

Safety Data Sheet**PREMIUM PU 2K COMP. A**

Safety Data Sheet dated: 01/09/2022 - version 1

► SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Mixture identification:

Trade name: PREMIUM PU

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

Recommended use: Epoxy-polyurethane adhesive

Uses advised against: Data not available

1.3. Details of the supplier of the safety data sheet

Company: DC Industries S.r.l. - Via Sorte, 2 - 24030 Barzana, BG

Tel. +(39) 551 233 0221 (office hours) - www.dc-industries.itResponsible: sicurezza@dcindustries.it**1.4. Emergency telephone number**

Centro antiveleni, Azienda ospedaliera "Antonio Cardarelli", III Servizio di anestesia e rianimazione, via Antonio Cardarelli 9, Napoli - Tel. 081 5453333

Centro antiveleni, Azienda ospedaliera universitaria Careggi, U.O. Tossicologia medica, via Largo Brambilla 3, Firenze - Tel. 055 7947819

Centro antiveleni, Centro nazionale d'informazione tossicologica, IRCCS Fondazione Salvatore Maugeri Clinica del lavoro e della riabilitazione, via Salvatore Maugeri 10, Pavia - Tel. 0382 24444

Centro antiveleni, Azienda ospedaliera Niguarda Ca' Granda, piazza Ospedale Maggiore 3, Milano - Tel. 02 66101029

Centro antiveleni, Azienda ospedaliera "Papa Giovanni XXIII", Tossicologia clinica, Dipartimento di farmacia clinica e farmacologia, piazza OMS 1, Bergamo - Tel. 800 883300

Centro antiveleni Policlinico "Umberto I", PRGM tossicologia d'urgenza, viale del Policlinico 155, Roma - Tel. 06 49978000

Centro antiveleni del Policlinico "Agostino Gemelli", Servizio di tossicologia clinica, largo Agostino Gemelli 8, Roma - Tel. 06 3054343

Centro antiveleni, Azienda ospedaliera universitaria Riuniti, viale Luigi Pinto 1, Foggia - Tel. 800 183459

Centro antiveleni, Ospedale pediatrico Bambino Gesù, Dipartimento emergenza e accettazione DEA, piazza Sant'Onofrio 4, Roma - Tel. 06 68593726

Centro antiveleni dell'Azienda ospedaliera universitaria integrata (AOUI) di Verona sede di Borgo Trento, piazzale Aristide Stefani, 1 - 37126 Verona - Tel. 800 011858

► SECTION 2: Hazards identification**2.1. Classification of the substance or mixture**

Skin Irrit. 2 Causes skin irritation.

Eye Irrit. 2 Causes serious eye irritation.

Skin Sens. 1 May cause an allergic skin reaction.

Aquatic Chronic 3 Harmful to aquatic life with long lasting effects.

2 The concentration of isocyanate stated is the percentage by weight of the free monomer calculated with reference to the total weight of the mixture.

Adverse physicochemical, human health and environmental effects: No other hazards

**2.2. Label elements****Regulation (EC) n. 1272/2008 (CLP)****Pictograms and Signal Words**

ing

Hazard statements:

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements:

P261 Avoid breathing mist/vapours/spray.

P264 Wash hands thoroughly after handling.

P273 Avoid release to the environment.

P280 Wear protective gloves/clothing and eye/face protection.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P337+P313 If eye irritation persists: Get medical advice/attention.

Special Provisions:

EUH204 Contains isocyanates. May produce an allergic reaction.

EUH205 Contains epoxy constituents. May produce an allergic reaction.

Contains:

reaction product: bisphenol-A- (epichlorhydrin); epoxy resin

(number average molecular weight $\leq$ 700)

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

None.

2.3. Other hazards

No PBT, vPvB or endocrine disruptor substances present in concentration $\geq$ 0.1%.

