

Safety Data Sheet dated 15/11/2019, version 1

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

1.1. Product identifier

Mixture identification:

Trade name: ITAMINE PD CA1125_12

Trade code: CA1125_12

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

Recommended use:

Hardner for epoxy resin

1.3. Details of the supplier of the safety data sheet

Company:

DDCHEM srl - Via Crear, 15 Loc. Mazzantica - 37050 Oppeano - Verona - Italy

tel. +390456985000

fax. +390457145504

Competent person responsible for the safety data sheet:

laboratorio@ddchem.it

1.4. Emergency telephone number

DDCHEM srl tel. +390456985000 office hours

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP):

⚠ Danger, Skin Corr. 1B, Causes severe skin burns and eye damage.

⚠ Danger, Eye Dam. 1, Causes serious eye damage.

⚠ Warning, Skin Sens. 1, May cause an allergic skin reaction.

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

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard pictograms:



Danger

Hazard statements:

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements:

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P273 Avoid release to the environment.

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

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

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/...

Special Provisions:

None

Contains

Reaction product of 3-aminomethyl-3,5,5-trimethylcyclohexylamine and 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane

Reaction products of di-, tri- and tetra-propoxylated propane-1,2-diol with ammonia

Polyoxypropylenediamine

Special provisions according to Annex XVII of REACH and subsequent amendments:
 None

2.3. Other hazards

vPvB Substances: None - PBT Substances: None

Other Hazards:

No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

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

Qty	Name	Ident. Number	Classification
>= 40% - < 50%	Reaction product of 3-aminomethyl-3,5,5-trimethylcyclohexylamine and 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane	CAS: 38294-64-3 EC: 500-101-4 REACH No.: 01-2119965165-33-0018	⚠ 3.3/1 Eye Dam. 1 H318 ⚠ 3.2/1B Skin Corr. 1B H314 ⚠ 3.4.2/1 Skin Sens. 1 H317 4.1/C3 Aquatic Chronic 3 H412
>= 30% - < 40%	benzyl alcohol	Index number: 603-057-00-5 CAS: 100-51-6 EC: 202-859-9 REACH No.: 01-2119492630-38-xxxx	⚠ 3.1/4/Inhal Acute Tox. 4 H332 ⚠ 3.3/2 Eye Irrit. 2 H319 ⚠ 3.1/4/Oral Acute Tox. 4 H302
>= 10% - < 12.5%	Reaction products of di-, tri- and tetrapropoxylated propane-1,2-diol with ammonia	CAS: 9046-10-0 REACH No.: 01-2119557899-12-xxxx	⚠ 3.2/1C Skin Corr. 1C H314 4.1/C3 Aquatic Chronic 3 H412 ⚠ 3.3/1 Eye Dam. 1 H318
>= 7% - < 10%	Polyoxypropylenediamine	Index number: polymer CAS: 9046-10-0	⚠ 3.1/4/Dermal Acute Tox. 4 H312 ⚠ 3.3/1 Eye Dam. 1 H318 ⚠ 3.1/4/Oral Acute Tox. 4 H302 ⚠ 3.2/1B Skin Corr. 1B H314 4.1/C3 Aquatic Chronic 3 H412

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

OBTAIN IMMEDIATE MEDICAL ATTENTION.

Remove contaminated clothing immediately and dispose off 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.

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

None

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

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

Treatment:

None

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water.

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.

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 persons to safety.

See protective measures under point 7 and 8.

6.2. Environmental precautions

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

Retain contaminated washing water and dispose it.

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

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

6.3. Methods and material for containment and cleaning up

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.

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.

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

Store at 10-35 °C.

The product may absorb moisture and carbon dioxide if left in open containers.

This may result in some foaming when curing epoxy resins.

Therefore, it should be kept in tightly closed containers when not in use and stored in a dry, cool and well-ventilated place.

Properly protected from moisture, the product has a shelf life of 12 months.

Keep away from food, drink and feed.

Incompatible materials:

None in particular.
 Instructions as regards storage premises:
 Adequately ventilated premises.
 Provisions related to directive EU 2012/18 (Seveso III):
 Seveso III category according to Annex 1, part 1

Product belongs to category:	Lower-tier threshold (tonnes)	Upper-tier threshold (tonnes)
None		

7.3. Specific end use(s)
 None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No occupational exposure limit available

DNEL Exposure Limit Values

benzyl alcohol - CAS: 100-51-6

Worker Professional: 22 mg/mq - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

Worker Professional: 110 mg/mq - Exposure: Human Inhalation - Frequency: Short Term, systemic effects

Worker Professional: 8 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects - Notes: p.c./day

Worker Professional: 8 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects - Notes: p.c./day

Consumer: 5.4 mg/mq - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

Consumer: 27 mg/mq - Exposure: Human Inhalation - Frequency: Short Term, systemic effects

Consumer: 4 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects - Notes: p.c./day

