



SAFETY DATA SHEET

Revision: N. 9 dated 02/14/2019

SECTION 1. IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1: Product identifier

Denomination: DILUENTE NITRO ANTINEBBIA FIORDALISO – THINNER FIORDALISO

Code: 2008

Exemption from registration obligation pursuant to Article 2, paragraph 7, letter D of EC Regulation 1907/2006

1.2: Relevant use of the mixture and uses advised against.

Description of use: Thinner for paints for exclusive industrial and professional use. Use in coatings. Production, formulation and repackaging. Uses advised against: those different from industrial and professional use

1.3: Information on the supplier of the safety data sheet

BRENNA S.R.L.

Via Arno, 48

20831 SEREGNO (MI) Italy

tel. 0362239819 fax 0362244726

e-mail of the competent person,

responsible for the safety data sheet: brennachim@gmail.com

1.4: Emergency telephone number

Milan Poison Control Center 02 66101029 (CAV Niguarda Ca 'Granda Hospital - Milan)

Poison Control Center of Pavia 0382 24444 (CAV IRCCS Fondazione Maugeri - Pavia)

Bergamo Poison Control Center 800 883300 (CAV Ospedali Riuniti - Bergamo)

Florence Poison Control Center 055 7947819 (CAV Careggi Hospital - Florence)

Poison Control Center of Rome 06 3054343 (CAV Policlinico Gemelli - Rome)

Poison Control Center of Rome 06 49978000 (CAV Policlinico Umberto I - Rome)

Poison Control Center of Naples 081 7472870 (CAV Cardarelli Hospital - Naples)

SECTION 2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture EC regulation criteria 1272/2008 (CLP):

Flammable liquid, category 2

H225 Highly flammable liquid and vapor.

Reproductive toxicity, category 2

H361d Suspected of damaging the unborn child.

Aspiration hazard, category 1

H304 May be fatal if swallowed and if penetrated in the respiratory tract.

Specific target organ toxicity –

Repeated exposure, category 2

H373 May cause damage to organs if exposed prolonged or repeated.

Carcinogenicity, category 2

H351 Suspected of causing cancer

Eye irritation, category 2

H319 Causes serious eye irritation.

Skin irritation, category 2

H315 Causes skin irritation.

Specific toxicity for target organs –

Exposure single, category 3

H336 May cause drowsiness or dizziness.

Hazardous to the aquatic environment,
chronic toxicity, category 3

H412 Harmful to aquatic life with long effects duration.

2.2: Elements on the label

Hazard labeling pursuant to Regulation (EC) 1272/2008 (CLP) and subsequent amendments and adjustments



Hazard pictograms:

Avvertenze:

Pericolo

Hazard statements:

H225 Highly flammable liquid and vapor. H361d Suspected of damaging the unborn child. H351 Suspected of causing cancer. H304 May be fatal if swallowed and enters airways. H373 May cause damage to organs through prolonged or repeated exposure. H319 Causes serious eye irritation. H315 Causes skin irritation. H336 May cause drowsiness or dizziness. H412 Harmful to aquatic life with long lasting effects.

EUH066 Repeated exposure may cause skin dryness or cracking.

Precautionary statements:

P202 Do not handle before reading and understanding all warnings. P210 Keep away from heat / sparks / open flames / hot surfaces. Not smoking. P233 Keep container tightly closed. P260 Do not breathe dust / fumes / gases / mist / vapors / aerosols. P280 Wear protective gloves / protective clothing / eye protection / face protection. P301 + P310 IF SWALLOWED: immediately contact a POISON CENTER or doctor. P303 + P361 + P353 IN CASE OF CONTACT WITH SKIN (or hair): immediately take off all contaminated clothing. Rinse the skin / take a shower. P304 + P340 IN CASE OF INHALATION: transport the injured person to the open air and keep him at rest in a position which encourage breathing. P305 / 351/338 IN CASE OF CONTACT WITH EYES: rinse thoroughly for several minutes. Remove any contact lenses if it is easy to do so. Continue to rinse. P370 + 376 + 378 IN CASE OF FIRE: block the leak if there is no danger. Extinguish with CO₂, chemical powders, water spray. Do not use full jet water. P403 + P235 Keep container tightly closed and in a well-ventilated place. P501 Dispose of the product in accordance with national regulations.

Contains: Toluene, Methanol, Dichloromethane, Tetrahydrofuran, hexamethylenedisiloxane

Special provisions based on Annex XVII of REACH and subsequent adjustments:

None

2.3. Other hazards

VPvB Substances: None - PBT Substances: None

SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

It is a mixture of recovery solvents Exempt from the registration requirement pursuant to Article 2, paragraph 7, letter D of the EC Regulation 1907/2006

3.1: Substances

Not relevant information.

3.2 Mixtures

Hazardous components under the CLP Regulation and related classification:

QUANTITY	NAME	IDENTIFICATION NUMBER	IDENTIFICATION NUMBER
>= 20% - <25%	acetato di etile	Numero Index: 607-022-00-5 CAS: 141-78-6 EC: 205-500-4	2.6/2 Flam. Liq. 2 H225 3.3/2 Eye Irrit. 2 H319 3.8/3 STOT SE 3 H336 EUH066
>= 20% - <25%	acetone	Numero Index: 606-001-00-8 CAS: 67-64-1 EC: 200-662-2	2.6/2 Flam. Liq. 2 H225 3.3/2 Eye Irrit. 2 H319 3.8/3 STOT SE 3 H336 EUH066
>= 1% - <10%	metanolo; alcool metilico	Numero Index: 603-001-00-X CAS: 67-56-1 EC: 200-659-6	2.6/2 Flam. Liq. 2 H225 3.1/3/Oral Acute Tox. 3 H301 3.1/3/Dermal Acute Tox. 3 H311 3.1/3/Inhal Acute Tox. 3 H331 3.8/1 STOT SE 1 H370 EUH066
>= 1% - <10%	Diclorometano	Numero Index: 602-004-00-3 CAS: 75-09-2 EC: 200-838-9	3.6/2 Carc. 2 H351
>= 5% - <10%	toluene	Numero Index: 601-021-00-3 CAS: 108-88-3 EC: 203-625-9	2.6/2 Flam. Liq. 2 H225 3.7/2 Repr. 2 H361 3.10/1 Asp. Tox. 1 H304 3.9/2 STOT RE 2 H373 3.2/2 Skin Irrit. 2 H315 3.8/3 STOT SE 3 H336
>= 5% - <10%	metile acetato	Numero 607-021-00-X	2.6/2 Flam. Liq. 2 H225