Other Hazards: No other hazards

This preparation contains low molecular weight epoxy resins. Cross sensitisation to other epoxies is possible. Avoid also exposure to spray mist and vapour.

► SECTION 3: Composition/information on ingredients**3.1. Substances**

Not Relevant

3.2. Mixtures

Mixture identification: PREMIUM PU 2K

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

Concentration (%w/w)	Name	Ident. Numb.	Classification	Registration Number	Properties
$\geq$ 5 - <10 %	reaction product: bisphenol-A- (epichlorhydrin); epoxy resin	CAS:1675-54-3, 25068-38-6,	Skin Irrit. 2, H315 Skin Sens. 1, H317 Eye Irrit. 2, H319 Aquatic	01-2119456619-26	
	(number average molecular weight $\leq$ 700)	25085-99-8 EC:216-823-5 Index:603-073- 00-2	Chronic 2, H411 Specific Concentration Limits: C $\geq$ 5%: Skin Irrit. 2 H315 C $\geq$ 5%: Eye Irrit. 2 H319		
$\geq$ 0.49 - <1 %	4-nonylphenol, branched	CAS:84852-15-3 EC:284-325-5 Index:601-053- 00-8	Repr. 2, H361fd; Skin Corr. 1B, H314; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Acute Tox. 4, H302, M-Chronic:10, M- Acute:10	01-2119510715-45-XXXX	SVHC

► 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 of safely.

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

In case of eyes contact:

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

Protect uninjured eye.

In case of Ingestion:

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

In case of Inhalation:

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

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

Eye irritation

Eye damages

Skin Irritation

Erythema

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:

(see paragraph 4.1)

► SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO₂).

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

5.3. Advice for firefighters

Use suitable breathing apparatus.

► SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Remove persons to safety.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil.

Do not allow to enter into surface water or drains.

Limit leakages with earth or sand.

6.3. Methods and material for containment and cleaning up

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

Retain contaminated washing water and dispose it.

6.4. Reference to other sections

See also section 8 and 13

► SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists. Don't use empty container before they have been cleaned.

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

Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

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.

7.3. Specific end use(s)

Recommendation(s)

None in particular Industrial sector specific solutions:

None in particular

► SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Predicted No Effect Concentration (PNEC) values

	PNEC Limit	Exposure Route	Exposure Frequency Remark
4-nonylphenol, branched CAS: 84852-15-3	0.000614 mg/l	Fresh Water	
	0.000527 mg/l	Marine water	
	4.62 mg/kg	Freshwater sediments	
	1.23 mg/kg	Marine water sediments	

Derived No Effect Level. (DNEL)

	Worker Industry	Worker Professional	Consumer	Exposure Route	Exposure Frequency Remark
4-nonylphenol, branched CAS: 84852-15-3	0.5 mg/m3		0.4 mg/m3	Human Inhalation	Long Term, systemic effects
	1 mg/m3		0.8 mg/m3	Human Inhalation	Short Term, systemic effects
	7.5 mg/kg		3.8 mg/kg	Human Dermal	Long Term, systemic effects
	15 mg/kg		7.6 mg/kg	Human Dermal	Short Term, systemic effects
			0.08 mg/kg	Human Oral	Long Term, systemic effects
			0.4 mg/kg	Human Oral	Short Term, systemic effects

8.2. Exposure controls

Eye protection:

Use close fitting safety goggles, don't use eye lens.

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Suitable materials for safety gloves; EN ISO 374:

Polychloroprene - CR: thickness $\geq 0,5\text{mm}$; breakthrough time $\geq 480\text{min}$. Nitrile rubber - NBR: thickness $\geq 0,35\text{mm}$;

breakthrough time $\geq 480\text{min}$. Butyl rubber - IIR: thickness $\geq 0,5\text{mm}$; breakthrough time $\geq 480\text{min}$.

Fluorinated rubber - FKM: thickness $\geq 0,4\text{mm}$; breakthrough time $\geq 480\text{min}$.

