BRENNA s.r.l.

PRODOTTI CHIMICI PER L'INDUSTRIA 20831 SEREGNO (MB) VIA ARNO 48



Tel. 0362-239819 Fax 0362-244726 C.F. 09681730157 P.IVA 00973460967 R.E.A. Milano N. 1309582 e-mail: brennachim@gmail.com

SAFETY DATA SHEET

Pursuant to Regulation (EC) 1907/2006 and Regulation (EC) 453/2010

SECTION 1: IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY

1.1: Product identifier

DILUENTE NITRO: DILUENTE DN33Commercial code: DB0003DN33

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

Solvent for professional use, suitable for dilution and / or washing operations.

1.3: Details of the supplier of the safety data sheet

BRENNA S.R.L. Via Arno, 48

20831 SEREGNO (MI) Italia tel. 0362239819 fax 0362244726

e-mail of the competent person responsible for the safety data sheet:

brennachim@gmail.com

1.4: Emergency telephone number

Poison Control Center in Milan 02 66101029 (CAV Niguarda Ca 'Granda Hospital - Milan) (H24)

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

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

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

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

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

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

SECTION 2: HAZARD IDENTIFICATION

2.1: Classification of the mixture

The product is classified as dangerous according to the provisions of Regulation (EC) 1272/2008 (CLP) (and subsequent amendments and adjustments). The product therefore requires a safety data sheet in compliance with the provisions of Regulation (EC) 1907/2006 and subsequent amendments.

Any additional information regarding risks to health and / or the environment are given in sect. 11 and 12 of this sheet.

Hazard classification and indications:

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	It can be fatal if swallowed and enters the respiratory
		tract.
Specific target organ toxicity - repeated exposure,	H373	May cause damage to organs through prolonged or
category 2		repeated exposure.
Serious eye damage / eye irritation, category 1	H318	Causes serious eye damage
Skin irritation, category 2	H315	Causes skin irritation.
Specific target organ toxicity - single exposure, category	H336	It can cause drowsiness or dizziness.
3		
Specific target organ toxicity - single exposure, category	H335	It can irritate the respiratory tract
3		

2.2: Elements on the label

Regulation (EC) n. 1272/2008 (CLP)







Flame (GHS02) - Health hazard (GHS08) - Corrosion (GHS05)

Warnings

Danger

Hazard statements

H225 Highly flammable liquid and vapor.

H304 May be fatal if swallowed and enters airways.

H361d Suspected of damaging the unborn child.

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

H315 Causes skin irritation.

H318 Causes serious eye damage.

H336 May cause drowsiness or dizziness.

H335 May cause respiratory irritation

EUH066 Repeated exposure may cause skin dryness or cracking.

Prudence Tips

P210 Keep away from heat / sparks / open flames / heated surfaces. - Not smoking.

P241 Use explosion-proof electrical / ventilation / lighting systems.

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

P301 + 310 IF SWALLOWED: immediately contact a POISON CENTER or doctor.

P303 + 361 + 353 IN CASE OF CONTACT WITH SKIN (or with hair): take off immediately all contaminated clothing. Rinse skin / take a shower.

P304 + P340 IN THE EVENT OF INHALATION: transport the injured person to fresh air and keep him at rest in a position that favors breathing.

P403 + 235 Store in a cool, well-ventilated place.

P370 + P378 In case of fire: extinguish with chemical powder or foam

P501 Dispose of contents / container according to local regulations.

Contains: Toluene, isobutyl alcohol

2.3: Other hazards NOBODY

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

3.1: Substances present in the mixture (preparation), classified as dangerous: -According to Dir67 / 548 / CEE and s.m. and i. and regulation 1272/2008 (CLP):

