

BLUE DIAMOND PRODUCTS LTD

Unit 2

Off Smithies Lane

Heckmondwike

W. Yorkshire

WF16 0PN

01924 410050



PRODUCT DATA SHEET

(This booklet incorporates the Specification and M.S.D.S.)

PRODUCT	FORMALDEHYDE 24%	
CAS NO.	50-00-0	
TARIFF NO.	291211000	
U.N NO.	2810	
EINECS NO.	200-001-8	
IMCO CLASS	3 TOXIC	
HAZARDS	HARMFUL CATEGORY 3 CARCINOGEN	
SPECIFICATION REFERENCE	FO24/1	DATE OCT 01
REFERENCE NO.	FO24/3	DATE MAY 03
PREVIOUS EDITION.	FO24/2	DATE JAN 03

SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY

Product: FORMALDEHYDE SOLUTION 24%
 COMPANY: Blue Diamond Products Ltd
 Unit2
 Beehive Business Park
 Off Smithies Lane
 Heckmondwyke
WF16 0PN
TEL: 01924 410050
FAX: 01924 23554

2. COMPOSITION/INFORMATION ON INGREDIENTS

Substance	CAS No.	EINECS No.	%	Symbol(s)	R Phrases
Formaldehyde	50-00-0	200-001-8	<25	T	23/24/25,34,40,43
Methanol	67-56-1	200-659-6	1-13	T, F	11, 23/24/25, 39

3. HAZARDS IDENTIFICATION

Health/Physical Hazards Harmful by inhalation, in contact with skin and if swallowed. Contact with respiratory system, eyes and skin will cause irritation and may cause skin sensitisation. It is classified as EU Category 3 carcinogen

Environmental Hazards Toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment (See Section 12)

4. FIRST AID MEASURES

First Aid - Eyes Flush immediately with plenty of water for at least 15 minutes, keeping eyelids open and avoiding contamination of unaffected eye. Seek medical attention

First Aid - Skin Wash immediately with plenty of water. Remove any contaminated clothing and launder before re-use. If irritation persists or develops, seek medical attention

First Aid - Ingestion: DO NOT induce vomiting! Rinse mouth out with water, but do not give anything to drink. Seek medical attention

First Aid - Inhalation Remove patient to fresh air, allow to rest and keep warm. If not breathing, give artificial respiration and seek medical attention

Personal Precautions Ensure that those giving first aid treatment do not get contaminated by product spills, etc. Wear suitable protective clothing, gloves, safety goggles. See also Section 8

5. FIRE FIGHTING MEASURES

Extinguishing Media Water, spray or mist, foam, carbon dioxide or dry powder

Unsuitable Extinguishing Media None

Special Exposure Hazards Alert fire brigade! Aqueous solution will burn if involved in a fire and allowed to dry out and give off noxious fumes (e.g. formaldehyde and carbon oxides). Vapour is heavier than air and is an explosion hazard

Protection For Fire Fighters Self contained breathing apparatus and protective clothing. Prevent fire fighting water entering water courses or groundwater

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions Observe any warning labels on the container (see Sections 14 and 15). Wear suitable protective clothing, gloves and safety goggles. See Section 8 for details

Environmental Precautions Prevent from entering sewers or the immediate environment. In case of large spill, inform local police, local authority, water company, National Rivers Authority and/or fire brigade as appropriate

Methods of Cleaning - Soil Contain any spilled material immediately with dry agent (e.g. sand, earth, vermiculite, etc), neutralise to hexamine if necessary with 5% ammonia and vacuum or shovel carefully into labelled containers for disposal (see Section 13). Use the TREMCARD system data for substantial spillages in public places

Method of Cleaning - Water None known

7. HANDLING AND STORAGE

Handling Avoid contact with skin and eyes. Do not ingest. Handle/weigh this product under conditions of good local exhaust ventilation to avoid breathing fumes of aerosol. If this is not possible, use personal protective equipment (see Section 8)

Storage Keep in original containers. Store in a well ventilated place, protect from frost

and replace lid after use. Avoid naked flames and other sources of ignition

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits	2.5 8h TWA STEL 2.5 (15 min) UK (MEL) Ireland, Greece 1.2 8h TWA Finland (ceiling) 1.5 8h TWA 3 (15 min) Holland 0.6 8h TWA Norway (ceiling), Sweden 0.5 8h TWA 1.2 (5 min) Germany, Switzerland, France 0.4 8h TWA Denmark (ceiling) 0.3 ppm 8h TWA US-ACGIH, proposed
Monitoring Procedures	None specified
Personal Protection	Always check applicability with your supplier of protective equipment Personal exposure must be controlled to conform with local/national regulations (see above). If this is not possible, respiratory protection must be worn. Full face respirator conforming to EN141, Type A or self contained breathing apparatus should be used
Skin Protection	Chemically resistant protective overall or apron, and rubber boots
Eye Protection	Full face visor
Hand Protection	Butyl rubber, nitrile, Viton gloves Note: Break through times can vary depending on thickness, use and source. Change gloves regularly

