

Safety Data Sheet
REGULATORY REACH 878/2020/CE
115.0993 INDURITORE PER PUR IDRO 2K



Safety Data Sheet dated 22/9/2026, version 9

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

- 1.1. Product identifier
Mixture identification:
Trade name : INDURITORE PER PUR IDRO 2K
Trade code : 115.0993
UFI: 7329-10A2-R00K-D0U2
- 1.2. Relevant identified uses of the substance or mixture and uses advised against
Product type and use: Painting product for car refinish and industrial job-professional use-
- 1.3. Details of the supplier of the safety data sheet
Supplier:
PALINI VERNICI S.R.L. Via San Gerolamo,14 25055 Pisogne (BS)
PALINI VERNICI S.R.L. Tel.+390364/880496- 882727 Fax.+390364/882740-87722 (9-12 13-18)
- Competent person responsible for the safety data sheet:
ricerca@palinal.com
- 1.4. Emergency telephone number
PALINI VERNICI S.R.L. Tel.+390364/880496- 882727 Fax.+390364/882740-87722 (9-12 13-18)

SECTION 2: Hazards identification

- 2.1. Classification of the substance or mixture
EC regulation criteria 1272/2008 (CLP):
- ⚠ Warning, Flam. Liq. 3, Flammable liquid and vapour.
 - ⚠ Warning, Acute Tox. 4, Harmful if inhaled.
 - ⚠ Danger, Eye Dam. 1, Causes serious eye damage.
 - ⚠ Warning, Skin Sens. 1, May cause an allergic skin reaction.
 - ⚠ Warning, STOT SE 3, May cause respiratory irritation.

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

2.2. Label elements

Hazard pictograms:



Danger

Hazard statements:

- H226 Flammable liquid and vapour.
- H332 Harmful if inhaled.
- H318 Causes serious eye damage.
- H317 May cause an allergic skin reaction.
- H335 May cause respiratory irritation.

Precautionary statements:

- P210 Keep away from heat - No smoking.
- P261 Avoid breathing vapours.
- P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/...
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P310 Immediately call a POISON CENTER/doctor/...

Safety Data Sheet

REGULATORY REACH 878/2020/CE

115.0993 INDURITORE PER PUR IDRO 2K

P370+P378 In case of fire, use a dry powder fire extinguisher to extinguish.

P403+P235 Store in a well-ventilated place. Keep cool.

Special Provisions:

None

Contains

Hexamethylene diisocyanate, oligomers

SILANO

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

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

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

Qty	Name	Ident. Number	Classification
$\geq 50\%$ - $< 60\%$	Hexamethylene diisocyanate, oligomers	CAS: 28182-81-2	⚠ 3.1/4/Inhal Acute Tox. 4 H332 ⚠ 3.4.2/1 Skin Sens. 1 H317 ⚠ 3.8/3 STOT SE 3 H335
$\geq 7\%$ - $< 10\%$	SILANO	CAS: 2530-83-8 EC: 219-784-2 REACH No.: 01-2119513212-58	4.1/C3 Aquatic Chronic 3 H412 ⚠ 3.3/1 Eye Dam. 1 H318
470 ppm	hexamethylene-di-isocyanate	CAS: 822-06-0 EC: 212-485-8 REACH No.: 01-2119457571-37	⚠ 3.1/1/Inhal Acute Tox. 1 H330 ⚠ 3.1/2/Inhal Acute Tox. 2 H330 ⚠ 3.1/4/Oral Acute Tox. 4 H302 ⚠ 3.2/2 Skin Irrit. 2 H315 ⚠ 3.3/2 Eye Irrit. 2 H319 ⚠ 3.4.2/1 Skin Sens. 1 H317 ⚠ 3.8/3 STOT SE 3 H335 ⚠ 3.4.1/1 Resp. Sens. 1 H334

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.

CONSULT A PHYSICIAN IMMEDIATELY.

Wash thoroughly the body (shower or bath).

Remove contaminated clothing immediately and dispose off safely.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time,

Safety Data Sheet

REGULATORY REACH 878/2020/CE

115.0993 INDURITORE PER PUR IDRO 2K

then consult an ophthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Do NOT induce vomiting.

In case of Inhalation:

If breathing is irregular or stopped, administer artificial respiration.

In case of inhalation, consult a doctor immediately and show the packing or label.

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

No data available

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

None

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

In case of fire, use a dry powder fire extinguisher to extinguish.

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

5.3. Advice for firefighters

Use suitable breathing apparatus .

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

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Remove all sources of ignition.

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

Provide adequate ventilation.

Use appropriate respiratory protection.

See protective measures under point 7 and 8.

6.2. Environmental precautions

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

Retain contaminated washing water and dispose it.