Identification	Conc. %.	Classification 1272/2008
		(CLP).
TOLUENE	≥30-<45	Flam. Liq. 2 H225,
CAS. 108-88-3		Repr. 2 H361d,
CE. 203-625-9		Asp. Tox. 1 H304,
INDEX. 601-021-00-3		STOT RE 2 H373,
Registration number (CE): 01-2119471310-51		Skin Irrit. 2 H315,
		STOT SE 3 H336
ACETONE	≥30-<35	Flam. Liq. 2 H225,
CAS N.: 67-64-1		Eye Irrit. 2 H319,
EINECS N.: 200-662-2		STOT SE 3 H336, EUH066
INDEX N.: 606-001-00-8		
Registration number (CE): 01-2119471330-49		
ALCOOL ISOBUTILICO	≥10-<20	Flam. Liq. 3 H226,
CAS 78-83-1		Eye Dam. 1 H318,
CE 201-148-0		STOT SE 3 H336,
INDEX 603-108-00-1		STOT SE 3 H335,
Registration number (CE): 01-2119484609-23		Skin Irrit. 2 H315,
		EUH066
2-BUTOSSIETANOLO	≥1-<7	Acute Tox. 4 H332,
CAS. 111-76-2		Acute Tox. 4 H312,

CE. 203-905-0		Acute Tox. 4 H302
INDEX. 603-014-00-0		Eye Irrit. 2 H319,
Registration number (CE) :01-2119475108-36		Skin Irrit. 2 H315
ACETATO DI BUTILE	≥5-<10	Flam. Liq. 3; H226,
CAS N.: 123-86-4		STOT SE 3;H336,
EINECS N.: 204-658-1		EUH066
INDEX N: 607-025-00-1		
Registration number (CE): 01-2119485493-29		

The full text of the hazard phrases -H- is given in section 16 of the sheet.

SECTION 4: FIRST AID MEASURES

4.1 Routes of exposure:

General indications: Take appropriate precautions to avoid being exposed. Remove the injured person from the place of danger. Change clothing if dirty from product. Preliminary examination skin and respiratory conditions.

Inhalation: remove the subject from the contaminated area keeping it at rest and warm in an airy environment. If you stop breathing, practice artificial respiration. If the problem persists, consult a doctor.

Skin contact: remove contaminated clothing. Wash with soap and plenty of it

water. Make sure the skin is clean. If problems persist, contact a doctor.

Eye contact: rinse immediately with plenty of water, minimum 10-15 minutes, keeping the eyelids wide open. Consult a doctor.

Ingestion: do not induce vomiting. Do not give liquids. Consult a doctor.

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

Irritation of the eyes, nose and throat. Headache, dizziness, dermatitis, drowsiness, nausea and other effects on the central nervous system. If ingested, the material can be sucked into the lungs and cause chemical pneumonia.

4.3: Indication of any need to consult a doctor or special treatments:

Medical consultation: IMMEDIATE, for prolonged exposure. Symptoms of poisoning can appear after many hours, for this reason a doctor's surveillance is necessary in the 48 hours following the accident

SECTION 5: FIRE-FIGHTING MEASURES

The product is flammable, pay close attention. Non-explosive product, however the formation of explosive vapor / air mixtures is possible. Avoid the formation of vapors. Ensure electrical continuity with a suitable grounding network to avoid the accumulation of electrostatic charges

5.1: Extinguishing media:

Suitable extinguishing media:

chemical powder, carbon dioxide, alcohol resistant foam; water spray.

Extinguishing media not to be used for safety reasons:

full jet water.

5.2: Special hazards arising from the substance or mixture:

From combustion toxic fumes can form: carbon monoxide.

Do not mix with reducing or oxidizing substances, for possible exothermic reactions.

5.3: Recommendations for firefighters.

Do not breathe in gases from the fire. In case of fire, use respiratory mask with separate fresh air supply system. Remove unprotected and unauthorized persons from the danger area. Cool the containers or tanks exposed to the fire with water spray.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1: Personal precautions, protective equipment and emergency procedures.

Removal of ignition sources; adequate ventilation and / or adequate respiratory protection; prevention from contact with skin and eyes.

Respiratory protection: Use full face mask with filter suitable for vapors

organic, conforming to EN 149- type A.

Eye protection: Use goggles conforming to EN 166-170.

Hand protection: Use nitrile gloves, solvent resistant, compliant with EN 420.

Protection of the skin: use appropriate tyvek clothing, possibly fitted suits

hood and elastic on the wrists and ankles.

6.2: Environmental precautions

Operate in well-ventilated rooms equipped with collection circuits.

