



CDR S.r.l.
Via degli Artigiani, 6
50020 Ginestra F.na (FI)

MATERIAL SAFETY DATA SHEET
DILUENT

Revision: 0
of 08/11/2012

In accordance with EC Directive 1907/06 and Regulation (EU) 453/2010

Date of compilation: 08/11/2012

1. Identification of the substance/mixture and of the company/enterprise

1.1 Product identifier: **DILUENT**

1.2 Relevant identified uses of the substance or mixture:

Reagent for food analysis

1.3 Details of the supplier of the safety data sheet:

CDR S.r.l.

Via degli Artigiani, 6

50020 Ginestra F.na (FI)

Italy

Tel: +39 055-871431

Fax: +39 055-8714322

1.4 Emergency phone number:

+39 055-871431

e-mail TC: cdr@cdr-mediated.it

2. Hazards identification

2.1 Classification of the substance or mixture

Classification according to Directive 67/548/EEC - Directive 1999/45/EC: :

F; R11; Xi; R36; R 67

Nature of special risks attributed:

R11 - Highly flammable.

R36 - Irritating to eyes.

R67 - Vapours may cause drowsiness and dizziness.

The product easy inflames if subordinate to an ignition source. (flash point < 21° C)

2.2. Label elements:

Warning symbols:

F - Highly flammable

Xi - Irritant



Hazard sentences (R):

R11 - Highly flammable.

R36 - Irritating to eyes.

R67 - Vapours may cause drowsiness and dizziness.

Caution recommendations (S):

Product: **DILUENT**

S7/9 - Keep container tightly closed and in a well-ventilated place.
S16 - Keep away from sources of ignition — No smoking.
S25 - Avoid contact with eyes.
S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S29 - Do not empty into drains.
S33 - Take precautionary measures against static discharges.
S60 - This material and its container must be disposed of as hazardous waste.
S64 - If swallowed, rinse mouth with water (only if the person is conscious).

2.3 Other hazards:
none information

3. Composition/Information on ingredients

Chemical composition:

Mixture

Name	Concentration (C)	Classification			
		Directive 67/ 548/CEE		Regulation CE/1272/2008	
propan-2-ol	95 <= C < 100	F	R11	Flam. Liq. 2	H225
Cas No 67-63-0		Xi	R36	Eye Irrit. 2	H319
CE No 200-661-7			R67	STOT SE 3	H336
INDEX No 603-117-00-0					

The complete text of -R- phrases is specified in section 16.

4. First-aid measures

4.1 Description of first aid measures

Inhalation

Remove to fresh air. If breathing is irregular seek medical advice.

Skin contact

Remove contaminated clothing. Wash immediately with plenty of water and soap. In case of irritation seek medical attention. Wash contaminated clothing before using them.

Eyes contact

Irrigate copiously with clean, fresh water for at least 15 minutes, keeping opened eyes. Seek medical attention immediately .

Ingestion

Obtain medical attention. Don't induce vomiting. Never give anything by mouth to an unconscious person.

Other

Change contaminated clothing.

Product: **DILUENT**

4.2. Most important symptoms and effects, both acute and delayed
not available

4.3. Indication of any immediate medical attention and special treatment needed
not available

5. Fire-fighting measures

5.1 Extinguishing media

Advised extinguishing agents:

CO₂, foam, chemical powder for flammable liquids.

Unappropriate extinction methods:

Jets of water. Water may not be effective to extinguish the fire, nevertheless it should be used to cool the containers exposed to flames and prevent fires and explosions. For leakage and spillage that have not caught fire, nebulized water may be used to disperse the flammable vapours and protect the people involved in stopping the leakage.

5.2. Special hazards arising from the substance or mixture

The product under fire condition may develop irritant/toxic gas (CO_x, NO_x)

5.3. Advice for firefighters

wear equipment complete with helmet and face shield and protection of the neck, selfbreathing apparatus at pressure or demand, insulative jacket and trousers, with bands around the arms, legs and waist. Water used in fire-fighting has to be disposed following Local regulation.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid contact with skin and eyes. In case of formation of vapours use suitable protective devices. Supply a good air circulation. Move away any unauthorised person.

6.2. Environmental precautions

Collect the product in suitable container for disposal. Notify authorities if product enters sewer or public waters.

