

CONTACT
0800 990 3258
enquiries@reagent.co.uk



ReAgent

FORMALDEHYDE 37-40% W/V LRG MSDS

According to Regulation (EC) No 1907/2006

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

PRODUCT NAME	FORMALDEHYDE 37-40% W/V LRG
SUPPLIER	Reagent Chemical Services 18 Aston Fields Road Whitehouse Industrial Estate Runcorn Cheshire WA7 3DL T: 01928 716903 F: 01928 716425 E: info@reagent.co.uk
PRODUCT NO.	1035
APPLICATION	General chemical reagent
EMERGENCY TELEPHONE	Emergency Telephone : +44 (0) 1928 716903 Between 08.30 - 17.00

2 HAZARDS IDENTIFICATION

Causes burns. Irritating to respiratory system. Limited evidence of a carcinogenic effect. May cause sensitisation by skin contact. Toxic by inhalation, in contact with skin and if swallowed. Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.

CLASSIFICATION (1999/45) T;R23/24/25, R39/23/24/25. Carc. Cat. 3;R40. C;R34. Xi;R37. R43.

ENVIRONMENT

The substance is toxic to aquatic organisms and has a disinfectant effect. Release of the substance into the environment may have serious ecological effects. Do not discharge to land or water systems.

PHYSICAL AND CHEMICAL HAZARDS

If vapours are produced in enclosed spaces do not use without respiratory protection. Avoid contact with materials as specified in section 10. The product is combustible and will form explosive vapour/air mixtures.

HUMAN HEALTH

See section 11 for additional information on health hazards.

3 COMPOSITION/INFORMATION ON INGREDIENTS

Name	EC No.	CAS-No.	Content	Classification (67/548)
FORMALDEHYDE ...%	200-001-8	50-00-0	30-60%	Carc. Cat. 3;R40 T;R23/24/25 C;R34 R43
METHANOL	200-659-6	67-56-1	10-30%	F;R11 T;R23/24/25,R39/23/24/25

The Full Text for all R-Phrases are Displayed in Section 16

4 FIRST-AID MEASURES

GENERAL INFORMATION

CAUTION! First aid personnel must be aware of own risk during rescue! Always consider any dangers in the vicinity before approaching to treat the casualty. First aid personnel must protect themselves with all necessary personal protective equipment during the assistance of casualties. When breathing is difficult, properly trained personnel may assist the casualty by administering oxygen. If casualty needs to be resuscitated avoid mouth to mouth contact, use a mechanical device such as a bag and mask to provide artificial respiration. Place unconscious person on the side in the recovery position and ensure breathing can take place. Do not give victim anything to drink if they are unconscious. If medical assistance is needed take as much detail as possible about the incident and hazardous materials involved with the casualty.

INHALATION

Remove victim immediately from source of exposure. Provide rest, warmth and fresh air. In case of severe exposure or if any discomfort continues get medical attention.

INGESTION

Do not induce vomiting. Immediately rinse mouth and drink plenty of water. Get medical attention immediately!

SKIN CONTACT

Immediately remove contaminated clothing and wash before re-use. Rinse the skin immediately with lots of water. Unless contact has been slight and no discomfort is felt, obtain medical attention.

FORMALDEHYDE 37-40% W/V LRG

EYE CONTACT

May cause permanent damage if eye is not immediately irrigated. Promptly wash eyes with plenty of water or eye wash solution while lifting the eyelids. If possible remove any contact lenses and continue to wash. Get medical attention immediately.

5 FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA

Combustible. Extinguish with foam, carbon dioxide or dry powder.

SPECIAL FIRE FIGHTING PROCEDURES

Vapour/air mixture explosive

SPECIFIC HAZARDS

When heated and in case of fire, toxic vapours/gases may be formed.

PROTECTIVE MEASURES IN FIRE

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

6 ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS

Wear protective clothing as described in Section 8 of this safety data sheet.

SPILL CLEAN UP METHODS

Remove sources of ignition. Small Spillages: Absorb with sand or other inert absorbent. Large Spillages: Dam and absorb spillages with sand, earth or other inert material. Collect spillage in containers, seal securely and deliver for disposal according to local regulations. Containers with collected spillage must be properly labelled with correct contents and hazard symbol. The waste may be neutralised by the addition of sodium hydrogen sulphite. Wash spillage site well with water and detergent, be aware of the potential for surfaces to become slippery. Ventilate well. Wash thoroughly after dealing with a spillage. Wear suitable respiratory equipment for treating spillages in enclosed spaces.

