

# GP<sup>®</sup> 4461

## 50% Formaldehyde Solution Uninhibited Grade

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### Product Information

#### DESCRIPTION

Georgia-Pacific Chemicals supplies formaldehyde solution at 50% concentration, uninhibited grade. This solution is a high purity product that is highly reactive. It is produced by the catalytic oxidation of synthetic methanol under rigid quality control conditions. Other concentrations of formaldehyde, both inhibited and uninhibited with methanol, are available.

#### USES AND APPLICATIONS

Solutions of formaldehyde are used primarily in the manufacture of synthetic resins due to their high reactivity with phenol, urea, melamine and other similar compounds. These resins are then used to produce molded articles and high-pressure adhesives for plywood and particleboard as well as other wood panelboard products; resins for adding wet strength to paper; coatings; varnishes and enamels; foundry core and shell binders; glass and mineral wool insulation; and agrochemicals.

#### STORAGE AND HANDLING

Formaldehyde solutions should be stored in well ventilated areas away from oxidizing and alkaline materials. The recommended storage temperatures should be maintained to prevent polymerization which may occur at low temperatures and may plug equipment. Formaldehyde vapor may be given off at high temperatures. Prolonged storage should be avoided to minimize increases in acidity and to prevent polymerization.

Storage tanks of type 304 stainless steel are preferred. Iron, copper and bronze are not recommended for tanks or lines. Steel, copper and certain alloys may discolor the product. For some uses, fiberglass or aluminum tanks are satisfactory. Because formaldehyde vapor is combustible, storage tanks should be properly grounded. Formaldehyde solutions are stable and under normal conditions can be easily handled. Keep container closed when not in use. Use only in well ventilated areas.

Georgia-Pacific Chemicals supplies formaldehyde in insulated stainless steel tank trucks and lined, insulated tank cars equipped with heater coils.

Additional information on the safe handling of formaldehyde is in the Material Safety Data Sheet available from Georgia-Pacific Chemicals.

#### TYPICAL PROPERTIES

|   |              |
|---|--------------|
| Formaldehyde, wt. %                         | 50.0 – 50.5  |
| Methanol, wt. %                             | <1.0         |
| Acidity, wt. % as formic acid               | 0.05 maximum |
| Color, APHA                                 | 10 maximum   |
| Specific Gravity at 25°C                    | Approx. 1.15 |
| Weight per gallon, lb.                      | Approx. 9.5  |
| Flash Point, °F (Pensky-Martens Closed Cup) | 174          |
| Suggested Storage Temperature, °F           | 131 - 158    |



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