Consumer: 20 mg/kg - Exposure: Human Dermal - Frequency: Short Term, systemic effects - Notes: p.c./day

Consumer: 4 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects - Notes: p.c./day

Consumer: 20 mg/kg - Exposure: Human Oral - Frequency: Short Term, systemic effects - Notes: p.c./day

Reaction products of di-, tri- and tetra-propoxylated propane-1,2-diol with ammonia - CAS: 9046-10-0

Worker Industry: 2.5 mg/kg - Worker Professional: 2.5 mg/kg - Consumer: 1.25 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects

Consumer: 0.04 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects

PNEC Exposure Limit Values

benzyl alcohol - CAS: 100-51-6

Target: Fresh Water - Value: 1 mg/l

Target: Intermittent release - Value: 2.31 mg/l

Target: Marine water - Value: 0.1 mg/l

Target: Freshwater sediments - Value: 5.27 mg/kg

Target: Microorganisms in sewage treatments - Value: 39 mg/l

Target: Freshwater sediments - Value: 5.27 mg/kg

Target: Marine water sediments - Value: 0.527 mg/kg

Target: Soil (agricultural) - Value: 0.456 mg/kg

Reaction products of di-, tri- and tetra-propoxylated propane-1,2-diol with ammonia - CAS: 9046-10-0

Target: Fresh Water - Value: 0.015 mg/l

Target: Marine water sediments - Value: 0.125 mg/kg

Target: Soil (agricultural) - Value: 0.0176 mg/kg

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:

Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.
 Respiratory protection:
 Not needed for normal use.
 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:
Appearance and colour:	not very viscous liquid	--	--
Odour:	aminic	--	--
Odour threshold:	N.A.	--	--
pH:	N.A.	--	--
Melting point / freezing point:	N.A.	--	--
Initial boiling point and boiling range:	N.A.	--	--
Flash point:	N.A.	--	--
Evaporation rate:	N.A.	--	--
Solid/gas flammability:	N.A.	--	--
Upper/lower flammability or explosive limits:	N.A.	--	--
Vapour pressure:	N.A.	--	--
Vapour density:	N.A.	--	--
Relative density:	N.A.	--	--
Solubility in water:		--	--
Solubility in oil:		--	--
Partition coefficient (n-octanol/water):	N.A.	--	--
Auto-ignition temperature:	N.A.	--	--
Decomposition temperature:	N.A.	--	--
Viscosity:	N.A.	--	--
Explosive properties:	N.A.	--	--
Oxidizing properties:	N.A.	--	--

9.2. Other information

Properties	Value	Method:	Notes:
Miscibility:	N.A.	--	--
Fat Solubility:	N.A.	--	--
Conductivity:	N.A.	--	--
Substance Groups relevant properties	N.A.	--	--

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 toxicological effects
 Toxicological information of the product:
 N.A.

Toxicological information of the main substances found in the product:

benzyl alcohol - CAS: 100-51-6

a) acute toxicity:

Test: LD50 - Route: Skin - Species: Rabbit = 2000 mg/kg

Test: LC50 - Route: Inhalation Mist - Species: Rat > 4178 mg/m³

Test: LD50 - Route: Oral - Species: Rat = 1620 mg/kg

Reaction products of di-, tri- and tetra-propoxylated propane-1,2-diol with ammonia - CAS: 9046-10-0

a) acute toxicity:

Test: LC50 - Route: Inhalation Vapour - Species: Rat > 0.74 mg/l - Duration: 8h

Test: LD50 - Route: Skin - Species: Rabbit 2979.7 mg/kg

Test: LD50 - Route: Oral - Species: Rat 2885.3 mg/kg

b) skin corrosion/irritation:

Test: Skin Corrosive - Route: Skin - Species: Rabbit Positive

Test: Eye Corrosive - Species: Rabbit Positive

Polyoxypropylenediamine - CAS: 9046-10-0

a) acute toxicity:

Test: LD50 - Route: Skin - Species: Rabbit = 1555 mg/kg

Test: LD50 - Route: Oral - Species: Rat = 1100 mg/kg

b) skin corrosion/irritation:

Test: Skin Corrosive - Route: Skin Negative

e) germ cell mutagenicity:

Test: Mutagenesis Negative - Notes: OECD 476 in vitro mammalian cell gene mutation test

Reaction products of di-, tri- and tetra-propoxylated propane-1,2-diol with ammonia - CAS: 9046-10-0

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

a) acute toxicity;

b) skin corrosion/irritation;

c) serious eye damage/irritation;

- d) respiratory or skin sensitisation;
- e) germ cell mutagenicity;
- f) carcinogenicity;
- g) reproductive toxicity;
- h) STOT-single exposure;
- i) STOT-repeated exposure;
- j) aspiration hazard.