7 HANDLING AND STORAGE

USAGE PRECAUTIONS

Avoid inhalation of vapours/spray and contact with skin and eyes. Do not eat, drink or smoke when handling.

STORAGE PRECAUTIONS

Store in closed original container at temperatures between 15°C and 25°C. Ensure adequate ventilation. Store away from direct sunlight and moisture. Store away from incompatible materials. It is advisable to store in a bunded area or use other protective measures such as a sump pallet or storage tray.

STORAGE CLASS

Chemical storage.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Name	Std	TWA - 8 hrs		STEL - 15 min		Notes
FORMALDEHYDE ...%	WEL	2 ppm	2.5 mg/m ³	2 ppm	2.5 mg/m ³	
METHANOL	WEL	200 ppm(Sk)	266 mg/m ³ (Sk)	250 ppm(Sk)	333 mg/m ³ (Sk)	

WEL = Workplace Exposure Limit.

ENGINEERING MEASURES

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined workplace exposure limit (WEL) is not exceeded. Explosion-proof general and local exhaust ventilation.

RESPIRATORY EQUIPMENT

Wear suitable respiratory protection if vapours or mists are generated. Chemical respirator with organic vapour cartridge. Consult with the supplier as to the compatibility of the equipment with the chemical of concern. CAUTION: Air purifying respirators do not protect the user in oxygen deficient atmospheres, use air supplied system.

HAND PROTECTION

Use full length gloves. Butyl rubber. Nitrile. Viton rubber (fluor rubber). Be aware that the liquid may penetrate the gloves. Frequent change is advisable. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material.

EYE PROTECTION

Wear approved safety goggles.

OTHER PROTECTION

Wear suitable protective clothing as protection against splashing or contamination. Provide eyewash station and safety shower. If there is a risk of splashing then wear a face shield. Wear plastic apron and full length gloves if handling large amounts.

FORMALDEHYDE 37-40% W/V LRG**HYGIENE MEASURES**

Wash at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes wet or contaminated. Promptly remove any clothing that becomes wet or contaminated. When using do not eat, drink or smoke.

9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	Liquid		
COLOUR	Colourless		
ODOUR	Pungent		
SOLUBILITY	Miscible with water		
BOILING POINT (°C)	96	RELATIVE DENSITY	1.08
pH-VALUE, CONC. SOLUTION	2.8 - 4.0	FLASH POINT (°C)	62
AUTO IGNITION TEMPERATURE (°C)	About 300	FLAMMABILITY LIMIT - LOWER(%)	7
FLAMMABILITY LIMIT - UPPER(%)	73		

10 STABILITY AND REACTIVITY**STABILITY**

The substance is hygroscopic and will absorb water by contact with the moisture in the air. Tends to polymerize.

CONDITIONS TO AVOID

Avoid heat, direct sunlight and moisture. Avoid storage with incompatible materials.

MATERIALS TO AVOID

Nitric acid. Acids. Strong oxidising substances. Organic nitro compounds. Nitrogen oxides.

HAZARDOUS DECOMPOSITION PRODUCTS

Fire may create Carbon monoxide (CO). Carbon dioxide (CO₂). Fire may result in the reaction with other substances to produce hazardous products.

11 TOXICOLOGICAL INFORMATION

TOXIC DOSE 1 - LD 50 100 mg/kg (oral rat)

INHALATION

Toxic by inhalation. May cause oedemas in the respiratory tract.

INGESTION

May cause severe internal injury. Irritation of the mouth, the oesophagus and the gastrointestinal tract. There is a risk of perforation of the oesophagus and stomach.

SKIN CONTACT

Causes burns. May cause sensitisation by skin contact. May be absorbed through the skin.

EYE CONTACT

Causes burns.

HEALTH WARNINGS

Found to cause cancer in laboratory animals. Carcinogen category 3. Absorption of large quantities may cause irreversible damage to the optic nerve (due to methanol), nausea, headache, vomiting, inebriation and blindness.

OTHER HEALTH EFFECTS

IARC Int. Agency for Cancer Research. Formaldehyde classified as carcinogenic in humans.

12 ECOLOGICAL INFORMATION**ECOTOXICITY**

Toxic to aquatic organisms. Do not allow to enter drinking water, waste water or soil.