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Colourless liquid
Odour	Irritating, pungent
pH (concentrated product)	2.5 – 6.5
Melting Point °C	-15 approx
Boiling Point/Range °C	96 – 101
Flash Point °C	83 Approx
Explosive Properties	Upper limit in air = 73% - for formaldehyde gas Lower limit in air = 7%
Oxidising Properties	None
Vapour Pressure mm Hg at 35°C	2.7
Density at 20°C kg/m ³	1090 – 1160
Solubility In Water % by weight	Miscible in all proportions
Solubility In Solvents	Soluble in ethanol, low in fatty type solvents
Partition Co Efficient (log Pow)	0.35 for formaldehyde gas
Note	These are typical values and do not constitute a specification

10. STABILITY AND REACTIVITY

Stability	Stable under normal conditions of use
Conditions To Avoid	Do not freeze (may polymerise). Avoid naked flames and other sources of ignition (evolves flammable gas at elevated temperatures)
Materials To Avoid	Strong oxidising agents. Vapour may react with hydrochloric acid to form bis-chloromethyl ether, a potent human carcinogen. The solution may become discoloured on contact with metals and alloys containing zinc, iron, copper and nickel, which may become corroded
Hazardous Decomposition Products	Formaldehyde (forms explosive mixture with air) may be evolved on heating, and carbon oxides may be released on burning or heating to decomposition

11. TOXICOLOGICAL INFORMATION

Acute Effects	Data for active ingredient Formaldehyde
Eyes	Contact can cause severe irritation with permanent damage
Skin	LD50 (dermal, rabbit) 270 mg/kg Toxic in contact and can cause skin burns
Ingestion	LD50 Oral, rat: 100 mg/kg Toxic if swallowed and can cause irritation and burns to throat, nose and gastrointestinal tract
Inhalation	LC50 Inhalation, rat: 203 mg/m ³ Classified as toxic by inhalation. Also can cause severe irritation of the respiratory tract
Chronic Effects	May cause allergic contact dermatitis reaction by skin contact (type IV immune reaction, acute and chronic skin sensitisation). Persons sensitised to formaldehyde should not handle this product
Skin	Classified as a Category 3 carcinogen in the EU, mainly on grounds of

Inhalation	inhalation experiments in animals that led to nasal cancer. However, this is not proven in humans there appears to be not definitive excess of lung cancer. Based on epidemiological evidence, no chronic adverse effects will be produced when working at below the UK MEL, although irritant effects may be experienced
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12. ECOLOGICAL INFORMATION

Aquatic Toxicity	LC50 Pimephales promelas 96h 24 mg/l EC50 Daphnia Magna 48h -2 mg/l
Bacterial Toxicity	EC50 Photobacterium phosphoreum 30 min 8.5 mg/l
Environmental Effects	Toxic for aquatic organisms. Disinfect effect. Sludge decomposition impaired or not possible even in diluted concentration Biodegradable in soil and water and not bio-accumulative. Not acutely toxic to vertebrate animals, but exerts activity against invertebrates, e.g. bacteria
WGK	2 Water Polluting This ecological assessment is calculated from data available on the components of the formulation and is not necessarily identical to the EC classification risk phrases

13. DISPOSAL CONSIDERATIONS

Disposal Of Product	Users should acquaint themselves with local regulations. This product comes under European Waste Codes H6, H8 and H11, therefore, waste is considered hazardous waste if it contains $\geq 1\%$ product; European Waste Catalogue Index No.07 01 99, if not mixed with other waste Disposal is usually carried out by incineration by a licensed waste material processor; stack gases may need to be scrubbed (see Section 5)
Disposal Of Packaging	Contaminated packing should be disposed of a Special Waste, as above, according to local authority guidelines

14. TRANSPORT INFORMATION

UN No.	2810
Proper Shipping Name ADR/RID	TOXIC LIQUID, ORGANIC, N.O.S. (CONTAINS FORMALDEHYDE)
Transport Hazard Label	Toxic
RID/ADR Classification	6.1
Packaging Group	III
TREMCARD	61GT1-III
HIN	60
EAC	2X (tanks only)
IMDG	
Transport Hazard Label	Toxic
IMO-IMDG Class	6.1
Packaging Group	III
EmS Code(s)	FA, SA
Marine Pollutant	No
ICAO/IATA	
Transport Hazard Label	Toxic
Classification	6.1
Packing Group	III
ERG Code	6L
Packing Instructions	Y611, 611 (passenger aircraft)
Packing Instructions	618 (cargo aircraft)
Max. Net Quantity/Package	60 litres (2 litres non EU packs) (passenger aircraft) 220 litres (cargo aircraft)

15. REGULATORY INFORMATION

Supply Classification	Xn Harmful
Risk Phrases	R20/21/22 Harmful by inhalation, in contact with skin and if swallowed R36/37/38 Irritating to eyes, respiratory system and skin R40 Limited evidence of a carcinogenic effect R43 May cause sensitisation by skin contact
Safety Phrases	S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice S36/37 Wear suitable protective clothing and gloves

16. OTHER INFORMATION

The Safety Data Sheets have been revised throughout to comply with CHIP III. The Specification remains the same.

Revision Date: 19/05/03