		Index:	
		CAS:	79-20-9
		EC:	201-185-2
			EUH066
>= 3% - <5%	esametildisilossano	CAS:	107-46-0
		EC:	203-492-7
			2.6/2 Flam. Liq. 2 H225
			3.6/2 Carc. 2 H351
			4.1/A1 Aquatic Acute 1 H400
			4.1/C2 Aquatic Chronic 2 H411
>= 1% - <3%	Tetraidrofurano	Numero Index:	603-025-00-0
		CAS:	109-99-9
		EC:	203-726-8
			2.6/2 Flam. Liq. 2 H225
			3.6/2 Carc. 2 H351
			3.3/2 Eye Irrit. 2 H319
			3.8/3 STOT SE 3 H335
			EUH019
>= 1% - <3%	acetonitrile	Numero Index:	608-001-00-3
		CAS:	75-05-8
		EC:	200-835-2
			2.6/2 Flam. Liq. 2 H225
			3.3/2 Eye Irrit. 2 H319
			3.1/4/Oral Acute Tox. 4 H302
			3.1/4/Dermal Acute Tox. 4 H312
			3.1/4/Inhal Acute Tox. 4 H332
>= 1% - <10%	butan-2-olo	Numero Index:	603-127-00-5
		CAS:	78-92-2
		EC:	201-158-5
			2.6/3 Flam. Liq. 3 H226
			3.3/2 Eye Irrit. 2 H319
			3.8/3 STOT SE 3 H335
			3.8/3 STOT SE 3 H336
>= 1% - <10%	isopropanolo	Numero Index:	603-117-00-0
		CAS:	67-63-0
		EC:	200-661-7
			2.6/2 Flam. Liq. 2 H225
			3.3/2 Eye Irrit. 2 H319
			3.8/3 STOT SE 3 H336
>= 1% - <3%	metilisobutilchetone	Numero Index:	606-004-00-4
		CAS:	108-10-1
		EC:	203-550-1
			2.6/2 Flam. Liq. 2 H225
			3.3/2 Eye Irrit. 2 H319
			3.8/3 STOT SE 3 H335
			3.1/4/Inhal Acute Tox. 4 H332
			EUH066
>= 0.5% - < 1%	metil-tert-butilettere	Numero Index:	603-181-00-X
		CAS:	1634-04-4
		EC:	216-653-1
			2.6/2 Flam. Liq. 2 H225
			3.2/2 Skin Irrit. 2 H315
>= 0.25% - <0.5%	n-eptano	Numero Index:	601-008-00-2
		CAS:	142-82-5
		EC:	205-563-8
			2.6/2 Flam. Liq. 2 H225
			3.10/1 Asp. Tox. 1 H304
			3.2/2 Skin Irrit. 2 H315
			3.8/3 STOT SE 3 H336
			4.1/A1 Aquatic Acute 1 H400
			4.1/C1 Aquatic Chronic 1 H410

SECTION 4. FIRST AID MEASURES

4.1. Description of first aid measures

In case of skin contact:

Remove contaminated clothing immediately.

Wash the areas of the body that have come into contact with the product immediately with plenty of water and soap, even if only suspicious. Wash the body completely (shower or bath).

Remove contaminated clothing immediately and dispose of it safely.

In case of contact with the skin, wash immediately with plenty of water and soap.

In case of eye contact:

In case of contact with the eyes, rinse them with water for an appropriate period of time and keep the eyelids open, then immediately consult an ophthalmologist. Protect the uninjured eye.

In case of ingestion:

Do not give anything to eat or drink.

In case of inhalation:

Bring the injured person into the open air and keep him warm and at rest.

4.2. Most important symptoms and effects, both acute and delayed None

4.3. Indication of any need to immediately consult a doctor and special treatments

In the event of an accident or feeling unwell seek medical advice immediately (if possible show the instructions for use or the safety data sheet).

Treatment:

Nobody

SECTION 5. FIREFIGHTING MEASURES

5.1. Fire fighting

Suitable extinguishing media:

Carbon dioxide (CO₂)

Dry powder

Foam

Extinguishing media which must not be used for safety reasons 5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases. Combustion produces heavy smoke.

5.3. Advice for fire-fighters Use suitable respiratory equipment.

Collect contaminated water used to extinguish the fire separately. Do not discharge it into the sewer system.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures Wear the personal protective equipment.

Remove any ignition source.

Move people to a safe place.

Consult the protective measures set out in points 7 and 8.

6.2. Environmental precautions

Prevent penetration into the soil / subsoil. Prevent runoff to surface water or sewer system.

Keep contaminated washing water and eliminate it.

In case of gas leak or penetration into waterways, soil or sewage system inform the responsible authorities. Suitable material for collection: absorbent 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 paragraphs 8 and 13

SECTION 7. HANDLING AND STORAGE

7.1. Precautions for Safe Handling

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

Use extreme caution when handling or opening the container.

Do not use empty containers before they have been cleaned.

Before transfer operations, make sure that there are no residual incompatible materials in the containers.

Contaminated clothing must be replaced before entering dining areas.

At work do not eat or drink.