6.3. Methods and material for containment and cleaning up

Cover the spillage with inert absorbent material. Collect as far as possible the resulting mass and discard the remainder by spraying water.

6.4 Reference to other sections

Refer to paragraphs 8 and 13 for more information.

7. Handling and storage

7.1. Precautions for safe handling

Supply good air circulation in working area. Vapours may ignite with explosion, it is therefore necessary to avoid accumulation keeping the windows and doors open, ensuring crossventilation. Without adequate ventilation, the vapours may accumulate at the bottom and ignite at a distance, if triggered off, with the risk of flashback.

Keep far away from sources of heat, naked flames and sparks and other sources.

Product: **DILUENT**

7.2. Conditions for safe storage, including any incompatibilities

Store the packaging closed in a fresh and ventilated area, far from sources of ignition.

7.3. Specific end use(s)

For particular uses of the product, is necessary to refer to the specific information or contact the technical service of the Company.

8. Exposure controls/personal protection

8.1. Control parameters

propan-2-ol

ACGH-TLV: 491mg/m³ (as TWA, skin); 982mg/m³ (as STEL, skin)

DNEL:

Systemic effects of eye for long-term exposure: 888 mg / kg

systemic effects for long-term exposure Inhalation: 500 mg/m³

PNEC:

Fresh water: 140.9 mg / l

sea water: 140.9 mg / l

Intermittent Release: 140.9 mg / l

STP: 2251 mg / l

sediment (freshwater): 552 mg / kg

sediment (seawater): 552 mg / kg

soil: 28 mg / kg

Oral: 160 mg / kg

8.2 Exposure controls

Avoid all unnecessary exposure, handle in accordance with good industrial hygiene and safety procedures. Do not eat, drink or smoke while handling it. Accurately wash the hands with soap and water before meals and at the end of the work shift.

8.3 Individual protection

The DPI's choice must be done on the basis of the test's results obtained according to the rule EN 374

Hand protection: : protective gloves (latex, nitrile, butyl rubber)
Eye protection : protective goggles
Skin protection : suitable protective clothing
Respiratory protection : mask with filter (Type A)

9. Physical and chemical properties

Physical and chemical properties	Value	Determination method
Appearance	colourless liquid	
Odour	characteristic	
Odour threshold	not available	
pH	not available	
Melting point/freezing point	not available	
Initial boiling point and boiling range	not available	
Flash point	about 12°C	
Evaporation rate	not available	

Product: **DILUENT**

Flammability (solid, gas)	not pertinent
Upper/lower flammability or explosive limits	not available
Vapour pressure	not available
Vapour density	not available
Relative density	not available
Solubility	miscible in water
Water solubility	miscible
Partition coefficient: n-octanol/water	not available
Auto-ignition temperature	not available
Decomposition temperature	not available
Viscosity	not available
Explosive properties	2-propanol: the vapor of this substance mixes well with air and it forms explosive mixture.
Oxidising properties	not oxidising

9.2. Other information

VOC (Directive 1999/13/CE): about 100%

10. Stability and reactivity

10.1. Reactivity

In contact with strong oxidants exothermal reaction may occur.

2-propanol: It reacts with strong oxidants.

10.2. Chemical stability

The product is stable in normal conditions of use and storage.

10.3. Possibility of hazardous reactions

2-propanol: the vapor of this substance mixes well with air and it forms explosive mixture.

10.4. Conditions to avoid

none information

10.5. Incompatible materials

2-propanol: It attacks some plastics and rubber.

10.6. Hazardous decomposition products

Due to thermal decomposition or in the event of a fire vapours may be produced potentially dangerous to health (CO_x, NO_x).

11. Toxicological information

11.1. Information on toxicological effects

Acute effects:

If brought into contact with eyes, the product, causes significant irritations which may last for more than 24 hours.

Warning: Vapours inhalation may cause sleepiness and giddiness

propan-2-ol

Product: **DILUENT**

ROUTES OF EXPOSURE: The substance can be absorbed into the body by inhalation of its vapour.

INHALATION RISK: A harmful contamination of the air will be reached rather slowly on evaporation of this substance at 20°C; on spraying or dispersing, however, much faster.

EFFECTS OF SHORT-TERM EXPOSURE: The substance is irritating to the eyes and the respiratory tract. The substance may cause effects on the central nervous system, resulting in depression. Exposure far above the OEL may result in unconsciousness.