Mandatory safety shower.

Prevent the product from entering drains or bodies of water. In case of infiltration into bodies of water or sewers, notify the competent authorities.

6.3: Methods and materials for containment and cleaning up

6.3.1: Methods for containing a spill

Avoid sources of ignition. Cover the drains.

6.3.2 Methods for cleaning up a spill

Collect the spilled material with absorbent aggregates (sepiolite, absorbent material, ...); to avoid ignition sources. Dispose of dirty absorbent material as special hazardous waste.

Rinse the spreading area with plenty of water, collecting it and disposing of it

as a special hazardous waste. Ventilate the premises.

6.4: References to other sections

See also Section 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling







7.1.1 recommendations for handling

Use in rooms with a collection system. Avoid aerosol formation. Vapors can ignite with explosion therefore accumulation must be avoided by keeping doors and windows open, ensuring cross ventilation. Eliminate sources of ignition. Use in a well-ventilated area.

Use anti-solvent masks, safety glasses, solvent-proof gloves.

7.1.2 Recommendations on professional hygiene

Do not eat, drink and / or smoke in the work areas; Wash your hands after use;

Change clothes and remove PPE before entering the premises used for food / drink intake.

Keep PPE clean and efficient.

7.2 Conditions for safe storage

Use in closed circuit systems and equipped with collection systems.

Use in rooms equipped with extractor hood and ventilation system.

Keep the quantities authorized by the responsible bodies (e.g. VVF); put in an airy and cool place; use steel containers and do not remove the label placed by the manufacturer.

Keep away from strong acids and bases, from peroxides, because it reacts violently with energetic oxidants, such as: nitric acid, chromic acid, permanganates, peroxides, ...

7.3 Specific end uses

Avoid using under pressure, in order not to create aerosols.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Normative requirements:

Italy Legislative Decree 9 April 2008, n.81.

Switzerland Valeurs limites d'exposition aux postes de travail 2012.

OEL EU Directive 2009/161 / UE; Directive 2006/15 / CE; Directive 2004/37 / CE; Directive 2000/39 / CE.

TLV-ACGIH ACGIH 2012

TOLUENE

Threshold limit value.

Description	Tio	State	TWA /8ore mg/m3	ppm	STEL/15min mg/m3	ppm	
TOLUENE	TLV- ACGIH		75,4	20			Pelle
	OEL	EU	192	50	384	100	Pelle
	OEL	1	192	50			Pelle

Predicted no effect concentration on the environment - PNEC.

Reference value for the terrestrial compartment 2.89 mg / kg

Reference value in fresh water 0.68 mg / L

Reference value in sea water 0.68 mg/L

Reference value for sediments in fresh water 16.39 mg / Kg

Health - Derived no-effect level - DNEL / DMEL

	Effects o	n consumers	S.		Effects on workers			
Route of	Sharp	Acute	Chronic	Chronic	Sharp	Acute	Chronic	Chronic
Exposure	rooms	systemics	rooms	systemics	rooms	systemics	rooms	systemics
Oral	VND	VND	VND	8,13	VND	VND	VND	VND
				mg/kg				
Inhalation	226	226	56,5	56,5	384	384	192	192
	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3
dermal	VND	VND	VND	226	VND	VND	VND	384
				mg/kg				mg/kg

ACETONE

Threshold limit value.

Description	Tio	State	TWA /8ore mg/m3	ppm	STEL/15min mg/m3	ppm	
ACETONE	TLV- ACGIH		1188		1782		
	TLV	CH	1200	500	2400	1000	
	OEL	EU	1210	500			

Predicted no effect concentration on the environment - PNEC.

Reference value for the terrestrial compartment 29.5 mg / kg

Reference value in sea water 1.06 mg/L

Reference value for sediments in fresh water 30.04 mg/L

Reference value for sediment in seawater 3.04 mg / L

Health - Derived no-effect level - DNEL / DMEL

	Effects o	n consumers	S.		Effects on workers			
Route of	Sharp	Acute	Chronic	Chronic	Sharp	Acute	Chronic	Chronic
Exposure	rooms	systemics	rooms	systemics	rooms	systemics	rooms	systemics
Oral			VND	62				
				mg/kg/d				
Inhalation			VND	200	VND	2420	VND	1210
				mg/m3		mg/m3		mg/m3
dermal			VND	60			VND	186
				mg/kg./d				mg/kg/d

ALCOOL ISOBUTILICO

Threshold limit value.

