

HARDENER EP 88 HT RU

Safety Data Sheet

According to ABNT NBR 14725: 2023

Issue date: 9/19/2023 Revision date: 5/21/2025 Version: 16.0

*** DRAFT ***



SECTION 1: Identification

1.1. GHS Product identifier

Product form : Mixture
Trade name : HARDENER EP 88 HT RU
Product code : 15858141
Type of product : Catalyst
Product group : Trade product

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Recommended use : Uses in coatings - Curing agent for component A.

1.4. Supplier's details

WEG TINTAS LTDA - GRUPO WEG

Guaramirim - Santa Catarina / Brasil

Rodovia BR 280 – Km 50, 6.918 – Bloco A. Caixa D'Água – 89270-000 - +55 (47) 3276-4000

Mauá - São Paulo / Brasil

Rua Dr. Ulysses Guimarães, nº 918 – Bloco A. Loteamento Industrial Coral 09372-050 – Fone: +55 (11) 4547-6100

Cabo de Santo Agostinho - Pernambuco / Brasil

Via VII, 314 Distrito Industrial DIPER – 54590-000 - Fone: +55 (81) 3512-3000

Betim - Minas Gerais / Brasil

Avenida Juiz Marco Tulio Isaac, 2994 Betim Industrial – 32671-198, Fone: +55 (31) 3268-0687 / +55 (31) 3268-0686

Macaé - Rio de Janeiro / Brasil

Rua Itacolomi, 528 – Quadra H – Lote 11 Cabiúnas – 27977-340

Atotonilco de Tula - Estado de Hidalgo / México

Av. Hidalgo, lote 40, 41, 42 y 43 - Parque Industrial Bicentenario, CP 42980 - Fone: +52 (55) 5321-4231

Buenos Aires - Provincia de Buenos Aires / Argentina

Av. José Melián, 2983 - Parque Industrial Burzaco, B1852 - Fone: +54 (11) 4299-8000

1.5. Emergency phone number

Emergency number :

24-HOUR EMERGENCY - AMBIPAR		0800 117 2020	
CHEMTREC international number		+1-703-527-3887 e 1-800-424-9300	
Country	City	Local Number	Toll-Free Number
Austria	Vienna	+43-1-3649237	
Austria			0800 293702
China		400 120 4937	
France		+33-975181407	
Germany			0800-181-7059

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India			000 800 1007 141
Italy	Milan	+39-02 4555 7031	
Italy			800 789 767
Netherlands		+31-85 888 0596	
Russia			8(800)100-63-46
South Africa			080-001-4676
United Kingdom	London	+44 20 3807 3798	
South korea			080-880-0454
Japan			0800-300-5842

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

Classification according to GHS BR (ABNT NBR 14725: 2023)

Flammable liquids, Category 3

Acute toxicity (oral), Category 4

Acute toxicity (inhalation:dust,mist) Category 4

Skin corrosion/irritation, Category 1B

Skin sensitisation, Category 1

Germ cell mutagenicity, Category 1A

Carcinogenicity, Category 1A

Specific target organ toxicity — Repeated exposure, Category 1

Hazardous to the aquatic environment - Acute Hazard, Category 2

Hazardous to the aquatic environment - Chronic Hazard, Category 2

2.2. GHS Label elements, including precautionary statements

GHS BR labelling

Hazard pictograms (GHS BR)



Signal word (GHS BR)

: Danger

Hazard statements (GHS BR)

: H226 - Flammable liquid and vapour
H302+H332 - Harmful if swallowed or if inhaled
H314 - Causes severe skin burns and eye damage
H317 - May cause an allergic skin reaction
H340 - May cause genetic defects.
H350 - May cause cancer.
H372 - Causes damage to organs through prolonged or repeated exposure.

Precautionary statements (GHS BR)

: P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.
No smoking.
P233 - Keep container tightly closed.
P240 - Ground and bond container and receiving equipment.
P241 - Use explosion-proof equipment.
P242 - Use non-sparking tools.
P243 - Take action to prevent static discharges.
P260 - Do not breathe dust, fume, gas, mist, vapours or spray.
P264 - Wash hands, forearms and face thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.

