

## Section 1: Product and Company Identification

**Absolute Accuracy**  
4591 S Wayside Dr  
Houston, TX 77087  
(832) 571-2387

Product Code: 3005

**Synonyms:** N/A  
**Recommended Use:** CALIBRATION GAS  
**Usage Restrictions:** INDUSTRIAL CALIBRATION GAS ONLY

## Section 2: Hazards Identification



**Danger**

### Hazard Classification:

Acute Dermal Toxicity (Category 3)  
Acute Oral Toxicity (Category 3)  
Carcinogenicity (Category 1.B)  
Gases Under Pressure  
Germ Cell Mutagenicity (Category 1.B)  
Skin Sensitizer (Category 1)

### Hazard Statements:

Contains gas under pressure; may explode if heated  
May cause an allergic skin reaction  
May cause cancer  
May cause genetic defects  
Toxic if swallowed  
Toxic in contact with skin

### Precautionary Statements

#### Prevention:

Wash thoroughly after handling.  
Avoid breathing dust/fume/gas/mist/ vapors/spray.  
Do not eat, drink or smoke when using this product.  
Do not handle until all safety precautions have been read and understood.  
Contaminated work clothing must not be allowed out of the workplace.  
Wear protective gloves, protective clothing, eye protection and face protection.  
Obtain special instructions before use.

#### Response:

If swallowed: Immediately call a poison center or doctor.  
If skin irritation occurs: Get medical advice/attention.

Take off immediately all contaminated clothing and wash it before reuse.  
 Wash with plenty of water  
 If exposed or concerned: Get medical advice/attention.

**Storage:**

Protect from sunlight.  
 Store in well-ventilated place.  
 Store locked up.

**Disposal:**

Dispose of contents and/or container in accordance with applicable regulations.

## Section 3: Composition/Information on Ingredients

	CAS #	Concentration
<b>Formaldehyde</b>	50-00-0	5PPM
<b>Nitrogen</b>	7727-37-9	BALANCE

	Chemical Substance	Chemical Family	Trade Names
<b>Formaldehyde</b>	Formaldehyde	Aldehydes	Formaldehyde solution; Formalin; Formalith; Formic aldehyde; Formol; Methanal; Methyl aldehyde; Oxomethane
<b>Nitrogen</b>	NITROGEN, COMPRESSED GAS	Inorganic gases	DIATOMIC NITROGEN; DINITROGEN; NITROGEN; NITROGEN-14; NITROGEN GAS; UN 1066; N2

## Section 4: First Aid Measures

	Skin Contact	Eye Contact	Ingestion	Inhalation	Note to Physicians
<b>Formaldehyde</b>	Wash with soap and plenty of water. Go immediately to hospital	Rinse with plenty of water and consult physician.	Do not induce vomiting.	Move to fresh air	Not available
<b>Nitrogen</b>	Wash exposed skin with soap and water.	Flush eyes with plenty of water.	If a large amount is swallowed, get medical attention.	If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. If breathing is difficult, oxygen should be administered by qualified personnel. Get immediate medical attention.	For inhalation, consider oxygen.

## Section 5: Fire Fighting Measures

	Suitable Extinguishing Media	Products of Combustion	Protection of Firefighters
<b>Formaldehyde</b>	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide	Carbon oxides	<ul style="list-style-type: none"> <li>▪ Not available</li> <li>▪ Not available</li> <li>▪ Not available</li> <li>▪ Wear self contained breathing apparatus if necessary</li> </ul>

	<b>Suitable Extinguishing Media</b>	<b>Products of Combustion</b>	<b>Protection of Firefighters</b>
<b>Nitrogen</b>	Non-flammable. Use suitable extinguishing media for surrounding fire. Cylinders may rupture or explode if exposed to heat.	Non-flammable	<ul style="list-style-type: none"> <li>Respiratory protection may be needed for frequent or heavy exposure.</li> </ul>

## Section 6: Accidental Release Measures

	<b>Personal Precautions</b>	<b>Environmental Precautions</b>	<b>Methods for Containment</b>
<b>Formaldehyde</b>	Wear respiratory protection. Avoid breathing vapors, mist or gas.	Prevent further leakage or spillage if safe to do so.	Contain spillage
<b>Nitrogen</b>	Keep unnecessary people away, isolate hazard area and deny entry. Stay upwind and keep out of low areas.	No significant effects from contamination expected.	Stop leak if possible without personal risk.

