

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

Product Identifier:

Trade Name: Formaldehyde 30-50%

Relevant identified uses of the substance or mixture and uses advised against:

Identified use(s): Chemical intermediate; Resin Manufacture.

Not to be used for: None specified

Company name:

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2. HAZARDS IDENTIFICATION

Classification of the substance or mixture:

Regulation 1272/2008 (CLP):

Physical hazards: Not Classified

Health hazards: Acute Tox. 3 - H301
Acute Tox. 3 - H311
Acute Tox. 3 - H331
Skin Corr. 1B - H314
Eye Dam.1 - H318
Skin Sens. 1 - H317
Muta. 2 - H341
Carc. 1B - H350
STOT SE 2 – H371
STOT SE 3 - H335

Environmental hazards: Not classified

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Label elements:

According to Regulation (EC) No. 1272/2008 (CLP).

EC No.: 200-001-8



Signal word(s):

Danger.

Hazard statement(s):

H301: Toxic if swallowed
H311: Toxic in contact with skin
H331: Toxic if inhaled
H314: Causes severe skin burns and eye damage
H317: May cause an allergic reaction
H335: May cause respiratory irritation
H341 Suspected of causing genetic defects.
H350 May cause cancer.
H371: May cause damage to organs

Precautionary Statement(s):

P201: Obtain special instructions before use
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe vapour/spray.
P261 Avoid breathing vapour/spray.
P264 Wash contaminated skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P302+P352 IF ON SKIN: Wash with plenty of water.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P311 IF exposed or concerned: Call a POISON CENTER or doctor.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P311 Call a POISON CENTER/doctor.
P312 Call a POISON CENTER/doctor if you feel unwell.
P321 Specific treatment (see medical advice on this label).
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P361+P364 Take off immediately all contaminated clothing and wash it before reuse.
P362+P364 Take off contaminated clothing and wash it before reuse.
P363 Wash contaminated clothing before reuse.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.
P501 Dispose of contents/container in accordance with national regulations.

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Contains: Methanol and formaldehyde
Other hazards: No further information

3. COMPOSITION / INFORMATION ON INGREDIENTS

Mixtures:

Ingredient: 30 – 50% Formaldehyde
CAS No./EC No.: 50-00-0/200-001-8
REACH Registration No.: 01-2119488953-20-XXXX
Classification: Acute Tox. 3 - H301
Acute Tox. 3 - H311
Acute Tox. 2 - H330
Skin Corr. 1B - H314
Eye Dam. 1 - H318
Skin Sens. 1A - H317
Muta. 2 - H341
Carc. 1B - H350
STOT SE 3 - H335

Ingredient: 3 -<10% Methanol*
CAS No./EC No.: 67-56-1/200-659-6
REACH Registration No.: 01-2119433307-44-XXXX
Classification: Flam. Liq. 2 - H225
Acute Tox. 3 - H301
Acute Tox. 3 - H311
Acute Tox. 3 - H331
STOT SE 1 - H370

The full text for all hazard statements is displayed in Section 16
Under DPD EC 1999/45

4. FIRST AID MEASURES

Eye Contact: Remove any contact lenses and open eyelids wide apart. Rinse with water. Continue to rinse for at least 15 minutes and get medical attention.

Inhalation: Move affected person to fresh air at once. Rinse nose and mouth with water. Get medical attention if any discomfort continues.

Skin contact: Remove affected person from source of contamination. Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if symptoms are severe or persist after washing.

Ingestion: Remove affected person from source of contamination. Remove person to fresh air and keep comfortable for breathing. Never give anything by mouth to an unconscious person. Give plenty of water to drink. Do not induce vomiting. Get medical attention immediately.

Protection of first aiders: First aid personnel should wear appropriate protective equipment during any rescue.

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Most important symptoms and effects, both acute and delayed:

Inhalation:	Prolonged or repeated exposure to vapours in high concentrations may cause the following adverse effects: May cause sensitisation or allergic reactions in sensitive individuals.
Ingestion:	Prolonged or repeated exposure may cause the following adverse effects: May cause liver and/or renal damage.
Skin contact:	This product is corrosive. The product contains a sensitising substance.
Eye contact:	This product is corrosive. Prolonged or repeated exposure to vapours in high concentrations may cause the following adverse effects: May cause severe eye irritation.

Indication of any immediate medical attention and special treatment needed:

Notes for the doctor:	Treat symptomatically. Get medical attention if a large quantity has been ingested.
Specific treatment:	No special treatment required.

5. FIRE-FIGHTING MEASURES

Extinguishing Media:

Suitable:	Use alcohol-resistant foam, carbon dioxide or dry powder to extinguish. Use dry powder, dry sand or dry earth to extinguish. Water spray, fog or mist.
Not suitable:	Do not use water jet as an extinguisher, as this will spread the fire.

Special hazards arising from the substance or mixture:

Hazardous combustion products: Thermal decomposition or combustion products may include the following substances: Oxides of carbon. Oxides of nitrogen.

