EU) 453/2010 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

- 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
- ECHA website

Note for users:



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

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.