



# GHS SAFETY DATA SHEET

WELD-ON FLOWGUARD GOLD® Low VOC Cement for CPVC Plastic Pipe

Date Revised: MAR 2020

Supersedes: FEB 2019

## SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** WELD-ON FLOWGUARD GOLD® Low VOC Cement for CPVC Plastic Pipe

**PRODUCT USE:** Low VOC Solvent Cement for CPVC Plastic Pipe

**RESTRICTIONS ON USE:** No relevant information available

**SUPPLIER:**

**MANUFACTURER:** IPS Corporation  
17109 South Main Street, Gardena, CA 90248-3127  
P.O. Box 379, Gardena, CA 90247-0379  
Tel. 1-310-898-3300 E-mail address: EHSinfo@ipscorp.com

**EMERGENCY:** Transportation: CHEMTEL Tel. 800.255-3924, +1 813-248-0585 (International)

**Medical:** CHEMTEL Tel. 800.255-3924, +1 813-248-0585 (International)

## SECTION 2 - HAZARDS IDENTIFICATION

**GHS CLASSIFICATION:**

| Health                                                                                                                                           | Environmental                                              | Physical                    |
|--------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|-----------------------------|
| Acute Toxicity: Category 2<br>Skin Irritation: Category 3<br>Skin Sensitization: NO<br>Carcinogenicity: Category 2<br>Eye Irritation: Category 2 | Acute Toxicity: None Known<br>Chronic Toxicity: None Known | Flammable Liquid Category 2 |

**GHS LABEL:**



**Signal Word:** Danger

### HAZARD STATEMENTS

H225: Highly flammable liquid and vapor  
H319: Causes serious eye irritation  
H332: Harmful if inhaled  
H335: May cause respiratory irritation  
H336: May cause drowsiness or dizziness  
H351: Suspected of causing cancer

### PRECAUTIONARY STATEMENTS

P210: Keep away from heat/sparks/open flames/hot surfaces – No smoking  
P261: Avoid breathing dust/fume/gas/mist/vapors/spray  
P280: Wear protective gloves/protective clothing/eye protection/face protection  
P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
P403+P233: Store in a well ventilated place. Keep container tightly closed  
P501: Dispose of contents/container in accordance with local regulation

### RESPONSE STATEMENTS

P301+P310: IF SWALLOWED: Call a POISON CENTER and get Medical Attention  
P331: Do NOT induce vomiting.  
P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or 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+P313: IF exposed or concerned: Get medical advice/attention.

**Physical Hazards Not Otherwise Classified**

May form explosive peroxides

## SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

|                           | CAS      | EINECS    | REACH<br>Registration Number | CONCENTRATION<br>% by Weight |
|---------------------------|----------|-----------|------------------------------|------------------------------|
| Tetrahydrofuran (THF)     | 109-99-9 | 203-726-8 | 01-2119444314-46-0000        | 30 - 40                      |
| Methyl Ethyl Ketone (MEK) | 78-93-3  | 201-159-0 | 01-2119457290-43-0000        | 15 - 25                      |
| Cyclohexanone             | 108-94-1 | 203-631-1 | 01-2119453616-35-0000        | 10 - 18                      |

All of the constituents of this adhesive product are listed on the TSCA inventory of chemical substances maintained by the US EPA, or are exempt from that listing.

\* Indicates this chemical is subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (40CFR372).

# indicates that this chemical is found on Proposition 65's List of chemicals known to the State of California to cause cancer or reproductive toxicity.

## SECTION 4 - FIRST AID MEASURES

**Contact with eyes:** Flush eyes immediately with plenty of water for 15 minutes and seek medical advice immediately.  
**Skin contact:** Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water. If irritation develops, seek medical advice.  
**Inhalation:** Remove to fresh air. If breathing is stopped, give artificial respiration. If breathing is difficult, give oxygen. Seek medical advice.  
**Ingestion:** Rinse mouth with water. Give 1 or 2 glasses of water or milk to dilute. Do not induce vomiting. Seek medical advice immediately.