Description	Tio	State	TWA /8ore mg/m3	ppm	STEL/15min mg/m3	ppm						
ALCOOL	TLV-		152									
ISOBUTILICO	ACGIH											
	TLV	1		50								

Predicted no effect concentration on the environment - PNEC.

Reference value for the terrestrial compartment 0.0699 mg / kg

Reference value in sea water 0.4 mg / L

Reference value for sediment in fresh water 0.04 mg / L

Reference value for sediment in sea water 1.52 mg / L

Reference value for water, intermittent release 11 mg/L

Reference value for sediment in sea water 0.152 mg/L

Reference value for microorganisms STP 10 mg / L

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers.					Effects on workers			
Route of	Sharp	Acute	Chronic	Chronic	Sharp	Acute	Chronic	Chronic	
Exposure	rooms	systemics	rooms	systemics	rooms	systemics	rooms	systemics	

Oral		VND mg/kg	25 mg/kg			
Inhalation		55	VND		310	VND
		mg/m3	mg/m3		mg/m3	mg/m3

2-BUTOSSIETANOLO

Threshold limit value.

Description	Tio	State	TWA /8ore mg/m3	ppm	STEL/15min mg/m3	ppm	
2- BUTOSSIETANOLO	OEL	EU	98	20	246	50	Pelle

Salute - Livello derivato di non effetto - DNEL / DMEL

	Effects of	n consumers	S.		Effects on workers			
Route of	Sharp	Acute	Chronic	Chronic	Sharp	Acute	Chronic	Chronic
Exposure	rooms	systemics	rooms	systemics	rooms	systemics	rooms	systemics
Oral			VND	3,2				
				mg/kg				
Inhalation	123	VND	VND	49			VND	20
	mg/m	mg/m3	mg/m3	mg/m3			mg/kg	mg/kg
dermal			VND	38			VND	75
			Mg/kg	mg/kg			mg/kg	mg/kg

ACETATO DI BUTILE

Threshold limit value.

Description	Tio	State	TWA /8ore		STEL/15min		
			mg/m3	ppm	mg/m3	ppm	
ACWTATO DI	TLV-		628	150			
BUTILE	ACGIH						

Predicted no effect concentration on the environment - PNEC.

Reference value for the terrestrial compartment 1.3 mg/kg

Reference value in fresh water 0.18 mg/L

Reference value in sea water 0.018 mg / L

Reference value for sediment in fresh water 0,981 mg / kg

Reference value for sediment in sea water 0.0981 mg/kg

Reference value for STP microorganisms 35.6 mg / L

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers.				Effects on workers			
Route of	Sharp	Acute	Chronic	Chronic	Sharp	Acute	Chronic	Chronic
Exposure	rooms	systemics	rooms	systemics	rooms	systemics	rooms	systemics
Oral	VND	2 mg/kg	VND	2 mg/kg		VND		VND
Inhalation	600	600	35,7	35,7	600	600	300	300
	mg/m	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3
dermal		6 mg/kg	VND	6		VND	VND	11
			Mg/kg	mg/kg			mg/kg	mg/kg

8.2 Exposure control

Considering that the use of adequate technical measures should always take priority over personal protective equipment, ensure good ventilation in the workplace through effective local extraction. The individual protection devices must bear the CE marking which certifies their compliance with the standards in force.

For the choice of risk management measures and operating conditions, also consult the attached exhibition scenarios.

Provide emergency shower with visocular tray.



HAND PROTECTION

Protect your hands with category III work gloves (ref.standard EN 374).

For the final choice of the material of the work gloves, the following must be considered: compatibility, degradation, breaking time and permeation.

In the case of preparations, the resistance of work gloves to chemical agents must be checked before use as it cannot be foreseen. The gloves have a wear time that depends on the duration and mode of use.

