



## **Safety data sheet**

According to EC Directive 91/155/EEC

### **1. Identification of the substance/preparation and of the company**

Identification of the product – Product name : FORDOR 37

Manufacturer/supplier identification –

Company : Dor Chemicals Ltd.  
Address : P.O.Box 10036, Haifa 26110, Israel  
Telephone : 972-4-8465000, Telefax : 972-4-8415194.

### **2. Composition/information on ingredients**

Hazardous ingredients :

Name according EC Directives : Formaldehyde Molecular  
formula : HCHO Molar mass : 30.03  
Hazard symbols : T R-phrases : 23/24/25/-34-40-43  
EC-Index No : 605-001-00-5 Toxic by inhalation, in contact with  
Skin and if swallowed. Causes burns.  
Possible risks of irreversible  
Effects. May cause sensitization by  
Skin contact.  
CAS number : 50-00-0 Content : 36-38%

Name according EC Directives : Methanol  
Molecular formula : CH<sub>3</sub>OH Molar mass : 32.04  
Hazard symbols : F T R-phrases : 11-23/24/25-39/23/24/25  
EC-Index-No. : 603-001-00-X Highly flammable. Toxic by  
Inhalation and if swallowed.  
CAS number : 67-56-1 Content : 3-8



### **3. Hazards identification**

Toxic by inhalation, in contact with skin or eye and if swallowed. Causes burns. Danger of very serious irreversible effects. May cause sensitization by skin contact.

### **4. First aid measures**

After inhalation : fresh air. If necessary, apply mouth-to-mouth resuscitation or mechanical ventilation.

After skin contact : wash off with plenty of water. Remove contaminated clothing.

After eye contact : rinse out with plenty of water with the eyelid held wide open. Summon eye specialist.

After ingestion : Drink plenty of water. Subsequently administer : activated Charcoal (20-40 g in 10% slurry). Immediately summon doctor.

Indications for the doctor: Gastric lavage. Laxative : sodium sulfate (1 tablespoon / 1/4 l water).

### **5. Fire-fighting measures**

Suitable extinguishing media : Powder, foam, water

Special risks :

Combustible vapour. Keep away from sources of ignition. Formation of explosive mixtures possible with air.

Special protective equipment for fire fighting :

Suitable chemical protection clothing and self contained breathing apparatus should be used.

Additional measures : Disposal of all FORDOR 37 present. Treat residuals with excess sodium hydrogen sulfite solution.



## **6. Accidental release measures**

Person-related precautionary measures :

Do not inhale vapours. Avoid eye or skin contact. Ensure supply of fresh air.

Procedures for cleaning/absorption :

Collect all released solution. Clean up affected area.

Environment protection : Prevent contamination of ground water and sewage systems

Render harmless : Collect released material and treat residuals with excess sodium hydrogen sulfite solution.

## **7. Handling and storage**

Handling :

Avoid eye or skin contact. Do not inhale vapours or aerosols

Do not store below + 15°C. Low temperatures increase polymerization to paraformaldehyde. However, the clear FORDOR 37 solution is still fully usable if it is decanted from the precipitate formed.

Storage :

Tightly closed. Protected from light. In a well-ventilated place.

Keep away from sources of ignition and heat. At room temperature (recommendation : 15 to + 25°C). Accessible only for authorized persons.

Requirements for storage rooms and containers : No metal containers (except stainless steel)

## **8. Exposure controls/personal protection**



Specific control parameters :

Max. allowable conc. (Israel) Formaldehyde : 0.3 ppm by volume  
Max. allowable conc. (Israel) Methanol : 200 ppm by volume.

Personal protective equipment :

Respiratory protection : required when vapours/aerosols are generated.  
Eye protection : required  
Hand protection : required

Industrial hygiene :

Immediately change contaminated clothing . Apply skin – protective barrier cream. Wash hands and face after working with substance. Do not inhale vapours.

## 9. Physical and chemical properties

Form :	Liquid
Colour :	colourless
Odour :	pungent
Boiling temperature	pH value (20°C) : 3-5
Ignition temperature	93-98 °C
Flash point	near 300° C
66° C Explosion limits	min
	lower 7
	Upper 73 Vol%
Density	(20°C) 1.09
	g/cm <sup>3</sup> Solubility in –
Water	(20°C) soluble
Ethanol	(20°C) soluble

## 10. Stability and reactivity



Conditions to be avoided :

Strong heating. (explosive with air in a vaporous/gaseous state).