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P271 - Use only outdoors or in a well-ventilated area.
P272 - Contaminated work clothing should not be allowed out of the workplace.
P273 - Avoid release to the environment.
P280 - Wear protective gloves, protective clothing, eye protection, face protection and hearing protection.
P301+P312 - IF SWALLOWED: Call a POISON CENTER or a doctor if you feel unwell.
P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P302+P352 - IF ON SKIN: Wash with plenty of water.
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water .
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313 - IF exposed or concerned: Get medical advice or attention.
P310 - Immediately call a POISON CENTER or a doctor.
P312 - Call a POISON CENTER or a doctor if you feel unwell.
P314 - Get medical advice or attention as appropriate.
P321 - Specific treatment (see supplemental first aid instruction on this label).
P330 - Rinse mouth.
P333+P313 - If skin irritation or rash occurs: Get medical advice or attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P363 - Wash contaminated clothing before reuse.
P370+P378 - In case of fire: Use appropriate media to extinguish.
P391 - Collect spillage.
P403+P235 - Store in a well-ventilated place. Keep cool.
P405 - Store locked up.
P501 - Dispose of contents and/or container to hazardous or special waste collection point, in accordance with local, regional, national and international regulations.

2.3. Other hazards which do not result in classification

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	GHS Product identifier	%	Classification according to GHS BR (ABNT NBR 14725: 2023)
BENZYL ALCOHOL	CAS-No.: 100-51-6	20 – 40	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation), H332
Industrial secret	-	20 – 40	Flam. Liq. 1, H224 Skin Irrit. 2, H315 Muta. 1A, H340 Carc. 1A, H350 STOT RE 1, H372 Asp. Tox. 1, H304 Aquatic Acute 2, H401
N-Oleil-1,3-diaminopropano	CAS-No.: 7173-62-8	10 – 20	Acute Tox. 4 (Oral), H302 Skin Corr. 1, H314 STOT RE 1, H372 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

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Name	GHS Product identifier	%	Classification according to GHS BR (ABNT NBR 14725: 2023)
ISOPHORONE DIAMINE	CAS-No.: 2855-13-2	10 – 20	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Skin Corr. 1, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Chronic 3, H412
2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL	CAS-No.: 90-72-2	10 – 20	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2A, H319
BENZENE-1,3-DIMETHANEAMINE	CAS-No.: 1477-55-0	5 – 10	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation), H332 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1B, H317 Aquatic Chronic 3, H412
Naphtha (petroleum), refined light solvent	CAS-No.: 64741-84-0	1 – 5	Flam. Liq. 2, H225 Acute Tox. 4 (Dermal), H312 Skin Irrit. 2, H315 Muta. 1B, H340 Carc. 1B, H350 Repr. 2, H361 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Acute 2, H401 Aquatic Chronic 1, H410
POLYOXYPROPYLENEDIAMINE	CAS-No.: 9046-10-0	1 – 5	Skin Corr. 1C, H314 Eye Dam. 1, H318 Aquatic Chronic 3, H412
SALICYLIC ACID	CAS-No.: 69-72-7	1 – 5	Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318 Repr. 2, H361

SECTION 4: First-aid measures

4.1. Description of necessary first-aid measures

First-aid measures general	: IF exposed or concerned: Get medical advice/attention. People with over sensibility problems are not allowed to work or be exposed to the product.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.
First-aid measures after skin contact	: After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water. Do not remove clothing if it sticks to the skin. Be careful, the product may remain trapped under clothing, footwear or a wrist-watch. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
First-aid measures after ingestion	: If swallowed, seek medical advice immediately and show this container or label. Do not induce vomiting because of corrosive effects.

4.2. Most important symptoms and effects, acute and delayed

Symptoms/effects	: Causes damage to organs through prolonged or repeated exposure. Harmful if inhaled. Swallowing a small quantity of this material presents some health hazard. Causes severe
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Symptoms/effects after inhalation	: skin burns and eye damage. May cause an allergic skin reaction. : May cause irritation to the respiratory tract, sneezing, coughing, burning sensation of throat with constricting sensation of the larynx and difficulty in breathing.
Symptoms/effects after skin contact	: Highly corrosive to skin. Causes severe burns. irritation (itching, redness, blistering). Cracking of the skin.
Symptoms/effects after eye contact	: stinging. Redness. Causes serious eye burns. redness, itching, tears.
Symptoms/effects after ingestion	: Harmful if swallowed. Ingestion may cause nausea and vomiting. Burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.
Chronic symptoms	: May cause cancer. May cause heritable genetic damage.