	<b>Methods for Cleanup</b>	<b>Other Information</b>
<b>Formaldehyde</b>	Collect with an electrically protected vacuum cleaner.	Not available
<b>Nitrogen</b>	N/A	N/A

## Section 7: Handling and Storage

	<b>Handling</b>	<b>Storage</b>
<b>Formaldehyde</b>	Store and use with adequate ventilation. Firmly secure cylinders upright to keep them from falling or being knocked over. Screw valve protection cap firmly in place by hand. Store only where temperature will not exceed 125F (52C). Store full and empty cylinders separately. Use a first-in, first-out inventory system to prevent storing full cylinders for long periods.	Do not get liquid in eyes, on skin, or clothing. Protect cylinders from damage. Use a suitable hand truck to move cylinders; do not drag, roll, slide, or drop. Open valve slowly. Close cylinder valve after each use; keep closed even when empty. If valve is hard to open, discontinue use and contact your supplier
<b>Nitrogen</b>	Store and handle in accordance with all current regulations and standards. Subject to storage regulations: U.S. OSHA 29 CFR 1910.101.	Keep separated from incompatible substances.

## Section 8: Exposure Controls/Personal Protection

	<b>Exposure Guidelines</b>
<b>Formaldehyde</b>	0.3 ppm
<b>Nitrogen</b>	NITROGEN, COMPRESSED GAS: NITROGEN: ACGIH (simple asphyxiant)

### Engineering Controls

Handle only in fully enclosed systems.

	<b>Eye Protection</b>	<b>Skin Protection</b>	<b>Respiratory Protection</b>
<b>Formaldehyde</b>	Tightly fitting safety goggles	Complete suit protecting against chemicals	Not available
<b>Nitrogen</b>	Eye protection not required, but recommended.	Protective clothing is not required.	Respiratory protection may be needed for frequent or heavy exposure.

### General Hygiene considerations

- Avoid breathing vapor or mist
- Avoid contact with eyes and skin
- Wash thoroughly after handling and before eating or drinking

## Section 9: Physical and Chemical Properties

	Physical State	Appearance	Color	Change in Appearance	Physical Form	Odor	Taste
<b>Formaldehyde</b>	Gas	Clear	Colorless	Not available	Gas, usual in trade as aqueous solution	Characteristic	Not available
<b>Nitrogen</b>	Gas	Clear	Colorless	N/A	Gas	Odorless	Tasteless

	Flash Point	Flammability	Partition Coefficient	Autoignition Temperature	Upper Explosive Limits	Lower Explosive Limits
<b>Formaldehyde</b>	64 deg C - closed cup	Not available	Not available	300 deg C	73 %	7 %
<b>Nitrogen</b>	Not flammable	Not available	Not available	Nonflammable	Nonflammable	Nonflammable

	Boiling Point	Freezing Point	Vapor Pressure	Vapor Density	Specific Gravity	Water Solubility	pH	Odor Threshold	Evaporation Rate	Viscosity
<b>Formaldehyde</b>	96 deg C	-15 deg C	10 mm Hg at -88 C	1.04 (Air=1)	Not available	Not available	Not available	Not available	Not available	Not available
<b>Nitrogen</b>	-321 F (-196 C)	-346 F (-210 C)	760 mmHg @ -196 C	0.967 (Air=1)	Not applicable	1.6% @ 20 C	Not applicable	Not available	Not applicable	0.01787 cP @ 27 C

	Molecular Weight	Molecular Formula	Density	Weight per Gallon	Volatility by Volume	Volatility	Solvent Solubility
<b>Formaldehyde</b>	30.03 g/mol	CH <sub>2</sub> O	1.016 g/cm <sup>3</sup>	Not available	Not available	Not available	Not available
<b>Nitrogen</b>	28.0134	N <sub>2</sub>	1.2506 g/L	Not available	100%	1	Soluble: Liquid ammonia

## Section 10: Stability and Reactivity

	Stability	Conditions to Avoid	Incompatible Materials
<b>Formaldehyde</b>	Stable under recommended storage conditions	Stable under recommended storage conditions	Strong bases, acids, oxidizing agents, alkali metals, strong oxidizing agents, reducing agents peroxides, phenol, aniline
<b>Nitrogen</b>	Stable at normal temperatures and pressure.	Stable at normal temperatures and pressure.	Metals, oxidizing materials

	Hazardous Decomposition Products	Possibility of Hazardous Reactions
<b>Formaldehyde</b>	Carbon oxides	Not available
<b>Nitrogen</b>	Oxides of nitrogen	Will not polymerize.

## Section 11: Toxicology Information

### Acute Effects

	Oral LD50	Dermal LD50	Inhalation
<b>Formaldehyde</b>	Not available	Not available	Toxic if inhaled
<b>Nitrogen</b>	Not available	Not available	Nausea, vomiting, difficulty breathing, headache, drowsiness, dizziness, tingling sensation, loss of coordination, convulsions, coma