Advice for fire-fighters:

Protective actions during fire-fighting: In case of fire: Evacuate area. No action shall be taken without appropriate training or involving any personal risk. Control run-off water by containing and keeping it out of sewers and watercourses.

Special protective equipment for firefighters: Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

No action shall be taken without appropriate training or involving any personal risk. Evacuate area. Wear protective clothing as described in Section 8 of this safety data sheet.

For non-emergency personnel: Evacuate area. Keep upwind to avoid inhalation of gases, vapours, fumes and smoke.

For emergency responders: Wear protective clothing as described in Section 8 of this safety data sheet.

Environmental precautions: Avoid the spillage or runoff entering drains, sewers or watercourses. Inform the relevant authorities if environmental pollution occurs (sewers, waterways, soil or air).

Methods and material for containment and cleaning up:

Methods for cleaning up:

Small Spillages: Stop leak if safe to do so. Move containers from spillage area. Do not touch or walk into spilled material. Absorb spillage with sand or other inert absorbent.

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Large Spillages: Absorb spillage with sand or other inert absorbent. Collect spillage for reclamation or disposal in sealed containers via a licensed waste contractor.

Reference to other sections: See section 8 for details of protective equipment.
See section 13 for details of disposal.

7. HANDLING AND STORAGE

Precautions for safe handling:

Usage precautions: For professional users only. Persons susceptible to allergic reactions should not handle this product. For personal protection, see Section 8.

Advice on general occupational hygiene: Persons susceptible to allergic reactions should not handle this product. Do not eat, drink or smoke when using this product. Good personal hygiene procedures should be implemented. Wash at the end of each work shift and before eating, smoking and using the toilet.

Conditions for safe storage, including any incompatibilities:

Storage precautions: Store in tightly-closed, original container in a dry, cool and well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Specific end use(s): The identified uses for this product are detailed in Section 1.2.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters:

Formaldehyde:

Long-term exposure limit (8-hour TWA): WEL 2 ppm 2.5 mg/m³

Short-term exposure limit (15-minute): WEL 2 ppm 2.5 mg/m³

Methanol:

Long-term exposure limit (8-hour TWA): WEL 200 ppm 266 mg/m³

Short-term exposure limit (15-minute): WEL 250 ppm 333 mg/m³

Sk

WEL = Workplace Exposure Limit

Sk = Can be absorbed through the skin.

Exposure controls:

Appropriate engineering controls: As this product contains ingredients with exposure limits, process enclosures, local exhaust ventilation or other engineering controls should be used to keep worker exposure below any statutory or recommended limits, if use generates dust, fumes, gas, vapour or mist.

Eye/face protection: Wear tight-fitting, chemical splash goggles or face shield.

Hand protection: To protect hands from chemicals, gloves should comply with European Standard EN374. It is recommended that gloves are made of the following material: Butyl rubber. Nitrile rubber. Viton rubber (fluoro rubber). Frequent changes are recommended.

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Skin protection:	Avoid contact with skin. Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact.
Hygiene measures:	Good personal hygiene procedures should be implemented. Wash promptly with soap and water if skin becomes contaminated. Promptly remove any clothing that becomes contaminated. Wash at the end of each work shift and before eating, smoking and using the toilet. Do not eat, drink or smoke when using this product. Do not smoke in work area. Provide eyewash station and safety shower.
Respiratory protection:	Wear a full face piece respirator fitted with the following cartridge: Gas filter, type A2. Gas filter, type AX.
Environmental exposure controls:	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. Keep container tightly sealed when not in use. Residues and empty containers should be taken care of as hazardous waste according to local and national provisions.
Skin Protection:	Chemical-protection suit (e.g. according to EN 14605)
Respiratory protection:	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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties:

Appearance:	Colourless liquid
Odour:	Irritating, pungent
Odour threshold:	Not determined
pH (concentrated product):	2.5 – 5.5
Melting Point:	-15°C approx.
Boiling point/range:	96 – 101°C
Flashpoint:	63 - 75°C
Evaporation rate:	Not determined
Flammability:	Flammable liquid and vapour
Upper/lower flammability or explosive limits:	
Formaldehyde:	Lower flammable/explosive limit: 7% Upper flammable/explosive limit: 73%
Methanol:	Lower flammable/explosive limit: 6% Upper flammable/explosive limit: 37%
Vapour pressure:	4.2 mm HG at 35°C
Vapour density:	Not determined
Density at 20oC:	1080-1160 kg/m3 @20°C
Solubility:	Miscible with water. Soluble in the following materials: Ethanol.
Partition coefficient (log K_{ow}):	Formaldehyde log Kow. 0.35 Methanol. log Kow: -0.77
Auto-ignition temperature:	300°C
Decomposition temperature:	400°C
Viscosity:	1.0 (mPa.s at 20°C)
Oxidising properties:	Does not meet the criteria for classification as oxidising.
Other information:	
Note:	These are typical values and do not constitute a specification.

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10. STABILITY AND REACTIVITY

Reactivity: See Section 10.3 (Possibility of hazardous reactions) for further information.