PROTECTION OF THE SKIN

Wear category II professional long-sleeved overalls and safety footwear (ref. Directive 89/686 / EEC and standard EN ISO 20344). Wash with soap and water after removing protective clothing. Evaluate the advisability of providing antistatic clothing in case the work environment presents a risk of explosiveness.

EYE PROTECTION

We recommend wearing a hood visor or a protective visor combined with airtight goggles (ref. Standard EN 166).

If there was a risk of being subjected to splashes or splashes in relation to the processes carried out, adequate protection of the mucous membranes (mouth, nose, eyes) must be provided in order to avoid accidental absorption.

RESPIRATORY PROTECTION

If the threshold value (e.g. TLV-TWA) of the substance or one or more of the substances present in the product is exceeded, it is advisable to wear an AX filter mask whose use limit will be defined by the manufacturer (ref EN 14387 standard). If gases or vapors of a different nature and / or gases or vapors with particles (aerosols, fumes, mists, etc.) were present, combined filters should be provided. The use of respiratory protection means is necessary if the technical measures adopted are not sufficient to limit the worker exposure to the threshold values taken into consideration. The protection offered by the masks is however limited.

In the event that the substance considered is odorless or its olfactory threshold is higher than the relative TLV-TWA and in the event of an emergency, wear an open circuit compressed air breathing apparatus (ref. Standard EN 137) or a plug-in respirator outdoor air (ref. standard EN 138). For the correct choice of the respiratory protection device, refer to EN 529.

8.2.3 Environmental exposure controls

Emissions from production processes, including those from ventilation equipment, should be checked for compliance with environmental protection legislation.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties Appearance: colorless or slightly straw-colored liquid Odor: typical solvent, sweet and pungent

Odor threshold ND.

pH: ND

Melting point / freezing point ND

Boiling point / boiling range: 56-160 ° C at atmospheric P

Flash point: <21 ° C closed cup

Evaporation rate: ND

Flammability (solid, gas): ND Lower / upper explosive limit ND

Explosive properties: only under conditions of overheating of the vapors

in closed containers Oxidizing properties: ND

Relative density: 0.840-0.850 kg / I Solubility: partially soluble in water Partition coefficient n-octanol / water ND

Auto-ignition temperature ND Decomposition temperature ND

Viscosity: ND

VOC (directive 1999/13 / CE) 100% (850 g / liter of preparation) VOC (volatile carbon) 74.75% (635.37 g / liter of preparation)

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

There are no particular dangers of reaction with other substances under normal conditions of use.

TOLUENE: degrades due to the effect of sunlight.

N-BUTYL ACETATE: easily decomposes with water, especially when hot.

10.2 Chemical stability

Stable under normal storage conditions.

10.3 Possibility of hazardous reactions

Vapors can form explosive mixtures with air.

Incompatibility with: oxidizing substances (peroxides, permanganates, chromates ...), acids (sulfuric, hydrochloric, phosphoric ...) and strong bases (soda, methylates, ...).

High temperatures. Formation of vapors with the possibility of fire.

High pressures: formation of aerosols with the possibility of fire. Avoid the accumulation of electrostatic charges. Avoid any source of ignition.

Curing hazard: none.

10.5 Incompatible materials

Oxidizing agents, reducing agents, strong acids and bases.

10.6 Hazardous decomposition products

None under normal conditions.

In case of fire, irritating fumes and formation of NOx nitrogen oxides, carbon oxides with strongly exothermic reaction, with possible explosive course.

SECTION 11: TOXICOLOGICAL INFORMATION

In the absence of experimental toxicological data on the product itself, the possible health hazards of the product were assessed on the basis of the properties of the substances contained, according to the criteria established by the reference legislation for classification. Therefore consider the concentration of the single dangerous substances eventually mentioned in sect. 3, to evaluate the toxicological effects deriving from exposure to the product.

TOLUENE

The product is to be considered with suspicion for possible teratogenic effects which foresee toxic effects on the development of the fetus.

The introduction of even small quantities of liquid into the respiratory system in case of ingestion or for vomiting can cause bronchopneumonia and pulmonary edema.

The product can produce functional disorders or morphological changes, due to repeated or prolonged exposures and / or presents concerns about the possibility of accumulation in the human organism.