	<b>Eye Irritation</b>	<b>Skin Irritation</b>	<b>Sensitization</b>
<b>Formaldehyde</b>	Causes eye burns	Toxic if absorbed through skin, causes skin burns	Acute toxicity, Category 3, oral; H301: Toxic if swallowed. Acute toxicity, Category 3, dermal; H311: Toxic if in contact with skin. Acute toxicity, Category 3, inhalation; H331: Toxic if inhaled. Skin corrosion, Category 1B; H314: Causes severe skin burns and eye damage. Skin sensitisation, Category 1; H317: May cause an allergic skin reaction. Specific Target Organ Toxicity (single exposure), Category 3; H335: May cause respiratory irritation. Germ cell mutagenicity, Category 2; H341: Suspected of causing genetic defects. Carcinogenicity, Category 1B; H350: May cause cancer. Specific Target Organ Toxicity (single exposure), Category 1; H370: Causes damage to organs.
<b>Nitrogen</b>	Contact with rapidly expanding gas may cause burns or frostbite	No information on significant adverse effects	Difficulty breathing

### Chronic Effects

	<b>Carcinogenicity</b>	<b>Mutagenicity</b>	<b>Reproductive Effects</b>	<b>Developmental Effects</b>
<b>Formaldehyde</b>	IARC: Group 1: carcinogenic to humans	Not available	Not available	No data
<b>Nitrogen</b>	Not hazardous	Not available	Not available	No data

## Section 12: Ecological Information

### Fate and Transport

	<b>Eco toxicity</b>	<b>Persistence / Degradability</b>	<b>Bioaccumulation / Accumulation</b>	<b>Mobility in Environment</b>
<b>Formaldehyde</b>	Fish toxicity: not available Invertebrate toxicity: not available Algal toxicity: not available Phyto toxicity: not available Other toxicity: not available	Not available	Not available	Not available
<b>Nitrogen</b>	Fish toxicity: Not available Invertebrate toxicity: Not available Algal toxicity: Not available Phyto toxicity: Not available Other toxicity: Not available	Not available	Not available	Not available

## Section 13: Disposal Considerations

<b>Formaldehyde</b>	Contact a licensed professional waste disposal service to dispose of this material.
<b>Nitrogen</b>	Dispose in accordance with all applicable regulations.

## Section 14: Transportation Information

U.S. DOT 49 CFR 172.101

### DOT Information For This Mixture

Shipping Name	Compressed gas, n.o.s. (Nitrogen, Formaldehyde)
UN Number	UN1956
Hazard Class	2.2
Hazard Information	Non-Flammable Gas

### Individual Component Information

	Proper Shipping Name	ID Number	Hazard Class or Division	Packing Group	Labeling Requirements	Passenger Aircraft or Railcar Quantity Limitations	Cargo Aircraft Only Quantity Limitations	Additional Shipping Description
<b>F o r m a l d e h y d e</b>	Formaldehyde solutions, flammable	UN1198	3	III	Not available	Not available	Not available	Not available
<b>N i t r o g e n</b>	Nitrogen, compressed	UN1066	2.2	Not applicable	2.2	75 kg or L	150 kg	N/A

### Canadian Transportation of Dangerous Goods

	Shipping Name	UN Number	Class	Packing Group / Risk Group
<b>F o r m a l d e h y d e</b>	Formaldehyde solutions, flammable	UN1198	3	III
<b>N i t r o g e n</b>	Nitrogen, compressed	UN1066	2.2	Not applicable

## Section 15: Regulatory Information

### U.S. Regulations

	CERCLA Sections	SARA 355.30	SARA 355.40
<b>F o r m a l d e h y d e</b>	Not available	Not available	Not available
<b>N i t r o g e n</b>	Not regulated.	Not regulated.	Not regulated.

### SARA 370.21

	Acute	Chronic	Fire	Reactive	Sudden Release
<b>F o r m a l d e h y d e</b>	Not available	Not available	Not available	Not available	Not available

<b>Nitrogen</b>	Yes	No	No	No	Yes
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**SARA 372.65**

<b>Formaldehyde</b>	Not available
<b>Nitrogen</b>	Not regulated.

**OSHA Process Safety**

<b>Formaldehyde</b>	Not available
<b>Nitrogen</b>	Not regulated.

**State Regulations**

	<b>CA Proposition 65</b>
<b>Formaldehyde</b>	California Proposition 65 - This product contains, or may contain, a substance(s) known to the state of California to cause cancer, developmental and/or reproductive harm.
<b>Nitrogen</b>	Not regulated.

**Canadian Regulations**

	<b>WHMIS Classification</b>
<b>Formaldehyde</b>	Not available
<b>Nitrogen</b>	A

**National Inventory Status**

	<b>US Inventory (TSCA)</b>	<b>TSCA 12b Export Notification</b>	<b>Canada Inventory (DSL/NDSL)</b>
<b>Formaldehyde</b>	Not available	Not available	Not available
<b>Nitrogen</b>	Listed on inventory.	Not listed.	Listed on inventory.

**Section 16: Other Information**

	<b>NFPA Rating</b>
<b>Formaldehyde</b>	Health: 3, Fire:2, Reactivity:0
<b>Nitrogen</b>	HEALTH=0 FIRE=0 REACTIVITY=0 SPECIAL=SA

0 = minimal hazard, 1 = slight hazard, 2 = moderate hazard, 3 = severe hazard, 4 = extreme hazard