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

Notes to physician	: Treat symptomatically
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SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

Suitable extinguishing media	: Dry chemical, CO2, or water spray or regular foam.
Unsuitable extinguishing media	: Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Fire hazard	: Flammable liquid and vapour. The vapours are denser than air and may travel along the ground. Distance ignition possible. Agitation can cause build up of electrostatic charge. Vapours may cause fire/explosion if source of ignition is present. In case of fire and/or explosion do not breathe fumes. In case of fire, corrosive gases come free.
Explosion hazard	: Vapours may form explosive mixture with air. Prolonged exposure to fire may cause containers to rupture/explode.

5.3. Special protective actions for fire-fighters

Precautionary measures fire	: Keep container closed when not in use. This product is not to be used under conditions of poor ventilation.
Firefighting instructions	: Get the package away from the fire if this can be done without risk. Fight fire from a safe distance or use hoses with support or cannon engine. Cool laterally with water containers exposed to flames, even after the fire is extinguished. Do not enter fire area without proper protective equipment, including respiratory protection.
Protection during firefighting	: Use self-contained breathing apparatus and chemically protective clothing.
Other information	: On exposure to high temperature, may decompose, releasing toxic gases. In case of fire, corrosive and harmful gases come free.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Eliminate every possible source of ignition. Prevent from entering sewers, basements and workpits, or any place where its accumulation can be dangerous. Avoid contact with skin and eyes. May be harmful to aquatic organisms, to flora, to soil organisms. Clean up any spills as soon as possible, using an absorbent material to collect it. Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material damage.
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6.1.1. For non-emergency personnel

Protective equipment	: Wear recommended personal protective equipment.
Emergency procedures	: No flames, no sparks. Eliminate all sources of ignition. Do not touch or walk on the spilled product. Evacuate area. Only qualified personnel equipped with suitable protective equipment may intervene. Notify fire brigade and environmental authorities.

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6.1.2. For emergency responders

Protective equipment

: Use self-contained breathing apparatus and chemically protective clothing. Gloves. Wear security glasses which protect from splashes. Self-contained breathing apparatus. Total impervious protective suits, gloves, and boots must be worn to prevent any contact with the product. Corrosionproof suit. Equip cleanup crew with proper protection.

Emergency procedures

: Keep away from combustible material. All equipment used when handling the product must be grounded. Evacuate unnecessary personnel. Stop leak if safe to do so.

6.2. Environmental precautions

Prevent from entering sewers, basements and workpits, or any place where its accumulation can be dangerous. Toxic to aquatic life with long lasting effects. Do not allow product to spread into the environment. Toxic to aquatic life. Notify authorities if product enters sewers or public waters.

6.3. Methods and materials for containment and cleaning up

For containment

: Prevent dispersion by moistening spill with water or foam. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak without risks if possible.

Methods for cleaning up

: Absorb remaining liquid with sand or inert absorbent and remove to safe place. Absorb spilled material with sand or earth. Clean contaminated surfaces with an excess of water. Clear up rapidly by scoop or vacuum. Absorb spillage to prevent material damage. Take up liquid spill into absorbent material.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed

: Flammable vapours may accumulate in the container.

Precautions for safe handling

: Provide adequate ventilation to minimize dust and/or vapour concentrations. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Handle carefully. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wear personal protective equipment. Obtain special instructions before use. Take all necessary technical measures to avoid or minimize the release of the product on the workplace. Limit quantities of product at the minimum necessary for handling and limit the number of exposed workers. Do not eat, drink or smoke when using this product. When heated, material emits highly irritating vapours, affecting the eyes. Do not get in eyes, on skin, or on clothing. Contaminated work clothing should not be allowed out of the workplace. Ensure good ventilation of the work station. Keep only in original container. Do not handle until all safety precautions have been read and understood.

Hygiene measures

: Always wash hands after handling the product. Take off immediately all contaminated clothing and wash it before reuse. Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures

: Ensure adequate ventilation, especially in confined areas. Store locked up. Store in tightly closed, leak-proof containers.

Storage conditions

: Keep cool. Store in a well-ventilated place. Keep container tightly closed. Keep cool. Protect from sunlight.

Incompatible materials

: combustible materials.