Please also refer to paragraph 8 for recommended protective devices. 7.2. Conditions for safe storage, including any incompatibilities Keep the **container** tightly closed in a dry and well-ventilated place. Keep away from heat and other sources of fire. Store in well ventilated areas.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. Control parameters

Acetato di etile - CAS: 141-78-6

UE - TWA(8h): 734 mg/m³, 200 ppm - STEL: 1468 mg/m³, 400 ppm

ACGIH - TWA(8h): 400 ppm - Note: URT and eye irr

Acetone - CAS: 67-64-1

UE - TWA(8h): 1210 mg/m³, 500 ppm

ACGIH - TWA(8h): 250 ppm - STEL: 500 ppm - Note: A4, BEI - URT and eye irr, CNS impair

Metanolo; alcool metilico - CAS: 67-56-1

UE - TWA(8h): 260 mg/m³, 200 ppm - Note: Skin ACGIH - TWA(8h): 200 ppm - STEL: 250 ppm -

Note: Skin, BEI - Headache, eye dam, dizziness, nausea

Diclorometano - CAS: 75-09-2

UE - TWA(8h): 353 mg/m³, 100 ppm - STEL: 706 mg/m³, 200 ppm - Note: Skin

ACGIH - TWA(8h): 50 ppm - Note: A3, BEI - COHb-emia, CNS impair

Toluene - CAS: 108-88-3

UE - TWA(8h): 192 mg/m³, 50 ppm - STEL: 384 mg/m³, 100 ppm - Note: Skin

ACGIH - TWA(8h): 20 ppm - Note: A4, BEI - Visual impair, female repro, pregnancy loss

Metile acetato - CAS: 79-20-9

ACGIH - TWA(8h): 200 ppm - STEL: 250 ppm - Note: Headache, dizziness, nausea, eye dam
(degeneration of ganglion cells in the retina)

Tetraidrofurano - CAS: 109-99-9

UE - TWA(8h): 150 mg/m³, 50 ppm - STEL: 300 mg/m³, 100 ppm - Note: Skin

ACGIH - TWA(8h): 50 ppm - STEL: 100 ppm - Note: Skin, A3 - URT irr, CNS impair, kidney dam

Acetonitrile - CAS: 75-05-8

UE - TWA(8h): 70 mg/m³, 40 ppm - Note: Skin

ACGIH - TWA(8h): 20 ppm - Note: Skin, A4 - LRT irr

Butan-2-olo - CAS: 78-92-2

ACGIH - TWA(8h): 100 ppm - Note: URT irr, CNS impair

Isopropanolo - CAS: 67-63-0

ACGIH - TWA(8h): 200 ppm - STEL: 400 ppm - Note: A4, BEI - Eye and URT irr, CNS impair

Metilisobutilchetone - CAS: 108-10-1

UE - TWA(8h): 83 mg/m³, 20 ppm - STEL: 208 mg/m³, 50 ppm

ACGIH - TWA(8h): 20 ppm - STEL: 75 ppm - Note: A3, BEI - URT irr, dizziness, headache

Metil-tert-butilettere - CAS: 1634-04-4

UE - TWA(8h): 183.5 mg/m³, 50 ppm - STEL: 367 mg/m³, 100 ppm

ACGIH - TWA(8h): 50 ppm - Note: A3 - URT irr, kidney dam

n-eptano - CAS: 142-82-5

DFG - TWA: 2085 mg/m³, 500 ppm

UE - TWA(8h): 2085 mg/m³, 500 ppm

ACGIH - TWA(8h): 400 ppm - STEL: 500 ppm - Note: CNS impair, URT irr Valori limite di
esposizione DNEL

Methanol; methyl alcohol - CAS: 67-56-1

Industrial worker: 40 mg / kg Body weight - Consumer: 8 mg / Kg Body weight - Exposure:

Human Dermal - Frequency: Short term, systemic effects
Lavoratore industriale: 260 mg/m³ - Consumatore: 50 mg/m³
- Exposure: Human Inhalation -

Frequency:

Short term, systemic effects

Industrial worker: 260 mg / m³ - Consumer: 50 mg / m³ - Exposure: Human Inhalation -

Frequency:

Long term, systemic effects

Consumer: 8 mg / kg Body weight - Exposure: Human Oral - Frequency: Short term, local effects

Consumer: 8 mg / kg Body weight - Exposure: Human Oral - Frequency: Short term, effects

Systemic

Diclorometano - CAS: 75-09-2

Industrial worker: 353 mg / m³ - Consumer: 88.3 mg / m³ - Exposure: Human Inhalation -

Frequency:

Long term, systemic effects

Industrial worker: 4750 mg / Kg Body weight - Consumer: 2395 mg / Kg Body weight -

Exposure:

Human Dermal - Frequency: Long term, systemic effects

Industrial worker: 0.06 mg / Kg Body weight - Exposure: Human Oral - Frequency: Long

term, systemic effects

Esametildisilossano - CAS: 107-46-0

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Industrial worker: 890 mg / m³ - Exposure: Human inhalation - Frequency: Long term, effects systemic
 Industrial worker: 126 mg / Kg Body weight - Exposure: Human Cutaneous - Frequency: Long term, systemic effects
 PNEC exposure limit values

metanolo; alcool metilico - CAS: 67-56-1

Target: Fresh water - Value: 154 mg / l
 Target: Freshwater sediments - Value: 570.4 mg / kg
 Target: Sea water - Value: 15.4 mg / l
 Target: Soil - Value: 23.5 mg / kg
 Target: Sewage treatment plant - Value: 100 mg / l

Diclorometano - CAS: 75-09-2

Target: Fresh water - Value: 0.54 mg / l
 Target: Freshwater sediments - Value: 4.47 mg / kg
 Target: Sea water - Value: 0.194 mg / l
 Target: Sewage treatment plant - Value: 26 mg / l
 Target: Soil - Value: 0.583 mg / kg

Esametildisilossano - CAS: 107-46-0

Target: Fresh water - Value: 0.008 mg / l
 Target: Soil - Value: 1.19 mg / kg
 Target: Freshwater sediments - Value: 4.8 mg / kg
 Target: Sea water sediments - Value: 0.48 mg / kg
 Target: Sewage treatment plant - Value: 10 mg / l

8.2. Exposure controls Eye protection:

Do not use contact lenses

Glasses with side protection.