## SECTION 5 - FIREFIGHTING MEASURES

**Suitable Extinguishing Media:** Dry chemical powder, carbon dioxide gas, foam, Halon, water fog.  
**Unsuitable Extinguishing Media:** Water spray or stream.  
**Exposure Hazards:** Inhalation and dermal contact  
**Combustion Products:** Oxides of carbon, hydrogen chloride and smoke  
**Protection for Firefighters:** Self-contained breathing apparatus or full-face positive pressure airline masks. *Safety Glasses and Gloves*

|              | HMIS | NFPA |            |
|--------------|------|------|------------|
| Health       | 2    | 2    | 1-Slight   |
| Flammability | 3    | 3    | 2-Moderate |
| Reactivity   | 0    | 0    | 3-Serious  |
| PPE          | B    |      | 4-Severe   |

## SECTION 6 - ACCIDENTAL RELEASE MEASURES

**Personal precautions:** Keep away from heat, sparks and open flame.  
Provide sufficient ventilation, use explosion-proof exhaust ventilation equipment or wear suitable respiratory protective equipment.  
Prevent contact with skin or eyes (see section 8).  
**Environmental Precautions:** Prevent product or liquids contaminated with product from entering sewers, drains, soil or open water course.  
**Methods for Cleaning up:** Clean up with sand or other inert absorbent material. Transfer to a closable steel vessel.  
**Materials not to be used for clean up:** Aluminum or plastic containers

## SECTION 7 - HANDLING AND STORAGE

**Handling:** Avoid breathing of vapor, avoid contact with eyes, skin and clothing.  
Keep away from ignition sources, use only electrically grounded handling equipment and ensure adequate ventilation/fume exhaust hoods.  
Do not eat, drink or smoke while handling.  
**Storage:** Store in ventilated room or shade below 44°C (110°F) and away from direct sunlight.  
Keep away from ignition sources and incompatible materials: caustics, ammonia, inorganic acids, strong oxidizers and isocyanates.  
Follow all precautionary information on container label, product bulletins and solvent cementing literature.

## SECTION 8 - PRECAUTIONS TO CONTROL EXPOSURE / PERSONAL PROTECTION

| EXPOSURE LIMITS: | Component                 | ACGIH<br>8-HOUR TLV | ACGIH<br>15-MINUTE<br>STEL | OSHA<br>8-HOUR PEL | OSHA<br>15-MINUTE<br>STEL | OSHA<br>PEL-Ceiling | CAL/OSHA<br>8-HOUR<br>PEL | CAL/OSHA<br>15-MINUTE<br>Ceiling | CAL/OSHA<br>15-MINUTE<br>STEL |
|------------------|---------------------------|---------------------|----------------------------|--------------------|---------------------------|---------------------|---------------------------|----------------------------------|-------------------------------|
|                  | Tetrahydrofuran (THF)     | 50 ppm              | 100 ppm                    | 200 ppm            | N/E                       | N/E                 | 200 ppm                   | N/E                              | 250 ppm                       |
|                  | Methyl Ethyl Ketone (MEK) | 200 ppm             | 300 ppm                    | 200 ppm            | N/E                       | N/E                 | 200 ppm                   | N/E                              | 300 ppm                       |
|                  | Cyclohexanone             | 20 ppm              | 50 ppm                     | 50 ppm             | N/E                       | N/E                 | 25 ppm                    | N/E                              | N/E                           |

**Engineering Controls:** Use local exhaust as needed.

**Monitoring:** Maintain breathing zone airborne concentrations below exposure limits.

**Personal Protective Equipment (PPE):**

**Eye Protection:** Avoid contact with eyes, wear splash-proof chemical goggles, face shield, safety glasses (spectacles) with brow guards and side shields, etc. as may be appropriate for the exposure.

**Skin Protection:** Prevent contact with the skin as much as possible. Butyl rubber gloves should be used for frequent immersion.  
Use of solvent-resistant gloves or solvent-resistant barrier cream should provide adequate protection when normal adhesive application practices and procedures are used for making structural bonds.

**Respiratory Protection:** Prevent inhalation of the solvents. Use in a well-ventilated room. Open doors and/or windows to ensure airflow and air changes. Use local exhaust ventilation to remove airborne contaminants from employee breathing zone and to keep contaminants below levels listed above.  
With normal use, the Exposure Limit Value will not usually be reached. When limits approached, use respiratory protection equipment.



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### SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

|                                        |                                                                                              |                        |                                                             |
|----------------------------------------|----------------------------------------------------------------------------------------------|------------------------|-------------------------------------------------------------|
| Appearance:                            | Yellow, medium syrupy liquid                                                                 | Odor Threshold:        | 0.88 ppm (Cyclohexanone)                                    |
| Odor:                                  | Ketone                                                                                       | Boiling Range:         | 66°C (151°F) to 156°C (313°F)                               |
| pH:                                    | Not Applicable                                                                               | Evaporation Rate:      | > 1.0 (BUAC = 1)                                            |
| Melting/Freezing Point:                | -108.5°C (-163.3°F) Based on first melting component: THF                                    | Flammability:          | Category 2                                                  |
| Boiling Point:                         | 66°C (151°F) Based on first boiling component: THF                                           | Flammability Limits:   | LEL: 1.1% based on Cyclohexanone<br>UEL: 11.8% based on THF |
| Flash Point:                           | -20°C (-4°F) TCC based on THF                                                                | Vapor Pressure:        | 129 mm Hg @ 20°C (68°F) based on THF                        |
| Specific Gravity:                      | 0.986 @ 23°C (73°F)                                                                          | Vapor Density:         | >2 (Air = 1)                                                |
| Solubility:                            | Solvent portion soluble in water. Resin portion separates out.                               | Other Data: Viscosity: | Medium bodied                                               |
| Partition Coefficient n-octanol/water: | Not Available                                                                                |                        |                                                             |
| Auto-ignition Temperature:             | 321°C (610°F) based on THF                                                                   |                        |                                                             |
| Decomposition Temperature:             | Not Applicable                                                                               |                        |                                                             |
| VOC Content:                           | When applied as directed, per SCAQMD Rule 1168, Test Method 316A, VOC content is: ≤ 490 g/l. |                        |                                                             |