Packaging materials

: Store always product in container of same material as original container.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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BENZENE-1,3-DIMETHANEAMINE 1477-55-0

USA - ACGIH - Occupational Exposure Limits

Local name	m-Xylene α,α'-diamine
ACGIH® TLV® C	0.018 ppm
Remark (ACGIH)	TLV® Basis: Eye, skin, & GI irr. Notations: Skin
Regulatory reference	ACGIH 2024

8.2. Appropriate engineering controls

Appropriate engineering controls : Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

8.3. Individual protection measures

Personal protective equipment:

Corrosionproof clothing.

Hand protection:

Protective gloves made of PVC. Nitrile rubber gloves

Eye protection:

Wear closed safety glasses

Skin and body protection:

Safety shoes. Long sleeved protective clothing. Or chemical resistant apron

Respiratory protection:

Where exposure through inhalation may occur from use, respiratory protection equipment is recommended

Personal protective equipment symbol(s):



SECTION 9: Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state	: Liquid
Appearance	: Liquid.
Colour	: Colourless
Odour	: characteristic
Odour threshold	: Not available
pH	: Not available
Melting point	: Not available
Freezing point	: Not available
Boiling point	: Not available
Flash point	: 60 °C
Relative evaporation rate (butylacetate=1)	: Not available

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Flammability	: Not available
Explosive limits	: Not available
Vapour pressure	: Not available
Relative vapour density at 20°C	: Not available
Relative density	: Not available
Density	: 0.98 – 1.04 g/cm³
Solubility	: Material insoluble in water.
Partition coefficient n-octanol/water (Log Kow)	: Not available
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
Viscosity, kinematic	: Not available
Particle size	: Not applicable
Particle size distribution	: Not applicable
Particle shape	: Not applicable
Particle aspect ratio	: Not applicable
Particle specific surface area	: Not applicable

BENZENE-1,3-DIMETHANEAMINE1477-55-0

Boiling point	272 °C
Flash point	142 °C

Naphtha (petroleum), refined light solvent64741-84-0

Auto-ignition temperature	≥ 280 – ≤ 465
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2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL90-72-2

Flash point	148 °C
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N-Oleil-1,3-diaminopropano7173-62-8

Boiling point	> 150 °C Atm. press.: 101325 Pa
Flash point	184 °C Atm. press.: 1 atm
Vapour pressure	0.0015 Pa Temp.: 20 °C

9.2. Data relevant with regard to physical hazard classes

No additional information available

9.3. Further safety characteristics

No additional information available

SECTION 10: Stability and reactivity

Chemical stability	: In use may form flammable/explosive vapour-air mixture.
Conditions to avoid	: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid contact with hot surfaces. High temperature. Avoid formation of vapours.
Hazardous decomposition products	: May liberate toxic gases. On exposure to high temperature, may decompose, releasing corrosive gases.
Incompatible materials	: Combustible materials.
Possibility of hazardous reactions	: Liquids/vapours may ignite or react with other materials.
Reactivity	: The product is non-reactive under normal conditions of use, storage and transport.
Handling temperature	: No additional information available

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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Harmful if swallowed.
Acute toxicity (dermal) : Not available
Acute toxicity (inhalation) : Inhalation:dust,mist: Harmful if inhaled.

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ATE BR (oral)	722.399 mg/kg bodyweight
ATE BR (dust,mist)	4.695 mg/l/4h

BENZENE-1,3-DIMETHANEAMINE (1477-55-0)

LD50 oral rat	930 mg/kg
LD50 dermal rabbit	> 3100 mg/kg
LC50 Inhalation - Rat	1.34 mg/l

POLYOXYPROPYLENEDIAMINE (9046-10-0)

LD50 oral rat	2885 mg/kg bodyweight
LD50 dermal rabbit	2980 mg/kg bodyweight
LC50 Inhalation - Rat	> 0.74 mg/l

Naphtha (petroleum), refined light solvent (64741-84-0)

LD50 oral rat	≥ 7000 mg/kg bodyweight
LD50 dermal rabbit	≥ 2000 mg/kg bodyweight
LC50 Inhalation - Rat	≥ 43767 mg/m ³

N-Oleil-1,3-diaminopropano (7173-62-8)

LD50 oral rat	500 mg/kg bodyweight
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Skin corrosion/irritation : Causes severe skin burns.