Skin protection:

Lab coat.

Protective clothing for chemical agents.

Safety footwear.

Hand protection:

Use protective gloves that guarantee total protection, eg in PVC, neoprene or rubber.

Respiratory protection:

Full-face mask with multi-purpose filter (A B AND K P)

Thermal hazards:

Nobody

Environmental exposure controls:

Do not throw residues into drains.

Suitable technical checks:

Nobody

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

PROPERTY	VALUE	METHOD	NOTE
Appearance and color:	Liquid and colorless	--	--
Odor:	N.A.	--	--
Odor threshold:	N.A.	--	--
pH:	7-9	--	--
Melting / freezing point:	N.A.	--	--
Initial boiling point e boiling range:	56 - 72°C a 1ATM	--	--
Flash point:	N.A.	--	--
Evaporation rate:	N.A.	--	--

Solid / gas flammability:	N.A.	--	--
Upper / lower limit flammability or explosion:	N.A.	--	--
Vapor pressure:	160 hPa a 20°C 570 hPa a 50°C	--	--
Vapor density: Upper / lower limit	>1 (air=1)	--	--
Relative density:	0.860 - 0.920 a 20°C	--	--
Water solubility:	N.A.	--	--
Solubility in oil:	N.A.	--	--
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			
Property	Valore	Metodo:	Note:
Miscibility:	N.A.	--	--
Lipid:	N.A.	--	--
Conductivity:	N.A.	--	--
Characteristic properties of groups of substances	N.A.	--	--

SECTION 10. STABILITY AND REACTIVITY

10.1. Reactivity

Stable under normal conditions

10.2. Chemical stability

The product is chemically stable under standard environmental conditions (room temperature)

10.3. Possibility of dangerous reactions

Nobody

10.4. Conditions to avoid

Heating

10.5. Incompatible materials

Avoid contact with combustible materials. The product may catch fire.

10.6. Hazardous decomposition products

Nobody.

SECTION 11. TOXICOLOGICAL INFORMATION

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11.1. Informazioni sugli effetti tossicologici

Toxicological information regarding the product:

N.A.

Toxicological information regarding the main substances present in the product:

acetato di etile - CAS: 141-78-6

a) acute toxicity:

Test: LD50 - Via: Orale - Specie: Ratto = 11300 mg/kg

Test: LD50 - Via: Pelle - Specie: Coniglio = 18000 mg/kg

Test: LC50 - Via: Inalazione - Specie: Ratto = 1600 ppm - Durata: 4h

acetone - CAS: 67-64-1

a) acute toxicity:

Test: LD50 - Via: Orale - Specie: Ratto = 5800-7138 mg/kg - Fonte: www.reach.ipzs.it

Test: LD50 - Via: Pelle - Specie: Coniglio > 20000 mg/kg - Fonte: www.reach.ipzs.it

Test: LC50 - Via: Inalazione - Specie: Ratto = 76000 mg/m³ - Durata: 4h - Fonte: www.reach.ipzs.it

Test: LD50 - Via: Orale - Specie: Coniglio = 5300 mg/kg

metanolo; alcool metilico - CAS: 67-56-1

a) acute toxicity:

Test: LD50 - Via: Orale - Specie: Ratto = 6000-14000 mg/kg

Test: LD50 - Via: Orale - Specie: Topo = 6000-14000 mg/kg

Test: LD50 - Via: Orale - Specie: Coniglio = 6000-14000 mg/kg

Test: LD50 - Via: Pelle - Specie: Coniglio = 16000 mg/kg

Test: LC50 - Via: Inalazione - Specie: Topo = 100000 ppm - Durata: 1h e) mutagenicità delle cellule

germinali:

Test: Mutagenesi - Via: Test di ames - Specie: Salmonella Typhimurium Negativo - Fonte: Linee Guida 471 per il Test dell'OECD

Diclorometano - CAS: 75-09-2

a) acute toxicity:

Test: LD50 - Via: Orale - Specie: Ratto > 2000 mg/kg

Test: LC50 - Via: Inalazione - Specie: Ratto = 40200-55870 mg/m³ - Durata: 4h

toluene - CAS: 108-88-3

a) acute toxicity:

Test: LD50 - Via: Orale - Specie: Ratto = 5300-7400 mg/kg

Test: LD50 - Via: Pelle - Specie: Coniglio = 12400 mg/kg

Test: LC50 - Via: Inalazione - Specie: Ratto = 2.81 mg/l - Durata: 4h

esametildisilossano - CAS: 107-46-0

a) tossicità acuta:

Test: LD50 - Via: Orale - Specie: Ratto > 12160 mg/kg

Test: LC50 - Via: Inalazione - Specie: Ratto 107.5 mg/l - Durata: 4h - Fonte: OECD TG 403 - Note: Possibili danni: Irritazione mucose, tosse, mancanza respiro, edema polmonare.

Test: LD50 - Via: Cutanea - Specie: Ratto > 2000 mg/kg - Fonte: OECD TG 402 e) mutagenicità delle cellule germinali:

Test: Mutagenesi - Via: Aberrazione cromosomica - Specie: Ratto Negativo - Fonte: OECD TG 475

Test: Mutagenesi - Via: Test di ames - Specie: Salmonella Typhimurium Negativo

Tetraidrofurano - CAS: 109-99-9

a) acute toxicity:

Test: LD50 - Via: Orale - Specie: Ratto = 3800-6200 ml/kg

Test: LC50 - Via: Inalazione - Specie: Ratto = 62000 mg/m³ - Durata: 3h

acetoneitrile - CAS: 75-05-8

a) tossicità acuta:

Test: LD50 - Via: Orale - Specie: Ratto = 3476 mg/kg

Test: LD50 - Via: Pelle - Specie: Coniglio > 2000 mg/kg

Test: LC50 - Via: Inalazione - Specie: Ratto = 12685 mg/m³ - Durata: 8h

n-eptano - CAS: 142-82-5

a) acute toxicity:

Test: LD50 - Via: Orale - Specie: Topo = 5000 mg/kg

Test: LD50 - Via: Pelle - Specie: Coniglio = 3000 mg/kg

acetato di etile - CAS: 141-78-6

EXPOSURE

The main potential routes of exposure are inhalation and skin contact.