Acute effects: on contact with the skin there is irritation with erythema, edema, dryness and cracking. Ingestion can cause health problems, which include abdominal pain with burning, nausea and vomiting.

The product contains very volatile substances that can cause significant central nervous system (CNS) depression, with effects such as drowsiness, dizziness, loss of reflexes, narcosis.

Acute toxicity Based on available data, the classification criteria are not met. LD / LC50 values relevant for classification: Based on available data, the classification criteria are not met. Oral: LD50 / 24h 5000 mg / kg (rat) Dermal: LD50 12267 mg / kg (rabbit) Inhalation: LC50 / 4h 25.7 mg / I (rat) Corrosion / Irritation: Corrosion / skin irritation:

Causes skin irritation. Serious eye damage / serious eye irritation: Weak irritating effects Respiratory or skin sensitization: Based on available data, the classification criteria are not met. CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction) Germ cell mutagenicity: Based on available data i Carcinogenicity Based on available data, the classification criteria are not met. Reproductive toxicity: Suspected of damaging the unborn child. Specific target organ toxicity (STOT) - single exposure: May cause drowsiness or dizziness. Specific target organ toxicity (STOT) - repeated exposure May cause damage to organs through prolonged or repeated exposure. Ototoxicity: Oral central nervous system:

NOAEL 625 mg / kg / bw / d (human) Inhalation: NOAEC 98 mg / m3 (human) May cause damage to organs through prolonged or repeated exposure. Aspiration hazard: Aspiration directly through the oral

or nasal cavity, or indirectly following vomiting, can have severe acute effects on the lungs. It can be fatal if swallowed and enters the respiratory tract.

ACETONE

Primary irritability
On the eye: irritant.

Repeated or prolonged contact with the skin can cause dermatosis or desiccation.

sensitization

No sensitizing effects known.

Toxicity after repeated intake (subacute, subchronic, chronic)

It can cause drowsiness or dizziness.

N-BUTYL ACETATE: in humans the substance vapors cause irritation of the eyes and nose. In the event of repeated exposure, there is skin irritation, dermatosis (with dryness and cracking of the skin) and keratitis.

ISOBUTYL ALCOHOL: causes serious eye damage and can cause corneal opacity, iris injury, irreversible eye coloration

TOLUENE

LD50 (Oral): 5000 mg/kg dw/24 h Rat LD50 (Dermal): >5000 mg/kg dw Rabbit LC50 (Inhalation): 25,7 mg/l/4h Rat

ACETONE

LD50 (Oral): 5580 mg/kg Rat

LD50 (Dermal): >15800 mg/kg Rabbit LC50 (Inhalation): 76 mg/l/4h Rat

ALCOOL ISOBUTILICO

LD50 (Oral): >2830mg/kg bw Rat

LD50 (Dermal): >2000 mg/kg bw Rabbit LC50 (Inhalation): >18,18 mg/l/6h Rat

2-BUTOSSIETANOLO

LD50 (Oral): 1746 mg/kg Rat

LD50 (Dermal): >2000 mg/kg Porcellino d'India

LC50 (Inhalation): 20 mg/l/4h Rat

ACETATO DI BUTILE

LD50 (Oral): >10.760 mg/kg Rat LD50 (Dermal): >14.112 mg/kg Rabbit LC50 (Inhalation): 20 mg/l/4h Rat

SECTION 12: ECOLOGICAL INFORMATION

Use according to good working practices, avoiding to disperse the product in the environment. Notify the competent authorities if the product has reached water courses or sewers or if it has contaminated the soil or vegetation.