ISOPHORONE DIAMINE (2855-13-2)

pH	11.6
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2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL (90-72-2)

pH	11
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Serious eye damage/irritation : Assumed to cause serious eye damage

ISOPHORONE DIAMINE (2855-13-2)

pH	11.6
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2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL (90-72-2)

pH	11
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Respiratory or skin sensitisation : May cause an allergic skin reaction.
Germ cell mutagenicity : May cause genetic defects.
Carcinogenicity : May cause cancer.
Reproductive toxicity : Not available
STOT-single exposure : Not available

Naphtha (petroleum), refined light solvent (64741-84-0)

STOT-single exposure	May cause drowsiness or dizziness.
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STOT-repeated exposure : Causes damage to organs through prolonged or repeated exposure.

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Industrial secret	
STOT-repeated exposure	Causes damage to organs through prolonged or repeated exposure.
BENZENE-1,3-DIMETHANEAMINE (1477-55-0)	
NOAEL (subacute, oral, animal/male, 28 days)	150 mg/kg bodyweight
N-Oleil-1,3-diaminopropano (7173-62-8)	
NOAEL (oral, rat, 90 days)	0.4 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents), Guideline: EU Method B.26 (Sub-Chronic Oral Toxicity Test: Repeated Dose 90-Day Oral Toxicity Study in Rodents)
STOT-repeated exposure	Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not available

BENZENE-1,3-DIMETHANEAMINE (1477-55-0)	
Viscosity, kinematic	6.78 mm²/s
Naphtha (petroleum), refined light solvent (64741-84-0)	
Viscosity, kinematic	≥ 0.35 – ≤ 0.45 mm²/s
N-Oleil-1,3-diaminopropano (7173-62-8)	
Viscosity, kinematic	13.08 mm²/s

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

Symptoms/effects	: Causes damage to organs through prolonged or repeated exposure. Harmful if inhaled. Swallowing a small quantity of this material presents some health hazard. Causes severe skin burns and eye damage. May cause an allergic skin reaction.
Symptoms/effects after inhalation	: May cause irritation to the respiratory tract, sneezing, coughing, burning sensation of throat with constricting sensation of the larynx and difficulty in breathing.
Symptoms/effects after skin contact	: Highly corrosive to skin. Causes severe burns. irritation (itching, redness, blistering). Cracking of the skin.
Symptoms/effects after eye contact	: stinging. Redness. Causes serious eye burns. redness, itching, tears.
Symptoms/effects after ingestion	: Harmful if swallowed. Ingestion may cause nausea and vomiting. Burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.
Chronic symptoms	: May cause cancer. May cause heritable genetic damage.

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute)	: Toxic to aquatic life.
Hazardous to the aquatic environment, long-term (chronic)	: Toxic to aquatic life with long lasting effects.

Naphtha (petroleum), refined light solvent64741-84-0	
LC50 - Fish [1]	≥ 4.4 mg/l
EC50 - Crustacea [1]	≥ 9.74 mg/l
N-Oleil-1,3-diaminopropano7173-62-8	
LC50 - Fish [1]	0.148 mg/l
EC50 - Crustacea [1]	0.29 mg/l
EC50 72h - Algae [1]	0.507 mg/l

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N-Oleil-1,3-diaminopropano7173-62-8

NOEC chronic crustacea	0.1 mg/l
NOEC chronic algae	0.188 mg/l

12.2. Persistence and degradability

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Persistence and degradability	Not rapidly degradable
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SALICYLIC ACID69-72-7

Persistence and degradability	Not rapidly degradable
-------------------------------	------------------------

Industrial secret

Persistence and degradability	Not rapidly degradable
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BENZYL ALCOHOL100-51-6

Persistence and degradability	Not rapidly degradable
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BENZENE-1,3-DIMETHANEAMINE1477-55-0

Persistence and degradability	Not rapidly degradable
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ISOPHORONE DIAMINE2855-13-2

Persistence and degradability	Not rapidly degradable
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POLYOXYPROPYLENEDIAMINE9046-10-0

Persistence and degradability	Not rapidly degradable
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Naphtha (petroleum), refined light solvent64741-84-0

Persistence and degradability	Not rapidly degradable
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2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL90-72-2

Persistence and degradability	Not rapidly degradable
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N-Oleil-1,3-diaminopropano7173-62-8

Persistence and degradability	Not rapidly degradable
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12.3. Bioaccumulative potential

Naphtha (petroleum), refined light solvent64741-84-0

Partition coefficient n-octanol/water (Log Pow)	≥ 2.723
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12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Hazardous to the ozone layer

: Not available

Other adverse effects

: May cause pH changes in aqueous ecological systems. Before neutralisation, the product may represent a danger to aquatic organisms.