GENERAL EFFECTS OF ENVIRONMENTAL EXPOSURE

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The vapors, at high concentrations, are very irritating to the mucous membranes and cause effects on the CNS (headache, dizziness, asthenia and disorders of the consciousness). The vapors, at high concentrations, also have anesthetic power.

ACUTE TOXICITY

- Inhalation: Vapors irritate the nasal and pharyngeal mucous membranes. Short exposures to 400 ppm of ethyl acetate cause slight irritation of the nose and throat. Longer exposures at the same concentration showed symptoms of fatigue, discomfort and discomfort. Exposure to high concentrations may cause central nervous system (CNS) depression including headache, drowsiness, dizziness, shortness of breath. The case of a death is reported, due to strong exposure, due to congestion of the upper respiratory tract, spleen and kidneys, and to pulmonary hemorrhage.

- Ingestion: it is not very toxic. It can lead to depression of the central nervous system (CNS) with headache, drowsiness, dizziness, shortness of breath, nausea and vomiting.

- Skin: Repeated dermal exposure may cause skin dryness or cracking.

- Eyes: Vapors are irritating to ocular mucous membranes. The substance, sprayed in the eye, causes conjunctivitis and sometimes keratitis.

LONG-TERM TOXICITY (SUBACUTE, SUBCRONIC, CHRONIC)

- Inhalation:

- Skin: The substance has not shown sensitizing power. The substance causes chronic irritative effects on the skin.

- Eyes: Chronic eye irritation has been observed in workers exposed to the substance.

It does not accumulate in the body.

acetone - CAS: 67-64-1

EXPOSURE

The main potential routes of exposure are inhalation, skin contact and ingestion. Workers are exposed by inhalation and skin contact. The general population can be exposed through the use of commercial products containing the substance, by inhalation from the environment, by ingestion of water and contaminated foods.

GENERAL EFFECTS OF ENVIRONMENTAL EXPOSURE

In laboratory animals exposed to acetone concentrations above 7765 mg / m³ (> 3270 ppm) a lower performance was noted in behavioral tests.

In humans, exposure to acetone concentrations of 4750 mg / m³ (2000 ppm) has limited effects on eye irritation.

Workers exposed to doses higher than 25500 mg / m³ (> 12000 ppm) for 4 hours showed vomiting and loss of consciousness.

ACUTE TOXICITY

- Inhalation: irritation of the respiratory tract, headache and tiredness may occur between 1000 and 2000 ppm; over 2000 ppm dizziness, feeling of drunkenness, drowsiness, nausea and vomiting may be felt; for high doses (> 10000 ppm). The symptoms are local (eye and airway irritation), neurological with asthenia, headache, dizziness and coma, sometimes convulsive. In severe intoxication there is a slight hepatic and renal damage.

- Ingestion: In cases of oral poisoning, symptoms similar to that caused by inhalation occur, which usually occurs after a certain interval of hours. Oral intoxication is accompanied by digestive irritation with hematemesis without caustic type complications. A known case of 200 ml intake led to unconsciousness for 12 hours and, in the long term, to symptoms similar to those of diabetes.

- Eyes: In the rabbit it causes reversible conjunctival and corneal irritation in the eye. In humans it is irritating (burning)

metanolo; alcool metilico - CAS: 67-56-1

EXPOSURE

The main potential routes of exposure are inhalation, skin contact and ingestion. The general population is exposed to the substance by inhalation, through the consumption of food and water, through skin contact with various consumer products like solvents for paints, paint removers, stain removers and inks

GENERAL EFFECTS OF ENVIRONMENTAL EXPOSURE

The acute toxicity of the substance varies according to the animal species observed, being related to the metabolism of the formate. Primates and humans are highly sensitive to the toxic effects of methanol. The highest concentrations are found in the blood, ocular fluid, bile and urine. Inside the body it is oxidized to formaldehyde and formic acid, both toxic. In humans, the half-life in expired air, after dermal or oral exposure, is 1.5 hours.

Once absorbed, it is eliminated very slowly; due to the slowness of elimination, it presents the risk of accumulation, ie of increased concentration in the organism due to exposure before having disposed of the previously absorbed dose; this means that while individual exposures may not be dangerous, daily exposure can result in sufficient accumulation to cause damage.

ACUTE TOXICITY

Irritating to eyes, skin and respiratory system. Initially there is mild CNS depression, followed by a latency period - some hours up to 30 hours - (almost never before an hour or after 72 hours) and then the various symptoms appear. The manifestations depend on individual sensitivity.

You have non-specific symptoms:

- CNS depression (dizziness, ataxia, headache, agitation), then disorders of consciousness that sometimes go together with convulsions, respiratory depression and cardiovascular collapse;
- signs of digestive irritation (nausea, vomiting); and specific symptoms:
- CNS depression (vertigo, ataxia, headache, agitation)

Diclorometano - CAS: 75-09-2

EXPOSURE

The main potential routes of exposure are inhalation, skin contact and ingestion. Workers can be exposed by inhalation or skin. The general population can be exposed to inhalation in a contaminated environment, to ingestion of contaminated food or water, to skin contact with products containing methylene chloride, such as paint removers, soaps, paints and glues.

GENERAL EFFECTS OF ENVIRONMENTAL EXPOSURE

Acute exposure may cause narcotic effects. High concentrations of substance cause CNS depression and respiratory collapse. Other symptoms are drowsiness, euphoria, irritability, fatigue, weakness, sleep disturbance, numbness and tingling of the extremities, convulsions, pulmonary edema, changes in heart rhythm, nausea, vomiting and hemolysis. Cardiac sensitization with arrhythmias is also reported.