Neoprene gloves are suggested (0,5 mm) not recommended gloves: not waterproof gloves Respiratory protection:

Personal Protective Equipment should comply with relevant CE standards (as EN ISO 374 for gloves and EN ISO 166 for goggles), correctly maintained and stored. Consult the supplier to check the suitability of equipment against specific chemicals and for user information.

Respiratory protection must be used where exposure levels exceed workplace exposure limits. Refer to appropriate EN standards, like EN 136, 140, 143, 149, 14387 for information on selection and use of appropriate respiratory protection equipment.

In case of insufficient ventilation use mask with ABEKP filters (EN 14387).

Hygienic and Technical measures Not available

Appropriate engineering controls: Not available

► SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Liquid Appearance: paste Color: various

Odour: Characteristic

Odour threshold: Not available

Melting point / freezing point: Not available

Initial boiling point and boiling range: Not available

Flammability: N.A.

Upper/lower flammability or explosive limits: Not available
Flash point: Not available
Auto-ignition temperature: Not available
Decomposition temperature: Not available pH: Not available
Viscosity: 400,000.00 cPs
Kinematic viscosity: Not available
Solubility in water: Insoluble
Solubility in oil: soluble
Partition coefficient (n-octanol/water): Not available
Vapour pressure: Not available
Relative density: Not available
Vapour density: ==
Particle characteristics:
Particle size: Not available

9.2. Other information

Miscibility: Not available
Conductivity: Not available
Explosive properties: ==
No other relevant information

► 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

None.

► SECTION 11: Toxicological information

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

Toxicological information of the mixture:

a)	acute toxicity	Not classified Based on available data, the classification criteria are not met
b)	skin corrosion/irritation	The product is classified: Skin Irrit. 2(H315)
c)	serious eye damage/irritation	The product is classified: Eye Irrit. 2(H319)
d)	respiratory or skin sensitisation	The product is classified: Skin Sens. 1(H317)
e)	germ cell mutagenicity	Not classified Based on available data, the classification criteria are not met
f)	carcinogenicity	Not classified Based on available data, the classification criteria are not met
g)	reproductive toxicity	Not classified Based on available data, the classification criteria are not met
h)	STOT-single exposure	Not classified Based on available data, the classification criteria are not met
i)	STOT-repeated exposure	Not classified Based on available data, the classification criteria are not met
j)	aspiration hazard	Not classified Based on available data, the classification criteria are not met

Toxicological information on main components of the mixture:

reaction product: bisphenol-A- (epi-chlorhydrin); epoxy resin (number average molecular weight <= 700)	a) acute toxicity	LD50 Skin Rabbit = 20 mg/kg
		LD50 Oral Rat = 11300 µL/kg
		LD50 Skin Rabbit = 20000 mg/kg
4-nonylphenol, branched	a) acute toxicity	LD50 Oral Rat = 1246 mg/kg
		LD50 Skin Rabbit = 2031 mg/kg
	b) skin corrosion/irritation	Skin Irritant Rabbit Negative
	d) respiratory or skin sensitisation	Skin Sensitization Rat Negative

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

Endocrine disrupting properties:

No endocrine disruptor substances present in concentration >= 0.1%

► SECTION 12: Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment. Eco-Toxicological Information: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

List of Eco-Toxicological properties of the product

The product is classified: Aquatic Chronic 3(H412)

List of components with eco-toxicological properties

Component	Ident. Numb.	Ecotox Infos
4-nonylphenol, branched	CAS: 84852-15-3 - EINECS: 284-325-5 - INDEX: 601-053-00-8	a) Aquatic acute toxicity : LC50 Fish Pimephales promelas = 0.135 mg/L 96h IUCLID
		a) Aquatic acute toxicity : LC50 Fish Lepomis macrochirus = 0.1351 mg/L 96h EPA
		a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna = 0.14 mg/L 48h IUCLID
		a) Aquatic acute toxicity : EC50 Algae Pseudokirchneriella subcapitata 0.36 mg/L 96h EPA
		a) Aquatic acute toxicity : EC50 Algae Pseudokirchneriella subcapitata 0.16 mg/L 72h EPA
		a) Aquatic acute toxicity : EC50 Algae Desmodesmus subspicatus = 1.3 mg/L 72h IUCLID

12.2. Persistence and degradability

N.A.