EFFECTS OF LONG-TERM OR REPEATED EXPOSURE: The liquid degrades the skin.

ACUTE HAZARDS / SYMPTOMS

INHALATION Cough. Vertigo. Drowsiness. Headache. Sore throat. See Ingestion.

SKIN Dry skin. Bloodshot eyes.

INGESTION Abdominal pain. Cough. Nausea. Unconsciousness. Vomiting. (Further see Inhalation).

NOTE The use of alcoholic beverages enhances the harmful effect.

LD50 (rat) Oral (mg/kg body weight) = 2100

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 2100

Corrosive/irritation power:

Eyes: irritant

Skin: slightly irritant for long contacts

12. Ecological information

12.1. Toxicity:

Use this product according to good working practices. Avoid litter. Inform the competent authorities, should the product reach waterways or sewers or contaminate soil or vegetation.

propan-2-ol

LC50: 8970-9280 mg/kg/l/48h (fish)

EC50: 9714 mg/l/24h (Daphnia)

12.2. Persistence and degradability:

propan-2-ol

COD: 2300 mg/kg

12.3. Bioaccumulative potential:

propan-2-ol

logPow: 0.05

12.4. Mobility in soil:

propan-2-ol: it is lighter than water and is completely miscible at 20 °C. It dissipates by evaporation within a day. Large volumes may penetrate soil and contaminate groundwater.

12.5. Results of PBT and vPvB assessment: not available

12.6. Other adverse effects: not available

This product doesn't contain AOX

13. Disposal considerations

Product: **DILUENT**

Operate following the current Local or National Laws.
The non reclaimed containers have to be disposed as the product.
Consider the possibility of burning the product in a suitable incenerator.

14. Transport information

These goods must be packed in their original packings or in packings made of materials resistant to their content and not reacting dangerously with it. This good, being shipped under the provision for limited quantity, is packed and labelled in accordance with ADR Regulation – chapter 3.4- IMDG Code –chapter 3.4- IATA regulation – chapter 5.0.3- (i.e. 0.5 l for inner packaging max. and 1 l for outer packaging max.) and no other provision has to be respected.

RID/ADR:

UN number: 1219 Class: 3
Classification: F1 Packing group: II
Tunnel restriction code: (D/E)

Transport by sea (IMDG Code):

UN number: 1219 Class: 3
Packaging group: II EmS: F-E, S-D
Marine pollutant: not

Transport by air (ICAO-IATA):

Class: 3 Packaging group: II

Shipping name: ISOPROPANOL

Labelling:



15. Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Regulation	Cas	Substance
428/2009 ex CE 1334/2000 Ann.1	-	-
273/04 Tab.1 Cat.1	-	-
273/04 Tab.1 Cat.2	-	-
273/04 Tab.1 Cat.3	-	-
1907/2006 Ann. XIV	-	-
1907/2006 (Substances SVHC)	-	-
276/2010 (amending Reg. CE 1907/2006 as regards Ann. XVII)	-	-
552/2009 (amending Reg. CE 1907/2006 as regards Ann. XVII)	-	-
2003/105/CE Ann.1 part 1	-	-
2003/105/CE Ann.1 part 2	-	Mixture classified HIGHLY FLAMMABLE

15.2. Chemical safety assessment

none

Product: **DILUENT**

16. Further information

Description of the sentences of risk set out in paragraph 3

H225 = Highly flammable liquid and vapour.

H319 = Causes serious eye irritation.

H336 = May cause drowsiness or dizziness.

Description of the safety advice (R) exposed to point 3:

R11 = Highly flammable.

R36 = Irritating to eyes.

R67 = Vapours may cause drowsiness and dizziness.

Classification based on data of all components of the mixture

GENERAL BIBLIOGRAPHY:

1. Directive 1999/45/EC as amended
2. Directive 67/548/EEC and its amendments and adjustments (technical adjustment XXIX)
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
6. Regulation (EU) 453/2010
7. The Merck Index. Ed 10
8. Handling Chemical Safety
9. NIOSH - Registry of Toxic Effects of Chemical Substances
10. INRS - Fiche Toxicologique
11. Patty - Industrial Hygiene and Toxicology
12. NI Sax - Dangerous Properties of Industrial Materials-7, 1989 Edition

Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product .

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations.

The producer is relieved from any liability arising from improper uses.

This sheet cancels and substitutes any previous edition.