ACUTE TOXICITY

- Inhalation: v. generic effects
- Ingestion: burns of the oral mucosa, burns, bleeding and necrosis of the gastrointestinal tract may occur.
- Skin: irritating to the skin
- Eyes: may cause corneal burns

GENERAL EFFECTS OF ENVIRONMENTAL EXPOSURE

Acute exposure may cause narcotic effects. High concentrations of substance cause CNS depression and respiratory collapse. Other symptoms are drowsiness, euphoria, irritability, fatigue, weakness, sleep disturbance, numbness and tingling of the extremities, convulsions, pulmonary edema, changes in heart rhythm, nausea, vomiting and hemolysis. Cardiac sensitization with arrhythmias is also reported.

LONG-TERM TOXICITY (SUBACUTE, SUBCHRONIC, CHRONIC)

In humans, cases of visual and auditory hallucinations following exposure for one year are reported.

Subchronic toxicity studies show that exposure causes hepatotoxic, neurotoxic and, in some cases, even nephrotoxic effects.

Administration with drinking water to rats at doses of 166, 420, or 1200 mg / kg / day in males and 209, 607, or 1469 mg / kg / day in females for 3 months, caused the appearance of necrosis centrolobulare at medium-high doses in females and a vacuolization of hepatocytes in all treated animals. After one month of treatment, SGPT increased in all males and, in females, both SGPT and SGOT increased after 3 months of treatment at higher doses. A reduction in the concentration of glucose, cholesterol and fasting triglycerides was observed.

toluene - CAS: 108-88-3

It is rapidly absorbed by the lungs and gastrointestinal tract. It has good degreasing power, and can cause

contact dermatitis. It has good affinity with lipids, and therefore can accumulate in adipose tissue, in tissues with high fat content and in highly vascularized tissues, such as bone marrow, spinal cord, spinal nerves and cerebral white matter. There is less accumulation in blood, liver and kidneys. It is found in blood cells in the blood reds linked to hemoglobin. Cross the placental barrier and is eliminated with breast milk. It is oxidized in the liver and largely transformed into benzoic acid, which is conjugated to both glycine, with formation of hippuric acid, and glucuronic acid. 60-70% is eliminated as hippuric acid, which appears in the urine after 1/2 hour from exposure; about 15-20% is exhaled. 15% is eliminated as benzoilglucuronide.

Acute toxicity

Inhalation: drowsiness, headache, nose and throat irritation in narcosis and death, depending on the severity of exposure. In severe cases, damage to the liver, kidneys and heart has been reported.

Skin: moderate irritant. Because of its degreasing power it can cause dermatitis. Slow skin absorption.

Eyes: irritation and corneal damage reversible in 48 hours.

Ingestion: it is rapidly absorbed, giving the same effects as inhalation. Danger of aspiration into the lungs during ingestion or vomiting; the accumulation of liquid toluene in the lungs can cause death. Chronic toxicity

The main effect is the psycho-organic syndrome. Possible disorders of attention and sleep.

Skin: dermatitis.

Effect on the kidneys: not certain results.

Liver: there appears to be no damage due to chronic exposure.

Hearing: there seems to be a relationship between chronic exposure and hearing damage.

Exposure to other solvents, such as ethanol, slows their elimination from the body, increasing toxicity.

Physical activity, even modest, increases its concentration in the alveolar air and in the blood.

Tetraidrofurano - CAS: 109-99-9

Odor detectability: 7.3-10.2 mg / m³ (2.48-3.47 ppm) (noticeable); 180 mg / m³ (61.2 ppm) (distinct odor)

EXPOSURE

The main potential routes of exposure are inhalation, skin contact and ingestion.

ACUTE TOXICITY

In animals the signs of intoxication are CNS depression, myoclonus, convulsions, arterial hypotension, steatosis and hepatic cytolysis, renal tubular and glomerular damage. At low doses (100-200 ppm) it is irritating to the skin and mucous membranes: nose, throat and respiratory system. At high concentrations (25,000 ppm) it is anesthetic and can also cause a lowering of blood pressure and an increase in breathing; such a high concentration could even be lethal.

Following ingestion there is hemorrhagic gastritis and stomach ulceration.

In two cases of occupational exposure the substance caused irritation of the mucous membranes, nausea, headache in the occipital area, dizziness and cytolytic hepatitis. Symptoms of CNS irritation disappeared a few hours after stopping exposure.

- Skin: irritating to skin and mucous membranes. In exposed workers erythematous cutaneous eruptions are observed in the uncovered parts due to the substance and / or peroxides that form when the solvent oxidizes in contact with the oxygen in the air.

- Eyes: in the rabbit, it has shown irritation and corneal lesions depending on the concentration of the substance.

LONG-TERM TOXICITY (SUBACUTE, SUBCRONIC, CHRONIC)

At important doses there is depression of the central nervous system, cytolytic hepatic damage, renal tubular and an increase in cholinesterase activity.

A case of distal peripheral neuropathy is reported in a man exposed to the substance for two years.

acetonitrile - CAS: 75-05-8

EXPOSURE

The main potential routes of exposure are inhalation, skin contact and ingestion.

GENERAL EFFECTS OF ENVIRONMENTAL EXPOSURE

A harmful contamination of the air can be reached very quickly on evaporation of the substance at 20 ° C.

The substance is irritating to eyes, skin and respiratory tract. The effects may be delayed. The symptoms of acute poisoning do not become manifest until a few hours have passed.

ACUTE TOXICITY

The symptoms of acute poisoning are chest pain, difficulty in breathing, nausea, emesis, tachycardia, hypotension, headache and collapse. Systemic effects are due to the conversion of acetonitrile to cyanide.