Substances to be avoided :

Polymerization initiators (e.g. alkali metals), acids, nitrogen oxides, hydrogen peroxide, oxidizing agents, acid halides, alkaline earth metals, hydrides, zinc diethyl.

Hazardous decomposition products : Carbon monoxide, hydrogen.

Stabilizer :

Methanol Further information :

Hygroscopic, inflammable, tends to polymerize ; Incompatible with various metals and various alloys.

## **11. Toxicological information**

Acute toxicity

LD<sub>50</sub> (oral, rat) : 100 mg/kg (calculated on pure substance)

LD<sub>50</sub> (dermal, rabbit) : 270 mg/kg (calculated on pure substance) LD<sub>50</sub> (inhalation, rat) : 0.578 mg/l / 4 hours (calculated on pure substance).

Subacute to chronic toxicity :

The carcinogenic potential is awaiting further clarification.

An embryotoxic effect need not be feared when the MAC value is observed.

No impairment of reproductive performance in animal experiments.

Further toxicological information :

Property that must be anticipated on the basis of the components of the preparation –

After inhalation : Toxic. Irreversible damage possible. Inhalation may lead to the formation of oedemas in the respiratory tract.

After skin contact : Strong irritant effect. Toxic. Irreversible damage possible. Danger of skin absorption. Risk of sensitization with allergic manifestation.



After eye contact : strong irritant effect. Lacrimal irritation due to vapours.  
After ingestion : Toxic. Irritations of mucous membranes in the mouth, pharynx, oesophagus, and gastrointestinal tract. Risk of perforation in the oesophagus and stomach.

Systemic effect : narcosis, blindness.

## **12. Ecological information**

Abiotic degradation : Rapid.

Biologic degradation (Formaldehyde) : 97.4% / 5 days . Behavior in

environmental compartments :

No bioaccumulation is to be expected.

Ecotoxic effects :

Biological effects : Toxic for aquatic organisms. Protoplasmatic toxin. Caustic even in diluted form. Disinfectant effect. Toxic effect on fish and Plankton. Sludge decomposition impaired or not possible even in diluted concentration. Endangers drinking-water supplies if allowed to enter soil and/or waters in large quantities.

Fish toxicity : *P.promelas* LC<sub>50</sub> : 24mg/l /48 h (Formaldehyde); *Br.rerio* LC<sub>50</sub> : 41mg/l /96 h (Formaldehyde);

*Daphnia* toxicity : *Daphnia magna* EC<sub>50</sub> : 2 mg/l /48 h (Formaldehyde); Algal toxicity : *Sc.quadricauda* IC<sub>5</sub> : 2.5mg/l /8 d (Formaldehyde); Bacterial toxicity : *M. aeruginosa* EC<sub>5</sub> : 0.39 mg/l /8 d (Formaldehyde);

Further ecologic data :

COD 1.06 g/g ; ThOD : 1.068 g/g.

Do not allow to enter drinking water supplies, waste water, or soil!

## **13. Disposal considerations**



Product :

There are no uniform regulations for the disposal of chemicals or residues. Chemical residues generally count as special waste.

We recommend that you contact either the authorities in charge or approved waste disposal companies which will advise you on how to dispose of special waste.

Packaging :                      Disposal in accordance with local legal provisions.

#### **14. Transport information**

Land transport

Name :                                      UN – No. : 2209    Formaldehyde Solution

Sea transport IMDG

IMDG class : 8                              UN-No : 2209              Packging group : III

Ems : 8 - 07                                  MFAG : 300

Correct technical name : Formaldehyde Solution

Air transport ICAO-TI and IATA-DGR

ICAO/IATA class : 8                          UN/ID-No : 2209    Packging group : III

Correct technical name : Formaldehyde Solution

#### **15. Regulatory information**



Labelling according to EC Directives Symbol : T  
Name : Toxi

R-phrases : 23/24/25-34-39/23/24/25-40-43

Toxic by inhalation, in contact with Skin and if swallowed. Causes burns. Possible risks of irreversible effects. May cause sensitization by skin contact.

S-phrases : 26-36/37/39-45-51

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves and eye/face protection.

In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Use only in well-ventilated areas.

## **16. Other information**

Reason for alteration :  
General update.

Date of issue : 11/11/2002.

The information contained herein is based on the present state of our knowledge. It characterized the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product.

11.11.2002  
DC/3761/MH