SECTION 12: Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.
benzyl alcohol - CAS: 100-51-6

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish = 646 mg/l - Duration h: 48

Endpoint: LC50 - Species: Fish = 460 mg/l - Duration h: 96

Endpoint: EC50 - Species: Daphnia = 230 mg/l - Duration h: 48

Reaction products of di-, tri- and tetra-propoxylated propane-1,2-diol with ammonia - CAS: 9046-10-0

a) Aquatic acute toxicity:

Endpoint: EC50 - Species: Daphnia 80 mg/l - Duration h: 48 - Notes: OECD 202 Daphnia sp. Acute Immobilisation Test

Endpoint: EC50 - Species: Daphnia 418.34 mg/l - Duration h: 48 - Notes: ISO

Endpoint: EC50 - Species: Fish > 15 mg/l - Duration h: 96 - Notes: OECD 203 Fish acute Toxicity Test

Endpoint: EC50 - Species: Algae 141.72 mg/l - Duration h: 72 - Notes: ISO 10253:2006 Marine algal growth inhibition test

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. 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



14.1. UN number

ADR-UN Number: 2735

IATA-UN Number: 2735

IMDG-UN Number: 2735

14.2. UN proper shipping name

ADR-Shipping Name: POLYAMINES, LIQUID, CORROSIVE, N.O.S. (Reaction product of 3-aminomethyl-3,5,5-trimethylcyclohexylamine and 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, Reaction products of di-, tri- and tetra-propoxylated propane-1,2-diol with ammonia)

IATA-Shipping Name: POLYAMINES, LIQUID, CORROSIVE, N.O.S. (Reaction product of 3-aminomethyl-3,5,5-trimethylcyclohexylamine and 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, Reaction products of di-, tri- and

tetra-propoxylated propane-1,2-diol with ammonia)

IMDG-Shipping Name: POLYAMINES, LIQUID, CORROSIVE, N.O.S. (Reaction product of 3-aminomethyl-3,5,5-trimethylcyclohexylamine and 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, Reaction products of di-, tri- and tetra-propoxylated propane-1,2-diol with ammonia)

14.3. Transport hazard class(es)

ADR-Class: 8
ADR - Hazard identification number: 80
IATA-Class: 8
IATA-Label: 8
IMDG-Class: 8

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

14.6. Special precautions for user

ADR-Subsidiary hazards: -
ADR-S.P.: 274
ADR-Transport category (Tunnel restriction code): 3 (E)
IATA-Passenger Aircraft: 852
IATA-Subsidiary hazards: -
IATA-Cargo Aircraft: 856
IATA-S.P.: A3 A803
IATA-ERG: 8L
IMDG-EmS: F-A , S-B
IMDG-Subsidiary hazards: -
IMDG-Stowage and handling: Category A
IMDG-Segregation: SG35 SGG18

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code
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) 2015/830
Regulation (EU) n. 286/2011 (ATP 2 CLP)
Regulation (EU) n. 618/2012 (ATP 3 CLP)
Regulation (EU) n. 487/2013 (ATP 4 CLP)
Regulation (EU) n. 944/2013 (ATP 5 CLP)
Regulation (EU) n. 605/2014 (ATP 6 CLP)
Regulation (EU) n. 2015/1221 (ATP 7 CLP)
Regulation (EU) n. 2016/918 (ATP 8 CLP)
Regulation (EU) n. 2016/1179 (ATP 9 CLP)
Regulation (EU) n. 2017/776 (ATP 10 CLP)
Regulation (EU) n. 2018/699 (ATP 11 CLP)

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

Restrictions related to the product:
Restriction 3

Restrictions related to the substances contained:
No restriction.

Volatile Organic compounds - VOCs = 454.50 g/l 458 gr/Kg

Volatile CMR substances = 0.00 %

Halogenated VOCs which are assigned the risk phrase R40 = 0.00 %

Organic Carbon - C = 0.24
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)

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:
H318 Causes serious eye damage.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H412 Harmful to aquatic life with long lasting effects.
H332 Harmful if inhaled.
H319 Causes serious eye irritation.
H302 Harmful if swallowed.
H312 Harmful in contact with skin.

Hazard class and hazard category	Code	Description
Acute Tox. 4	3.1/4/Dermal	Acute toxicity (dermal), Category 4
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 Corr. 1B	3.2/1B	Skin corrosion, Category 1B
Skin Corr. 1C	3.2/1C	Skin corrosion, Category 1C
Eye Dam. 1	3.3/1	Serious eye damage, Category 1
Eye Irrit. 2	3.3/2	Eye irritation, Category 2
Skin Sens. 1	3.4.2/1	Skin Sensitisation, Category 1
Aquatic Chronic 3	4.1/C3	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
Skin Corr. 1B, H314	Calculation method
Eye Dam. 1, H318	Calculation method
Skin Sens. 1, H317	Calculation method
Aquatic Chronic 3, H412	Calculation method

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

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to

the product indicated and constitutes no guarantee of particular quality.
It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road.
ATE:	Acute Toxicity Estimate
ATEmix:	Acute toxicity Estimate (Mixtures)
CAS:	Chemical Abstracts Service (division of the American Chemical 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.