- - Inhalation: its toxicity is mainly due to its transformation, inside the organism, into cyanide. The first symptoms of poisoning include anxiety and excitement, weakness, headache, nausea and vomiting, metallic taste, tightness in the chest, flushing of the face, drowsiness, dizziness, eye irritation, nose and throat, wheezing, pressure increase arterial and decreased pulse. Breathing difficulties, pressure drop, weak and irregular heartbeat, loss of consciousness and convulsions follow. In severe cases cardiovascular collapse, shock and accumulation of fluid in the lungs (edema) are followed by death. The bright red color of the blood (which can give a red appearance to the skin) is characteristic of this type of poisoning.

- Ingestion: in the body it is transformed into cyanide, causing the same damage as inhalation.

- Skin: it is not irritating to the skin, but is absorbed through it, giving the same symptoms as inhalation.

- Eyes: severe irritant on animals. No human data are known.

Unless otherwise specified, the data required by Regulation (EU) 2015/830 below are to be understood as N.A. :

a) acute toxicity;

- b) skin corrosion / irritation;
- c) serious eye damage / severe eye irritation;
- d) respiratory or skin sensitization;
- e) germ cell mutagenicity;
- f) carcinogenicity;
- g) reproductive toxicity;
- h) specific toxicity for target organs (STOT) - single exposure;
- i) specific toxicity for target organs (STOT) - repeated exposure;
- j) aspiration hazard.

SECTION 12. ECOLOGICAL INFORMATION

12.1. Toxicity

Use according to good working practices, avoiding to disperse the product in the environment.

Short-term toxicity

acetato di etile - CAS: 141-78-6

a) Acute aquatic toxicity:

Endpoint: LC50 - Specie: Pesci = 230 mg/l - Durata h: 96

Endpoint: LC50 - Specie: Crostacei = 295 mg/l - Durata h: 48

acetone - CAS: 67-64-1

a) Acute aquatic toxicity:

Endpoint: LC50 - Specie: Pesci = 7280 mg/l - Durata h: 96

Endpoint: LC50 - Specie: Crostacei = 7635 mg/l - Durata h: 48

metanolo; alcool metilico - CAS: 67-56-1

a) Acute aquatic toxicity:

Endpoint: LC50 - Specie: Pesci = 10000 mg/l - Durata h: 48

Endpoint: LC50 - Specie: Pesci = 10000 mg/l - Durata h: 96

Diclorometano - CAS: 75-09-2

a) Acute aquatic toxicity:

Endpoint: LC50 - Specie: Pesci = 193 mg/l - Durata h: 96

Endpoint: LC50 - Specie: Crostacei = 224 mg/l - Durata h: 48

toluene - CAS: 108-88-3

a) Acute aquatic toxicity:

Endpoint: LC50 - Specie: Pesci = 57.68 mg/l - Durata h: 96

Endpoint: LC50 - Specie: Dafnie = 11.5 mg/l - Durata h: 48

esametildisilossano - CAS: 107-46-0

c) Tossicità per i batteri:

Endpoint: NOEC - Specie: Fango attivato > 100 mg/l - Durata h: 3 - Note: OECD TG 209

Endpoint: EC50 - Specie: Fango attivato > 100 mg/l - Durata h: 3 - Note: OECD TG 209

Tetraidrofurano - CAS: 109-99-9

a) Acute aquatic toxicity:

Endpoint: LC50 - Specie: Pesci = 2160 mg/l - Durata h: 96

acetonitrile - CAS: 75-05-8

a) Tossicità acquatica acuta:

Endpoint: LC50 - Specie: Pesci = 1000 mg/l - Durata h: 48

n-eptano - CAS: 142-82-5

a) Acute aquatic toxicity:

Endpoint: LC50 - Specie: Dafnie = 10 mg/l - Durata h: 24 Tossicità a lungo termine

12.2. Persistence and degradability

Nobody

metanolo; alcool metilico - CAS: 67-56-1

Biodegradability: Rapidly degradable - Test: Oxygen consumption - Duration: 30D -%: 99% - Notes:

OECD TG 301D

esametildisilossano - CAS: 107-46-0

Biodegradability: Non biodegradable - Test: Oxygen consumption - Duration: 28D -%: 2% - Notes:

Diclorometano - CAS: 75-09-2

Bioaccumulazione: Non bioaccumulabile - Test: log Pow 1.25 - Durata: N.A. - Note: N.A.

12.4. Mobilità nel suolo

Diclorometano - CAS: 75-09-2

Mobility in the soil: N.A. Test: log Koc 1.00 - Duration: N.A. - Notes: N.A.

12.5. Results of PBT and vPvB assessment

VPvB Substances: None - PBT Substances: None

12.6. Other adverse effects

Nobody

SECTION 13. DISPOSAL CONSIDERATIONS

Classification of waste: dangerous special.

13.1 Waste treatment methods

Reuse, if possible. Product residues are to be considered special hazardous waste. The dangerousness of the waste that partly contains this product must be assessed according to the laws in force.

Disposal must be entrusted to an authorized waste management company, in compliance with national and local regulations.

Waste transportation may be subject to ADR.

CONTAMINATED PACKAGING

Contaminated packaging must be sent for recovery or disposal in compliance with national waste management regulations.

SECTION 14. TRANSPORT INFORMATION



14.1. UN number

ADR-UN Number:	1263
IATA-UN Number:	1263
IMDG-UN Number:	1263

14.2. UN shipping name

ADR-Shipping Name:	PAINT OR PAINT RELATED MATERIAL
IATA-Shipping Name:	PAINT OR PAINT RELATED MATERIAL
IMDG-Shipping Name:	PAINT OR PAINT RELATED MATERIAL

14.3. Transport Hazard

ADR-Class:	3
ADR-N.identificazione pericolo:	33
IATA-Class:	3
IATA-Label:	3
IMDG-Class:	3

14.4. Packing group.

ADR / RID, IMDG, IATA:	II
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14.5. Environmental hazard

ADR /RID, IMDG-Marine pollutant	NO
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14.6. Special precautions for user

ADR-S.P.	274
ADR-Tunnel restriction	2(D/E)
IATA-Pass	352
IATA-Cargo	364
IATA-S.P.	A3
IATA-ERG	3HP
IMDG-EMS	F-E, S-E

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code.