Chemical stability: Stable at normal ambient temperatures and when used as recommended.

Possibility of hazardous reactions: The following materials may react with the product: Acids. Strong oxidising agents.

Conditions to avoid: Avoid heat, flames and other sources of ignition.

Incompatible materials: Avoid contact with the following materials: Acids. Strong oxidising agents.

Hazardous decomposition products: Heating may generate the following products: Oxides of carbon. Oxides of nitrogen.

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects: Data for active ingredients Formaldehyde or Methanol unless otherwise stated

Acute Toxicity: Acute toxicity – oral: ATE oral (mg/kg) 259.74
Acute toxicity – dermal: ATE dermal (mg/kg) 779.22
Acute toxicity – inhalation: ATE inhalation (gases ppm) 1,299.75

Toxicological information on ingredients:

Formaldehyde: Acute toxicity oral (LD₅₀mg/kg) 100.0. Species rat ATE oral (mg/kg) 100.0
Acute toxicity dermal (LD₅₀ mg/kg) 270.0. Species rabbit ATE dermal (mg/kg) 300.0
Acute toxicity inhalation (LC₅₀ gases ppmV). Species rat ATE inhalation (gases ppm) 463.0

IARC carcinogenicity: IARC Group 1 Carcinogenic to humans.

NTP carcinogenicity: Known human carcinogen.

Methanol: Acute toxicity oral (LD₅₀ mg/kg) 1,187.0. Species rat ATE oral (mg/kg) 100.0
Acute toxicity dermal (LD₅₀ mg/kg) 17,100.0. Species rabbit ATE dermal (mg/kg) 300.0
Acute toxicity inhalation ATE inhalation (gases ppm) 700.0

12. ECOLOGICAL INFORMATION

Toxicity

Acute toxicity – fish: LC₅₀, 96 hours: 24 mg/l, Fish, Pimephales promelas (Fat-head Minnow)
LC₅₀, 96 hours: 41 mg/l, Fish, Brachydanio rerio (Zebra Fish)

Acute toxicity – aquatic invertebrates: EC₅₀, 48 hours: ~2 mg/l, Daphnia magna
EC₅₀, 24 hours: 42 mg/l, Daphnia magna

Acute toxicity – microorganisms: EC₅₀, 5 hours: >1995 mg/l, Activated sludge.

Persistence and degradability: Readily biodegradable.

Bio accumulative potential: The product is not bioaccumulating.

Partition coefficient: Formaldehyde log Kow: 0.35 Methanol. log Kow: -0.77

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Mobility in soil: Expected to have a low potential for adsorption.

Results of PBT and vPvB assessment: This product does not contain any substances classified as PBT or vPvB.

Other adverse effects: No further relevant information.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods:

General information: The generation of waste should be minimised or avoided wherever possible. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements.

Disposal methods: Dispose of waste via a licensed waste disposal contractor. Waste class. Commission Decision 2000/532/EC as amended by Decision 2001/118/EC establishing a list of wastes and hazardous waste pursuant to Council Directive 75/442/EEC on waste and Directive 91/689/EEC on hazardous waste with amendments.

14. TRANSPORT INFORMATION

UN Number: 2209

Proper Shipping Name: FORMALDEHYDE SOLUTION

Transport Hazard Class: 8

ADR/RID: C9

Transport labels:



Packing group: III

Environmental Hazards:

Environmentally hazardous substance/marine pollutant: No

Special precautions for users:

EmS: F-A, S-B

ADR transport category: 3

Emergency Action Code: 2X

Hazard Identification Number ADR/RID: 80

Tunnel Code: E

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: No further information.

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15. REGULATORY INFORMATION

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

National regulations: The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No. 1348) (as amended) ["CDG 2009"]. EH40/2005 Workplace exposure limits.

EU legislation: 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) (as amended).
Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).

Chemical safety assessment: A Chemical Safety Assessment has been carried out.

Note: The regulatory information given above only indicates the principal regulations specifically Applicable to the product described in the safety data sheet. The user's attention is drawn to the possible existence of additional provisions which complete these regulations. Refer to all applicable national, international and local regulations or provisions.

16. OTHER INFORMATION

H-Statements used in Sections 2 and 3: H225 Highly flammable liquid and vapour.

H301 Toxic if swallowed.

H311 Toxic in contact with skin.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H330 Fatal if inhaled.

H331 Toxic if inhaled.

H335 May cause respiratory irritation.

H341 Suspected of causing genetic defects.

H350 May cause cancer.

H370 Causes damage to organs.

H371 May cause damage to organs.

Legal disclaimer: The information contained in this SDS does not constitute a risk assessment, and should not replace the user's own assessment of risks as required by other health and safety legislation. This advice is given by Nexchem Ltd who accept no legal liability for it except otherwise provided by law. The information contained herein is based on the present state of our knowledge and is intended to describe our products from the point of view of safety requirements. It should not therefore be construed as guaranteeing specific properties.