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

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

6.3. Methods and material for containment and cleaning up

Wash with plenty of water.

6.4. Reference to other sections

See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

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

Use localized ventilation system.

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

Before making transfer operations, assure that there aren't any incompatible material residuals

Safety Data Sheet

REGULATORY REACH 878/2020/CE

115.0993 INDURITORE PER PUR IDRO 2K

in the containers.

See also section 8 for recommended protective equipment.

Advice on general occupational hygiene:

Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

7.2. Conditions for safe storage, including any incompatibilities

Always keep in a well ventilated place.

Store between 5 and 35°C. Keep away from unguarded flame and heat sources. Avoid direct exposure to sunlight.

Keep away from unguarded flame, sparks, and heat sources. Avoid direct exposure to sunlight.

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Cool and adequately ventilated.

7.3. Specific end use(s)

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Hexamethylene diisocyanate, oligomers - CAS: 28182-81-2

10 - TWA: 1 mg/m³

hexamethylene-di-isocyanate - CAS: 822-06-0

ACGIH - TWA(8h): 0.005 ppm - Notes: URT irr, resp sens

EU - TWA(8h): 0.006 mg/m³ - STEL: 0.012 mg/m³ - Notes: Skin; Dermal and respiratory sensitisation

DNEL Exposure Limit Values

Hexamethylene diisocyanate, oligomers - CAS: 28182-81-2

Worker Professional: 1 19141.03 - Exposure: Human Inhalation - Frequency: Short Term, local effects

Worker Professional: 0.5 19141.03 - Exposure: Human Inhalation - Frequency: Long Term, local effects

SILANO - CAS: 2530-83-8

Worker Professional: 21 mg/kg - Exposure: Human Dermal - Frequency: Short Term, systemic effects

Worker Professional: 147 mg/kg - Exposure: Human Inhalation - Frequency: Short Term, systemic effects

Worker Professional: 21 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects

Worker Professional: 147 mg/kg - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

PNEC Exposure Limit Values

Hexamethylene diisocyanate, oligomers - CAS: 28182-81-2

Target: Fresh Water - Value: 127 19252.03

Target: Marine water - Value: 12.7 19252.03

Target: Freshwater sediments - Value: 266.7 mg/kg

SILANO - CAS: 2530-83-8

Target: Fresh Water - Value: 1 mg/l

Target: Marine water - Value: 0.1 mg/l

Target: 08 - Value: 1 mg/l

Target: Freshwater sediments - Value: 0.79 mg/kg

Target: Soil (agricultural) - Value: 0.13 mg/kg

Target: 09 - Value: 10 mg/l

8.2. Exposure controls

Eye protection:

Use close fitting safety goggles, don't use contact lenses.

Safety Data Sheet

REGULATORY REACH 878/2020/CE

115.0993 INDURITORE PER PUR IDRO 2K

Protection for skin:

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

Protection for hands:

Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.

Respiratory protection:

Use respiratory protection where ventilation is insufficient or exposure is prolonged.

Use adequate protective respiratory equipment. es. CEN/FFP-2 o CEN/FFP-3

Thermal Hazards:

None

Environmental exposure controls:

None

Appropriate engineering controls:

None

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes:
Physical state:	Liquid	--	--
Colour:	Transparent	--	--
Odour:	CHARACTERISTIC	--	--
Melting point/freezing point:	N.A.	--	--
Boiling point or initial boiling point and boiling range:	> 35 gradi C.	--	--
Flammability:	Flam. Liq. 3, H226	--	--
Lower and upper explosion limit:	N.A.	--	--
Flash point:	>= 23	--	--
Auto-ignition temperature:	400 gradi C.	--	--
Decomposition temperature:	N.A.	--	--
pH:	Not Relevant	--	--
Kinematic viscosity:	<= 20,5 mm ² /s (40 °C)	--	--
Solubility in water:	Insolubile	--	--
Solubility in oil:	N.A.	--	--
Partition coefficient n-octanol/water (log value):	N.A.	--	--

Safety Data Sheet
REGULATORY REACH 878/2020/CE
115.0993 INDURITORE PER PUR IDRO 2K

Vapour pressure:	N.D.	--	--
Density and/or relative density:	1.11 Kg/L	--	--
Relative vapour density:	>Air	--	--
Particle characteristics:			
Particle size:	N.A.	--	--

9.2. Other information

Properties	Value	Method:	Notes:
Explosive properties:	2/11 % Volume	--	--
Solids	100	--	--
% Volatile carbon:	0	--	--
% Solvent	0	--	--
Oxidizing properties:	N.D.	--	--