Not relevant information

SECTION 15. REGULATORY INFORMATION

15.1. Standards and legislation on health, safety and the environment specific to the substance or mixture.

Legislative Decree 9/4/2008 n. 81

D. M. Work 26/02/2004 (Occupational exposure limits)

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)
 Restrictions relating to the product or substances contained in Annex XVII of the Regulation (EC) 1907/2006 (REACH) and subsequent adjustments:

None

Where applicable, refer to the following regulations: Ministerial Circulars 46 and 61 (aromatic amines).

Directive 2012/18 / EU (Seveso III)

Regulation 648/2004 / CE (Detergents).

D.L. 3/4/2006 n. 152 Environmental regulations

Dir. 2004/42 / CE (VOC Directive)

Provisions relating to EU Directive 2012/18 (Seveso III):

Seveso III category in accordance with Annex I, part 1

Il prodotto appartiene alle categorie:	Requisiti di soglia inferiore (tonnellate)	Requisiti di soglia superiore (tonnellate)
P5c	5000	50000

15.2. Chemical safety assessment.

A chemical safety assessment has not been carried out for the mixture

SECTION 16. Other information

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

H225 Highly flammable liquid and vapor.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

EUH066 Repeated exposure may cause skin dryness or cracking.

H301 Toxic if swallowed.

H311 Toxic in contact with skin.

H331 Toxic if inhaled.

H370 Causes damage to organs.

H351 Suspected of causing cancer.

H361d Suspected of damaging fertility or the unborn child.

H304 May be fatal if swallowed and enters airways.

H373 May cause damage to organs through prolonged or repeated exposure.

H315 Causes skin irritation.

H400 Very toxic to aquatic organisms.

H411 Toxic to aquatic life with long lasting effects.

H335 May cause respiratory irritation.

EUH019 May form explosive peroxides.

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H332 Harmful if inhaled.

H226 Flammable liquid and vapor.

H410 Very toxic to aquatic life with long lasting effects.

Classe e categoria di pericolo	Codice	Descrizione

Flam. Liq. 2	2.6/2	Flammable liquid, Category 2
Flam. Liq. 3	2.6/3	Flammable liquid, Category 3
Acute Tox. 3	3.1/3/Dermal	Acute toxicity (dermal), Category 3
Acute Tox. 3	3.1/3/Inhal	Acute toxicity (by inhalation), Category 3
Acute Tox. 3	3.1/3/Oral	Acute toxicity (oral), Category 3
Acute Tox. 4	3.1/4/Dermal	Acute toxicity (dermal), Category 4
Acute Tox. 4	3.1/4/Inhal	Acute toxicity (by inhalation), Category 4
Acute Tox. 4	3.1/4/Oral	Acute toxicity (oral), Category 4
Asp. Tox. 1	3.10/1	Danger in case of aspiration, Category 1
Skin Irrit. 2	3.2/2	Skin irritation, Category 2
Eye Irrit. 2	3.3/2	Eye irritation, Category 2
Carc. 2	3.6/2	Carcinogenicity, Category 2
Repr. 2	3.7/2	Reproductive toxicity, Category 2
STOT SE 1	3.8/1	Specific toxicity for target organs - exposure single, Category 1
STOT SE 2	3.8/2	Specific toxicity for target organs - exposure single, Category 2
STOT SE 3	3.8/3	Specific toxicity for target organs - exposure single, Category 3
STOT RE 2	3.9/2	Specific toxicity for target organs - exposure repeated, Category 2
Aquatic Acute 1	4.1/A1	Acute hazard to the aquatic environment, Category 1
Aquatic Chronic 1	4.1/C1	Chronic (long-term) danger to the aquatic environment, Category 1
Aquatic Chronic 2	4.1/C2	Chronic (long-term) danger to the aquatic environment, Category 2
Aquatic Chronic 3	4.1/C3	Chronic (long-term) danger to the aquatic environment, Category 3

This document was prepared by a technician competent in SDS matters and received adequate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Center, Commission of the European Communities
SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold CCNL - Annex 1
National Institute of Health - National Inventory of Chemical Substances

The information contained herein is based on our knowledge on the date indicated above. They refer only to the product indicated and do not constitute a guarantee of particular qualities.

The user is obliged to make sure of the suitability and completeness of this information in relation to the specific use to be made of it.

This sheet supersedes any previous edition.

LEGEND:

- ADR: European agreement for the transport of dangerous goods by road
- CAS NUMBER: Number of the Chemical Abstract Service
- EC50: Concentration that gives effect to 50% of the population subject to testing
- CE NUMBER: Identification number in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008
- DNEL: Derived level without effect
- EmS: Emergency Schedule
- GHS: Global harmonized system for the classification and labeling of chemical products
- IATA DGR: Regulation for the transport of dangerous goods of the International Air Transport Association
- IC50: Immobilization concentration of 50% of the population subjected to tests
- IMDG: International maritime code for the transport of dangerous goods
- IMO: International Maritime Organization
- INDEX NUMBER: Identification number in the Annex VI of the CLP
- LC50: Lethal concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational exposure level
- PBT: Persistent, bioaccumulating and toxic according to REACH
- PEC: Predictable environmental concentration
- PEL: Predictable level of exposure
- PNEC: Predictable no-effect concentration
- REACH: EC Regulation 1907/2006
- RID: Regulation for the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that must not be exceeded during any time of occupational exposure.
- TWA STEL: Short-term exposure limit
- TWA: Average weighted exposure limit
- VOC: Volatile organic compound
- vPvB: Very persistent and very bioaccumulative according to REACH
- WGK: Class of aquatic hazard (Germany).