LC 50, 96 Hrs, FISH mg/l 24 (P.promelas)(formaldehyde)

EC 50, 48 Hrs, DAPHNIA, mg/l 2 (Daphnia magna)(formaldehyde)

BIOACCUMULATION

Low bioaccumulation potential.

DEGRADABILITY

Good biodegradability

13 DISPOSAL CONSIDERATIONS

FORMALDEHYDE 37-40% W/V LRG**GENERAL INFORMATION**

Provide sufficient ventilation and appropriate extraction during disposal to avoid the WEL being exceeded. If disposal is taking place in a confined space and vapours are exceeding the WEL wear suitable respiratory protection or stop the disposal process. Allow the vapours to disperse. Any waste material is classed as hazardous waste, it should only be disposed of through licenced waste handlers and treatment sites. Do not allow unauthorised disposal to the environment.

DISPOSAL METHODS

Dispose of waste and residues in accordance with local authority requirements. Avoid unauthorised disposal. Do not dump illegally onto land or into water.

14 TRANSPORT INFORMATION

UK ROAD CLASS	8		
PROPER SHIPPING NAME	FORMALDEHYDE SOLUTION		
UN NO. ROAD	2209	UK ROAD PACK GR.	III
ADR CLASS NO.	8	ADR CLASS	Class 8: Corrosive substances.
ADR PACK GROUP	III	ADR LABEL NO.	8
HAZCHEM CODE	2Z	CEFIC TEC(R) NO.	80GC9-II+III
RID CLASS NO.	8	RID PACK GROUP	III
UN NO. SEA	2209	IMDG CLASS	8
IMDG PAGE NO.	8	IMDG PACK GR.	III
EMS	F-A, S-B	MFAG	See Guide
MARINE POLLUTANT	No.	UN NO. AIR	2209
AIR CLASS	8	AIR PACK GR.	III

15 REGULATORY INFORMATION**LABELLING**

Toxic



Corrosive

CONTAINS FORMALDEHYDE 35%
METHANOL

RISK PHRASES

R34	Causes burns.
R37	Irritating to respiratory system.
R40	Limited evidence of a carcinogenic effect.
R43	May cause sensitisation by skin contact.
R23/24/25	Toxic by inhalation, in contact with skin and if swallowed.
R39/23/24/25	Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.

SAFETY PHRASES

S25	Avoid contact with eyes.
S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S27	Take off immediately all contaminated clothing.
S38	In case of insufficient ventilation, wear suitable respiratory equipment.
S45	In case of accident or if you feel unwell, seek medical advice immediately (show label where possible).
S36/37/39	Wear suitable protective clothing, gloves and eye/face protection.
S60	This material and its container must be disposed of as hazardous waste.

UK REGULATORY REFERENCES

Chemicals (Hazard Information & Packaging) Regulations.

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EU DIRECTIVES

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

STATUTORY INSTRUMENTS

Chemicals (Hazard Information and Packaging) Regulations. Control of Substances Hazardous to Health.

APPROVED CODE OF PRACTICE

Classification and Labelling of Substances and Preparations Dangerous for Supply. COSHH essentials: Easy steps to control chemicals. Control of Substances Hazardous to Health Regulations.

GUIDANCE NOTES

Workplace Exposure Limits EH40. Introduction to Local Exhaust Ventilation HS(G)37. Approved Classification and Labelling Guide (CHIP 4)

NATIONAL REGULATIONS

Control of Substances Hazardous to Health Regulations 2002 (as amended)

16 OTHER INFORMATION

GENERAL INFORMATION

This datasheet is not intended to be a replacement for a full risk assessment, these should always be carried out by competent persons. Under REACH Material Safety Datasheets (MSDS) are referred to as Safety Datasheets (SDS).

REVISION COMMENTS

General rewrite

REVISION DATE 23/03/2010

REV. NO./REPL. SDS GENERATED 3

SDS NO. 10117

SAFETY DATA SHEET STATUS

Approved.

RISK PHRASES IN FULL

R34	Causes burns.
R11	Highly flammable.
R37	Irritating to respiratory system.
R40	Limited evidence of a carcinogenic effect.
R43	May cause sensitisation by skin contact.
R23/24/25	Toxic by inhalation, in contact with skin and if swallowed.
R39/23/24/25	Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.