12.1. Toxicity. Aquatic toxicity

TOLUENE; Nr. CAS: 108-88-3

LC50 Pesci 5,5 mg/l Per. del test : 96 h Oncorhynchus kisutch EC50 Crostacei 3,78 mg/l Per. del test : 48 h Ceriodaphnia dubia NOEC Cronica Pesci 1,4 mg/l Oncorhynchus kisutch NOEC Cronica Crostacei 0,74 mg/l Ceriodaphnia dubia NOEC Cronica Alghe / Piante Acquatiche 10 mg/l Skeletonema costatum

ACETONE; Nr. CAS: 67-64-1

EC50 Algae 530 mg/l Per. del test : 8 giorni

LC50 Pesce 8120 mg/l Per. del test : 96 h Pimephales promelas

EC50 Crostacei 8800 mg/l Per. del test 48 h Daphnia

ALCOOL ISOBUTILICO; Nr. CAS: 78-83-1

EC50 Crostacei 1100 mg/l Per. del test : 48 h Daphnia

EC50 Alga 1799 mg/l Per. del test : 72 h Pseudokirchneriella subcapitata

LC50 Pesce 1430 mg/l Per. del test : 96 h Pimephales promelas

2-BUTOSSIETANOLO; Nr. CAS: 111-76-2

EC50 Crostacei > 100 mg/l Per. del test : 24 h Daphnia magna

EC50 Alga > 100 mg/l Per. del test : 7 g LC50 Pesce > 100 mg/l Per. del test : 96 h

ACETATO DI N-BUTILE ; Nr. CAS : 123-86-

EC 50 Batteri 115 mg/l Per. del test : 16 h

EC50 Crostacei 44 mg/l Per. del test : 48 h Daphnia magna

EC50 Alga 648 mg/l Per. del test : 72 h LC50 Pesce 18 mg/l Per. del test : 96 h

12.2 Persistence and degradability

Easily biodegradable

12.3 Bioaccumulative potential

Little bioaccumulative 12.4 Mobility in the soil Date not available

12.5 Results of PBT or vPvB assessment

This product is not, or does not contain, a substance defined as PBT or vPvB in a percentage higher

than 0.1%.

12.6 Other adverse effects Information not available

SECTION 13: DISPOSAL CONSIDERATIONS

Waste classification: special dangerous.

13.1 Waste treatment methods

Suitable disposal of the material:

Give preference to waste recovery operations in suitable authorized plants. If recovery of the solvent mixture is not possible, opt for thermal destruction in specific authorized systems, with thermal recovery.

Absolutely avoid dispersing the product in the ground, in sewers or waterways.

Suitable disposal of contaminated packaging:

Contaminated packaging is to be considered special hazardous waste and must be reclaimed for reuse or disposed of in specific authorized plants.

SECTION 14: TRANSPORT INFORMATION

The transport must be carried out by vehicles authorized to transport dangerous goods according to the provisions of the current edition of the A.D.R. and the applicable national provisions. Transport must be carried out in the original packaging and, in any case, in packaging which is made up of materials that cannot be affected by its contents and which are not likely to generate dangerous reactions with it. Employees for loading and unloading dangerous goods must have received appropriate training on the risks presented by the preparation and on any procedures to be adopted in the event of emergency situations.

Road or rail transport



Classe ADR/RID: 3 UN: 1263

Packing Group:

Etichetta:

Nr. Kemler:

Limited Quantity.

Tunnel restriction code.

II

3

5

Limited Quantity.

(D/E)

Technical name: PITTURE o MATERIE SIMILI ALLE PITTURE

Special Provision: 640D

Maritime transport

Classe IMO: 3 UN: 1263

Packing Group: II Label: 3

EMS: F-E, S-E

Marine Pollutant. NO

Proper Shipping Name: PAINT or PAINT RELATED MATERIAL

Airplane transport



IATA: 3 UN: 1263

Packing Group: II Label: 3

Cargo:

Packaging 364 Quantità massima: 60 L

Instructions:

Pass.:

Packaging 353 Quantità massima: 5 L

Instructions:

Special instructions: A3, A72

Proper Shipping Name: PAINT or PAINT RELATED MATERIAL

SECTION 15: REGULATORY INFORMATION

15.1 Health, safety and environmental standards and legislation specific for the substance or mixture

Seveso category. 7b,

Restrictions relating to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006.

Product

Point 3 - 40

Contained substances:

Point 48 TOLUENE CAS. 108-88-3 CE. 203-625-9 INDEX. 601-021-00-3

Substances in Candidate List (Art. 59 REACH).

None.

Substances subject to authorization (Annex XIV REACH).

None.

Substances subject to export notification obligation Reg. (EC) 689/2008:

None.