### SECTION 10 - STABILITY AND REACTIVITY

|                                   |                                                                                                                |
|-----------------------------------|----------------------------------------------------------------------------------------------------------------|
| Reactivity:                       | Heating may cause a fire                                                                                       |
| Stability:                        | Stable under normal conditions                                                                                 |
| Hazardous decomposition products: | None in normal use. When forced to burn, this product gives off oxides of carbon, hydrogen chloride and smoke. |
| Conditions to avoid:              | Keep away from heat, sparks, open flame and other ignition sources.                                            |
| Incompatible Materials:           | Oxidizers, strong acids and bases, amines, ammonia                                                             |

### SECTION 11 - TOXICOLOGICAL INFORMATION

Likely Routes of Exposure: Inhalation, Eye and Skin Contact

Acute symptoms and effects:

**Inhalation:** Excessive exposure to vapors or spray mists can result in headache, dizziness, incoordination and loss of consciousness. Irritation of the eyes, nose, throat and lungs can also occur when exposed to high vapor concentrations. Some reports have associated repeated and prolonged occupational overexposure to solvents with permanent nervous system damage.

**Eye Contact:** Vapors slightly uncomfortable. Overexposure may result in severe eye injury with corneal or conjunctival inflammation on contact with the liquid.

**Skin Contact:** Liquid contact may remove natural skin oils resulting in skin irritation. May cause defatting and irritation of skin (Dermatitis) upon prolonged or repeated

**Ingestion:** Swallowing can cause nausea, vomiting, diarrhea and loss of consciousness.

**Chronic (long-term) effects:** (MEK): Low level chronic exposure has been shown to cause decreased memory and impairment of the central nervous system.

**Health Hazards Not Otherwise Classified:** This material may cause defatting and irritation of skin (Dermatitis) upon prolonged or repeated contact.

**Respiratory or Skin Sensitization:** Not Applicable

| Reproductive Effects | Teratogenicity  | Mutagenicity    | Embryotoxicity  | Sensitization to Product | Synergistic Products |
|----------------------|-----------------|-----------------|-----------------|--------------------------|----------------------|
| Not Established      | Not Established | Not Established | Not Established | Not Established          | Not Established      |

**Carcinogenicity:** **Tetrahydrofuran (THF)** : Category 2: Suspected of causing cancer

| Toxicity:                  | LD50 (Oral)      | LD50 (Dermal)       | LC50 (Inhalation)         |
|----------------------------|------------------|---------------------|---------------------------|
| <b>Methyl Ethyl Ketone</b> | 2737 mg/kg (rat) | 6480 mg/kg (rabbit) | 8 hrs. 23,500 mg/m3 (rat) |
| <b>Cyclohexanone</b>       | 1535 mg/kg (rat) | 948 mg/kg (rabbit)  | 4 hrs. 8,000 PPM (rat)    |
| <b>Tetrahydrofuran</b>     | 2842 mg/kg (rat) | > 2,000 mg/kg (rat) | 3 hrs. 21,000 mg/m3 (rat) |

**Acute Toxicity**

Calculated (ATEs)

Category 2

Acute (Oral) Toxicity: Category 2

Acute (Dermal) Toxicity: Category 2

Acute (Inhalation) Toxicity: Category 2

**Specific Target Exposure Toxicity (Single Exposure):** **Methyl Ethyl Ketone**  
**Cyclohexanone**  
**Tetrahydrofuran**

| Category | Route of Exposure | Affected Organs        |
|----------|-------------------|------------------------|
| 3        | Inhalation        | Central Nervous System |
| N/E      | N/E               | N/E                    |
| 3        | Inhalation        | Central Nervous System |