SECTION 13: Disposal considerations

Regional waste regulation

: Law No. 12.305 on the National Policy on Solid Waste Management, 02 August 2010.

Waste treatment methods

: Must follow special treatment according to local regulation.

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Sewage disposal recommendations : Disposal must be done according to official regulations.
Product/Packaging disposal recommendations : Disposal must be done according to official regulations.
Additional information : Flammable vapours may accumulate in the container. Do not re-use empty containers.

SECTION 14: Transport information

14.1 National and international Regulations

In accordance with IMDG / IATA / ANTT

ANTT	IMDG	IATA
UN number		
2735	2735	2735
UN Proper Shipping Name		
AMINAS, CORROSIVAS, LÍQUIDAS, N.E. (N-Oleil-1,3-diaminopropano)	AMINES, LIQUID, CORROSIVE, N.O.S. (N-Oleil-1,3-diaminopropano)	Amines, liquid, corrosive, n.o.s. (N-Oleil-1,3-diaminopropano)
Transport document description		
Not applicable	UN 2735 AMINES, LIQUID, CORROSIVE, N.O.S. (N-Oleil-1,3-diaminopropano), 8, III, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS	UN 2735 Amines, liquid, corrosive, n.o.s. (N-Oleil-1,3-diaminopropano), 8, III, ENVIRONMENTALLY HAZARDOUS
Transport hazard class(es)		
8	8	8
Danger labels		
8	8	8
		
Subsidiary risk		
Not applicable	Not applicable	Not applicable
Risk Number		
80	Not applicable	Not applicable
Packing group		
III	III	III
Special provisions		
223,274	223,274	A3,A803
Dangerous for the environment		
Yes	Yes	Yes

14.2 Other informations

No additional information available

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SECTION 15: Regulatory information

15.1. National regulations

Brazil Local Regulations

: Standard ABNT NBR 14725.
Federal Decree no. 10.088, of 5 November 2019 – Promulgates Convention no. 170 of the WLO, relating to Safety in the Use of Chemicals in the Workplace, ratified by the Federative Republic of Brazil.
Ministerial Order no. 2.770, of 5 September 2022 – Approves the new wording of Regulatory Standard No. 26
Federal Decree no. 96.044, of 18 May 1988 - Approves Regulations for Road Transportation of Hazardous Materials
Resolution no. 5998, of November 3, 2022, updates the regulation for road transport of dangerous goods, approves its Complementary Instructions, and other measures.

SECTION 16: Other information

Abbreviations and acronyms

: CAS-No. - Chemical Abstract Service number
ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road
BCF - Bioconcentration factor
EC50 - Median effective concentration
LC50 - Median lethal concentration
VOC - Volatile Organic Compounds
LD50 - Median lethal dose
DMEL - Derived Minimal Effect level
DNEL - Derived-No Effect Level
COD - Chemical oxygen demand (COD)
ATE - Acute Toxicity Estimate
IMDG - International Maritime Dangerous Goods
IATA - International Air Transport Association
EC-No. - European Community number
vPvB - Very Persistent and Very Bioaccumulative
WGK - Water Hazard Class
IOELV - Indicative Occupational Exposure Limit Value
BLV - Biological limit value
TRGS - Technical Rules for Hazardous Substances
TLM - Median Tolerance Limit
IARC - International Agency for Research on Cancer

Important information, but not specifically described in the previous sections: This MSDS was prepared based on current knowledge about the handling of the product under normal conditions of use, according to the application specified on the packaging and recommended usage in Section 1 of this MSDS. Any other use of the product involving its combination with other materials, as well as forms of use different from those indicated, are the user's responsibility. The company advises that the handling of any chemical substance requires prior knowledge of its hazards by the user. In the workplace it is responsibility of the company user of the product to provide training of its employees and contractors about the possible risks arising from exposure to the chemical. We reserve the right to change the information contained in this document without prior notice, due to the improvement and continuous evolution of the product and technical knowledge.

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