12.3. Bioaccumulative potential

Component	Bioaccumulation	Test	Duration	Value
4-nonylphenol, branched	Not bioaccumulative	BCF - Bioconcentration factor	28 d	740

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

No PBT, vPvB or endocrine disruptor substances present in concentration $\geq 0.1\%$.

12.6. Endocrine disrupting properties

No endocrine disruptor substances present in concentration $\geq 0.1\%$

12.7. Other adverse effects

Not available

► SECTION 13: Disposal considerations

13.1. Waste treatment methods

The generation of waste should be avoided or minimized wherever possible. Recover if possible.

A waste code (EWC) according to European List of Waste (LoW) cannot be specified, due to dependence on the usage.

Contact and send to an authorized waste disposal service.

Methods of disposal:

Disposal of this product, solutions, packaging and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Dispose of surplus and nonrecyclable products via a licensed waste disposal contractor. Do not dispose of waste into sewers.

Hazardous waste: Yes Disposal considerations:

Do not allow to enter drains or watercourses.

Dispose of product according to all federal, state and local applicable regulations.

If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned.

Dispose of containers contaminated by the product in accordance with local or national legal provisions. For further information, contact your local waste authority.

Special precautions:

This material and its container must be disposed of in a safe way. Care should be taken when handling untreated empty containers. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Empty containers or liners may retain some product residues. Do not re-use empty containers.

► SECTION 14: Transport information

Not classified as dangerous in the meaning of transport regulations.

14.1. UN number or ID 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 Road and Rail (ADR-RID) :

Not Applicable Air (IATA) :

Not Applicable Sea (IMDG) :

Not Applicable

14.7. Maritime transport in bulk according to IMO instruments

Not Applicable

► SECTION 15: Regulatory information

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

VOC (2004/42/EC) : N.A. g/l

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 (EU) n. 2020/878 Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013 Regulation (EU) n. 286/2011 (ATP 2 CLP)

Regulation (EU) n. 618/2012 (ATP 3 CLP) Regulation (EU) n. 487/2013 (ATP 4 CLP) Regulation (EU) n. 944/2013 (ATP 5 CLP)
 Regulation (EU) n. 605/2014 (ATP 6 CLP) Regulation (EU) n. 2015/1221 (ATP 7 CLP) Regulation (EU) n. 2016/918 (ATP 8 CLP)
 Regulation (EU) n. 2016/1179 (ATP 9 CLP) Regulation (EU) n. 2017/776 (ATP 10 CLP) Regulation (EU) n. 2018/669 (ATP 11 CLP)
 Regulation (EU) n. 2019/521 (ATP 12 CLP) Regulation (EU) n. 2018/1480 (ATP 13 CLP) Regulation (EU) n. 2020/217 (ATP 14 CLP)
 Regulation (EU) n. 2020/1182 (ATP 15 CLP)

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

None

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: 3

Restrictions related to the substances contained: 46, 75

SVHC Substances:

Substances in candidate list (Art. 59 Reg. 1907/2006, REACH):

Component	Ident. Numb.	Quantity	Properties:
4-nonylphenol, branched	CAS: 84852-15-3	>=0.49 - <1 %	SVHC
	EINECS: 284-325-5 Index: 601-053-00-8		

German Water Hazard Class (WGK)

Class 2: hazardous for water.