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
Avoid contact with oxidizing materials. The product could catch fire.
- 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 product:
N.A.
- Toxicological information of the main substances found in the product:
Hexamethylene diisocyanate, oligomers - CAS: 28182-81-2
 - a) acute toxicity:
 - Test: LD50 - Route: Oral - Species: Rat > 2500 mg/kg
 - Test: LD50 - Route: Skin - Species: Rat > 2000 mg/kg
 - Test: LD50 - Route: Skin - Species: Rabbit > 2000 mg/kg
 - Test: LD50 - Route: Inhalation - Species: Rat = 0.39 mg/l - Duration: 4h
- SILANO - CAS: 2530-83-8
 - a) acute toxicity:

Safety Data Sheet

REGULATORY REACH 878/2020/CE

115.0993 INDURITORE PER PUR IDRO 2K

Test: LD50 - Route: Oral - Species: Rat = 8025 mg/kg
Test: LC50 - Route: Inhalation - Species: Rat > 5300 mg/l
Test: LD50 - Route: Skin - Species: Rabbit = 4250 mg/kg

hexamethylene-di-isocyanate - CAS: 822-06-0

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat = 959 mg/kg
Test: LD50 - Route: Skin - Species: Rat > 7000 mg/kg
Test: LC50 - Route: Inhalation - Species: Rat = 129 mg/l - Duration: 4h

If not differently specified, the information required in Regulation (EU)2020/878 listed below must be considered as N.A.:

- a) acute toxicity;
- b) skin corrosion/irritation;
- c) serious eye damage/irritation;
- d) respiratory or skin sensitisation;
- e) germ cell mutagenicity;
- f) carcinogenicity;
- g) reproductive toxicity;
- h) STOT-single exposure;
- i) STOT-repeated exposure;
- j) aspiration hazard.

11.2. Information on other hazards

Endocrine disrupting properties:

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

SECTION 12: Ecological information

12.1. Toxicity

Adopt sound working practices, so that the product is not released into the environment.

SILANO - CAS: 2530-83-8

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish = 55 mg/l - Duration h: 96

Endpoint: EC50 - Species: Algae = 119 mg/l - Duration h: 504

Endpoint: NOEC - Species: Algae 50 mg/l - Duration h: 504

12.2. Persistence and degradability

None

N.A.

12.3. Bioaccumulative potential

N.A.

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None

12.6. Endocrine disrupting properties

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

12.7. Other adverse effects

None

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

SECTION 14: Transport information

Safety Data Sheet
REGULATORY REACH 878/2020/CE
115.0993 INDURITORE PER PUR IDRO 2K



- 14.1. UN number or ID number
ADR-UN Number: 1263
IATA-UN Number: 1263
IMDG-UN Number: 1263
- 14.2. UN proper shipping name
ADR-Shipping Name: PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning and reducing compound)
IATA-Shipping Name: PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning and reducing compound)
IMDG-Shipping Name: PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning and reducing compound)
- 14.3. Transport hazard class(es)
ADR-Class: 3
ADR - Hazard identification number: 30
IATA-Class: 3
IATA-Label: 3
IMDG-Class: 3
- 14.4. Packing group
ADR-Packing Group: III
IATA-Packing group: III
IMDG-Packing group: III
- 14.5. Environmental hazards
ADR-Environmental Pollutant: NO
IMDG-Marine pollutant: NO
IMDG-Ems: F-E , S-E
- 14.6. Special precautions for user
ADR-Subsidiary hazards: -
ADR-S.P.: 163 367 640E 650
ADR-Transport category (Tunnel restriction code): 3 (D/E)
IATA-Passenger Aircraft: 355
IATA-Subsidiary hazards: -
IATA-Cargo Aircraft: 366
IATA-S.P.: A3 A72 A192
IATA-ERG: 3L
IMDG-Subsidiary hazards: -
IMDG-Stowage and handling: Category A
IMDG-Segregation: -
- 14.7. Maritime transport in bulk according to IMO instruments
N.A.

SECTION 15: Regulatory information

- 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
Dir. 98/24/EC (Risks related to chemical agents at work)
Dir. 2000/39/EC (Occupational exposure limit values)
Regulation (EC) n. 1907/2006 (REACH)
Regulation (EC) n. 1272/2008 (CLP)
Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013
Regulation (EU) n. 2020/878