Substances subject to the Rotterdam Convention:

None.

Substances subject to the Stockholm Convention:

None.

Sanitary checks.

Workers exposed to this chemical agent dangerous to health must undergo health surveillance carried out in accordance with the provisions of art. 41 of Legislative Decree 81 of 9 April 2008 unless the risk to the safety and health of the worker has been assessed as irrelevant, in accordance with the provisions of art. 224 paragraph 2.

15.2 Chemical safety assessment

A chemical safety assessment has not been prepared, refer to the substances it contains: toluene, acetone

SECTION 16: OTHER INFORMATION

Text of hazard (H) indications mentioned in section 3 of the sheet:

Flam liq.3 Flammable liquid, category 3

Flam. Liq. 2 Flammable liquid, category 2

Asp. Tox. 1 Aspiration hazard, category 1

Skin Irrit. 2 Skin irritation, category 2

STOT SE 3 Specific target organ toxicity - single exposure, category 3

Repr. 2 Reproductive toxicity, category 2

STOT RE 2 Specific target organ toxicity - repeated exposure, category 2

Acute Tox. 4 Acute toxicity, category 4

Eye Irrit. 2 Eye irritation, category 2

Eye Dam 1 Causes serious eye damage

H225 Highly flammable liquid and vapor.

H226 Flammable liquid and vapor

H361d Suspected of damaging the unborn child.

H312 Harmful in contact with skin.

H302 Harmful if swallowed.

H304 May be fatal if swallowed and enters airways.

H332Harmful if inhaled

H373 May cause damage to organs <or indicate all organs affected, if known> in the event of prolonged or repeated exposure <indicate the route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H315 Causes skin irritation.

H336 May cause drowsiness or dizziness.

H335 May cause respiratory irritation.

EUH066 Repeated exposure may cause skin dryness or cracking.

LEGEND:

- ADR: European agreement for the transport of dangerous goods by road
- CAS NUMBER: Chemical Abstract Service number
- CE50: 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 no effect level
- EmS: Emergency Schedule
- GHS: Global harmonized system for the classification and labeling of chemical products
- IATA DGR: Regulations for the transport of dangerous goods of the International Air Transport Association
- IC50: Immobilization concentration of 50% of the test population
- IMDG: International maritime code for the transport of dangerous goods
- IMO: International Maritime Organization
- INDEX NUMBER: Identification number in 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: Predicted no effect concentration
- REACH: EC Regulation 1907/2006
- RID: Regulations for the international transport of dangerous goods by train
- TLV: Threshold limit value
- TWA STEL: Short term exposure limit
- TWA: Weighted average exposure limit
- VOC: Volatile organic compound
- vPvB: Very persistent and very bioaccumulating according to Reach.

GENERAL BIBLIOGRAPHY:

- 1. Directive 1999/45 / EC and subsequent amendments
- 2. Directive 67/548 / EEC and subsequent amendments and adjustments
- 3. Regulation (EC) 1907/2006 of the European Parliament (REACH)
- 4. Regulation (EC) 1272/2008 of the European Parliament (CLP)
- 5. Regulation (EC) 790/2009 of the European Parliament (I Atp. CLP)
- 6. Regulation (EC) 453/2010 of the European Parliament

- 7. Regulation (EC) 286/2011 of the European Parliament (II Atp. CLP)
- 8. The Merck Index. Ed.10
- 9. Handling Chemical Safety
- 10. Niosh Registry of Toxic Effects of Chemical Substances
- 11. INRS Fiche Toxicologique
- 12. Patty Industrial Hygiene and Toxicology
- 13. N.I. Sax Dangerous properties of Industrial Materials-7 Ed., 1989
- 14. ECHA Agency website

Changes compared to the previous version: section 8

Note for the user:

The information contained in this sheet is based on the knowledge available from us at the date of the latest version.

The user must ensure the suitability and completeness of the information in relation to the specific use of the product.

This document must not be interpreted as a guarantee of any specific property of the product. Since the use of the product does not fall under our direct control, it is the user's obligation to observe the laws and regulations in force on hygiene and safety under his own responsibility. No liability is assumed for improper use.

Provide adequate training to personnel involved in the use of chemicals.