15.2. Chemical safety assessment

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

► SECTION 16: Other information

Code	Description	
H302	Harmful if swallowed.	
H314	Causes severe skin burns and eye damage.	
H315	Causes skin irritation.	
H317	May cause an allergic skin reaction.	
H319	Causes serious eye irritation.	
H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child.	
H400	Very toxic to aquatic life.	
H410	Very toxic to aquatic life with long lasting effects.	
H411	Toxic to aquatic life with long lasting effects.	
H412	Harmful to aquatic life with long lasting effects.	
Code	Hazard class and hazard category	Description
3.1/4/Oral	Acute Tox. 4	Acute toxicity (oral), Category 4
3.2/1B	Skin Corr. 1B	Skin corrosion, Category 1B
3.2/2	Skin Irrit. 2	Skin irritation, Category 2
3.3/2	Eye Irrit. 2	Eye irritation, Category 2
3.4.2/1	Skin Sens. 1	Skin Sensitisation, Category 1
3.7/2	Repr. 2	Reproductive toxicity, Category 2
4.1/A1	Aquatic Acute 1	Acute aquatic hazard, category 1
4.1/C1	Aquatic Chronic 1	Chronic (long term) aquatic hazard, category 1
4.1/C2	Aquatic Chronic 2	Chronic (long term) aquatic hazard, category 2
4.1/C3	Aquatic Chronic 3	Chronic (long term) aquatic hazard, category 3

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
3.2/2	Calculation method

3.3/2	Calculation method
3.4.2/1	Calculation method
4.1/C3	Calculation method

If appropriate, specific provisions in relation to possible training for workers are mentioned in section 2. Any training related to safety in the workplace must in any case refer to a risk assessment that must be carried out by a company safety officer taking into account the specific operating and environmental conditions in which the products are used. 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 SDS cancels and replaces any preceding release.

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

ACGIH: American Conference of Governmental Industrial Hygienists

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

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

ATE: Acute Toxicity Estimate

ATEmix: Acute toxicity Estimate (Mixtures)

BCF: Biological Concentration Factor

BEI: Biological Exposure Index

BOD: Biochemical Oxygen Demand

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

CAV: Poison Center

CE: European Community

CLP: Classification, Labeling, Packaging.

CMR: Carcinogenic, Mutagenic and Reprotoxic

COD: Chemical Oxygen Demand

COV: Volatile Organic Compound

CSA: Chemical Safety Assessment

CSR: Chemical Safety Report

DMEL: Derived Minimal Effect Level

DNEL: Derived No Effect Level.

DPD: Dangerous Preparations Directive

DSD: Dangerous Substances Directive

EC50: Half Maximal Effective Concentration

ECHA: European Chemicals Agency

EINECS: European Inventory of Existing Commercial Chemical Substances.

ES: Exposure Scenario

GefStoffVO: Ordinance on Hazardous Substances, Germany.

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

IARC: International Agency for Research on Cancer

IATA: International Air Transport Association.

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

IC50: half maximal inhibitory concentration

ICAO: International Civil Aviation Organization.

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

IMDG: International Maritime Code for Dangerous Goods.

INCI: International Nomenclature of Cosmetic Ingredients.

IRCCS: Scientific Institute for Research, Hospitalization and Health Care KAFH: KAFH

KSt: Explosion coefficient.

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

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

LDLo: Leathal Dose Low

N.A.: Not Applicable

N/A: Not Applicable

N/D: Not defined/ Not available

NA: Not available

NIOSH: National Institute for Occupational Safety and Health

NOAEL: No Observed Adverse Effect Level

OSHA: Occupational Safety and Health Administration.

PBT: Persistent, Bioaccumulative and Toxic

PGK: Packaging Instruction

PNEC: Predicted No Effect Concentration.

PSG: Passengers

RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.

STEL: Short Term Exposure limit.

STOT: Specific Target Organ Toxicity.

TLV: Threshold Limiting Value.

TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).

vPvB: Very Persistent, Very Bioaccumulative.

WGK: German Water Hazard Class.