Safety Data Sheet

REGULATORY REACH 878/2020/CE

115.0993 INDURITORE PER PUR IDRO 2K

Regulation (EU) n. 286/2011 (ATP 2 CLP)
Regulation (EU) n. 618/2012 (ATP 3 CLP)
Regulation (EU) n. 487/2013 (ATP 4 CLP)
Regulation (EU) n. 944/2013 (ATP 5 CLP)
Regulation (EU) n. 605/2014 (ATP 6 CLP)
Regulation (EU) n. 2015/1221 (ATP 7 CLP)
Regulation (EU) n. 2016/918 (ATP 8 CLP)
Regulation (EU) n. 2016/1179 (ATP 9 CLP)
Regulation (EU) n. 2017/776 (ATP 10 CLP)
Regulation (EU) n. 2018/669 (ATP 11 CLP)
Regulation (EU) n. 2018/1480 (ATP 13 CLP)
Regulation (EU) n. 2018/1480 (ATP 13 CLP)
Regulation (EU) n. 2019/521 (ATP 12 CLP)
Regulation (EU) n. 2020/217 (ATP 14 CLP)
Regulation (EU) n. 2020/1182 (ATP 15 CLP)
Regulation (EU) n. 2021/643 (ATP 16 CLP)
Regulation (EU) n. 2021/849 (ATP 17 CLP)
Regulation (EU) n. 2022/692 (ATP 18 CLP)
Regulation (EU) n. 2023/707
Regulation (EU) n. 2023/1434 (ATP 19 CLP)
Regulation (EU) n. 2023/1435 (ATP 20 CLP)
Regulation (EU) n. 2024/197 (ATP 21 CLP)
Regulation (EU) n. 2024/2564 (ATP 22 CLP)
Regulation (EU) n. 2024/2865
Regulation (EU) n. 2025/1222 (ATP 23 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications: 878/2020

Restrictions related to the product:

Restriction 3

Restriction 40

Restrictions related to the substances contained:

No restriction.

Where applicable, refer to the following regulatory provisions :

Directive 2012/18/EU (Seveso III)

Regulation (EC) nr 648/2004 (detergents).

Dir. 2004/42/EC (VOC directive)

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

Seveso III category according to Annex 1, part 1

Product belongs to category: P5c

15.2. Chemical safety assessment

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

SECTION 16: Other information

Text of phrases referred to under heading 3:

H332 Harmful if inhaled.

H317 May cause an allergic skin reaction.

H335 May cause respiratory irritation.

H412 Harmful to aquatic life with long lasting effects.

H318 Causes serious eye damage.

H330 Fatal if inhaled.

H302 Harmful if swallowed.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Safety Data Sheet
REGULATORY REACH 878/2020/CE
115.0993 INDURITORE PER PUR IDRO 2K

Hazard class and hazard category	Code	Description
Flam. Liq. 3	2.6/3	Flammable liquid, Category 3
Acute Tox. 1	3.1/1/Inhal	Acute toxicity (inhalation), Category 1
Acute Tox. 2	3.1/2/Inhal	Acute toxicity (inhalation), Category 2
Acute Tox. 4	3.1/4/Inhal	Acute toxicity (inhalation), Category 4
Acute Tox. 4	3.1/4/Oral	Acute toxicity (oral), Category 4
Skin Irrit. 2	3.2/2	Skin irritation, Category 2
Eye Dam. 1	3.3/1	Serious eye damage, Category 1
Eye Irrit. 2	3.3/2	Eye irritation, Category 2
Resp. Sens. 1	3.4.1/1	Respiratory Sensitisation, Category 1
Skin Sens. 1	3.4.2/1	Skin Sensitisation, Category 1
STOT SE 3	3.8/3	Specific target organ toxicity - single exposure, Category 3
Aquatic Chronic 3	4.1/C3	Chronic (long term) aquatic hazard, category 3

Paragraphs modified from the previous revision:

SECTION 1: Identification of the substance/mixture and of the company/undertaking
SECTION 2: Hazards identification
SECTION 3: Composition/information on ingredients
SECTION 8: Exposure controls/personal protection
SECTION 9: Physical and chemical properties
SECTION 11: Toxicological information
SECTION 14: Transport information
SECTION 15: Regulatory information
SECTION 16: Other information

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

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
Flam. Liq. 3, H226	On basis of test data
Acute Tox. 4, H332	Calculation method
Eye Dam. 1, H318	Calculation method
Skin Sens. 1, H317	Calculation method
STOT SE 3, H335	Calculation method

Safety Data Sheet

REGULATORY REACH 878/2020/CE

115.0993 INDURITORE PER PUR IDRO 2K

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

NIOSH - Registry of toxic effects of chemical substances (1983)

I.N.R.S. - Fiche Toxicologique

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

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road.
ATE:	Acute Toxicity Estimate
ATEmix:	Acute toxicity Estimate (Mixtures)
CAS:	Chemical Abstracts Service (division of the American Chemical Society).
CLP:	Classification, Labeling, Packaging.
DNEL:	Derived No Effect Level.
EINECS:	European Inventory of Existing Commercial Chemical Substances.
GefStoffVO:	Ordinance on Hazardous Substances, Germany.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWA:	Time-weighted average
WGK:	German Water Hazard Class.