**Specific Target Exposure Toxicity (Repeated Exposure):**

No Data Available

**Aspiration Hazard:** Based on available data, the classification criteria are not met.

### SECTION 12 - ECOLOGICAL INFORMATION

| Ecotoxicity:                               | LC50                                                                              | EC50                                | EC50                                                               |
|--------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------|--------------------------------------------------------------------|
| <b>Acute Aquatic Toxicity:</b>             | Pimephales promelas (fathead minnow); 96-hour                                     | Daphnia magna (water flea); 48-hour | Pseudokirchneriella subcapitata (microalgae) Growth rate inhibitor |
| <b>Methyl Ethyl Ketone</b>                 | > 100 mg/L                                                                        | > 100 mg/L                          | 2,029 mg/l - 96 hour                                               |
| <b>Cyclohexanone</b>                       | 527 mg/L                                                                          | > 100 mg/L                          | 0.925 mg/l - 72 hour                                               |
| <b>Tetrahydrofuran</b>                     | 2160 mg/L                                                                         | No Data Available                   | 3,700 mg/l - 192 hour                                              |
| <b>Mobility in Soil:</b>                   | If released into the environment, this product can move rapidly through the soil. |                                     |                                                                    |
| <b>Degradability:</b>                      | Not readily biodegradable                                                         |                                     |                                                                    |
| <b>Bioaccumulation:</b>                    | Minimal to none.                                                                  |                                     |                                                                    |
| <b>Results of PBT and vPvB assessment:</b> | PBT: Not applicable. vPvB: Not applicable                                         |                                     |                                                                    |
| <b>Other adverse effects:</b>              | No relevant information available.                                                |                                     |                                                                    |

### SECTION 13 - WASTE DISPOSAL CONSIDERATIONS

Dispose of waste and containers in compliance with applicable Federal, State, and Local Regulations. Consult disposal expert. Do not reuse empty containers.

### SECTION 14 - TRANSPORT INFORMATION

|                        |                          |                                                                                             |
|------------------------|--------------------------|---------------------------------------------------------------------------------------------|
| Proper Shipping Name:  | Adhesives                | EXCEPTION for Ground Shipping                                                               |
| Hazard Class:          | 3                        | DOT Limited Quantity: Up to 5L per inner packaging, 30 kg gross weight per package.         |
| Secondary Risk:        | None                     | Consumer Commodity: Depending on packaging, these quantities may qualify under DOT as ORM-D |
| Identification Number: | UN 1133                  | TDG INFORMATION                                                                             |
| Packing Group:         | PG II                    | TDG CLASS: FLAMMABLE LIQUID 3                                                               |
| Label Required:        | Class 3 Flammable Liquid | SHIPPING NAME: ADHESIVES                                                                    |
| Marine Pollutant:      | NO                       | UN NUMBER/PACKING GROUP: UN 1133, PG II                                                     |

### SECTION 15 - REGULATORY INFORMATION

|                                         |                                                                                                                                                                                                                                                                                                                   |                                                                                                             |
|-----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|
| <b>Precautionary Label Information:</b> | Highly Flammable, Irritant, Carc. Cat. 2                                                                                                                                                                                                                                                                          | Ingredient Listings: USA TSCA, Europe EINECS, Canada DSL, Australia AICS, Korea ECL/TCCL, Japan MITI (ENCS) |
| <b>Symbols:</b>                         | F, Xi                                                                                                                                                                                                                                                                                                             |                                                                                                             |
| <b>Compliance Statement:</b>            | This SDS was prepared to be in accordance with:<br>US OSHA Hazard Communication Standard 29 CFR 1910.1200 (Rev 2012)<br>Canadian Workplace Hazardous Materials Information System (WHMIS) 2015<br>European Regulation (EC) No (EU) 2015/830 on classification, labelling and packaging of substances and mixtures |                                                                                                             |

### SECTION 16 - OTHER INFORMATION

|                                           |                                                                            |                                                                                                                              |
|-------------------------------------------|----------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| <b>Specification Information:</b>         |                                                                            |                                                                                                                              |
| <b>Department issuing data sheet:</b>     | IPS, Safety Health & Environmental Affairs                                 | All ingredients are compliant with the requirements of the European Directive on RoHS (Restriction of Hazardous Substances). |
| <b>E-mail address:</b>                    | <EHSinfo@ipscorp.com>                                                      |                                                                                                                              |
| <b>Training necessary:</b>                | Yes, training in practices and procedures contained in product literature. |                                                                                                                              |
| <b>Reissue date / reason for reissue:</b> | 3/27/2020 / Updated GHS Standard Format                                    |                                                                                                                              |
| <b>Intended Use of Product:</b>           | Solvent Cement for CPVC Plastic Pipe                                       |                                                                                                                              |

This product is intended for use by skilled individuals at their own risk. The information contained herein is based on data considered accurate based on current state of knowledge and experience. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof.