

# CHEMICALS

#### Solvent release adhesives

Most lacquer, rubber or plastic base adhesives are the solvent-release type. They are universal and easy to apply with no special prepara-tion required. However, they are limited in their application as they are not suitable for cementing non-porous surfaces such as metals, glass, glazed ceramics and others, due to the inability of the solvent to evaporate quickly, except around the edges. They do work very well if one or both of the bonding surfaces consists of material which has some porosity.



#### General Purpose Plastic Cement II

A solvent-release adhesive with a special Nitrocellulose Lacquer Base. The bond is hard, but not brittle. Adheres especially well to plastics, paper, leather, ceramics and metal. Quick-drying and waterproof. Widely used by repairmen, model builders, hobbyists and do-it-yourselfers. Ozone friendly.

Part No. 10-327 2 fl. oz. Bottle with Brush Replaces Part No. 10-324



#### GC Bond Ю Thermoplastic adhesive based on synthetic components with unusually strong bonding characteristics to most materials. Produces a waterproof, resilient and long-lasting flexible bond. Light tan in color. GC Bond's uses range from cementing paper and cardboard to cementing electronic components to circuit boards and chassis. electronic Sticks well to all metals and glass. Dries in 15

Part No. 10-4302 N.S.N. 8040-00-682-6690	2 fl. oz. Bottle with Brush
Part No. 10-4308	8 fl. oz. Bottle with Brush
N.S.N. 8040-00-181-7710	

to 30 minutes.



#### Service Cement 🔞 A quick-drying and waterproof clear adhesive which forms a strong, hard but vibration-resistant bond with minimal shrinkage. A true universal adhesive for shop, industry, home and hobby use. Ideal for speaker repairs. May also be used for gluing porous or semi-porous materials to each other or to metals, plastics, etc. Not suitable for metal-to-metal, glass-tometal or other non-porous to non-porous surfaces, for which Perma-Bond, GR-R-RIP or epoxy cements are more suitable.

Part No. 10-302 2 fl. oz. Bottle with Brush Part No. 10-310 1 gal. Can



### Rubber-to-Metal Cement II

A heavy-bodied, rubber-based cement with a leavy-bolied, hubble-based echient with outstanding bonding qualities to many materials such as natural and synthetic rubber, metal, wood and plastics. Dries quickly and produces a lasting, flexible bond which often succede the strength of the material itself. Used exceeds the strength of the material itself. Used to cement any rubber or flexible plastic part to cabinets, chassis or panels; also for gaskets, weather strips, etc. Ozone friendly.

Part No. 10-354 2 fl. oz. Bottle with Brush Replaces Part No. 10-352



## Acrylic Cement 🕑

Consists of solvent for acrylics (plexiglass, lucite and others), slightly thickened with dissolved acrylic resin. It actually "welds" items made of plexiglass. The joint is usually invisible and stronger than the material itself. Cements many items used in electronics for decorative or functional purposes as well as acrylic signs, art objects and decorative pieces.

Part No. 10-4002 2 fl. oz. Bottle with Brush Part No. 10-4008 8 fl. oz. Bottle with Brush N.S.N. 8040-00-209-1346 N.S.N. 8040-00-259-6181 N.S.N. 8040-00-503-0315





Vinyl resin-base cement that is waterproof, almost invisible and has excellent resistance to moisture, most acids and alkalis. Used to cement items made of rigid or flexible vinyl, wood, cardboard, paper, metal, plastics, and glass. Very flexible. Lends itself particularly well to items where a rigid bond is not desirable.

Part No. 10-5802 2 fl. oz. Bottle with Brush N.S.N. 8030-00-264-3838



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#### MATERIAL SAFETY DATA SHEET

Complies with OSHA Hazard Communication Standard 29 CFR 1910.1200

Product Type:	Solvent Release Adhesive
Product Name:	GC Bond
Part Number(s):	10-4302
	10-4308

	Section 1 – Identification of Product				
Common Name: GC Bond					
Product Name: General Purpose In	ndustrial Adhesive				
General or Generic ID – Nitrile Ru	bber/Resin in Solvent				
NFPA Rating:	Least 0				
Health: 1	Slight 1				
Flammability: 3	Moderate 2				
Reactivity: 0	High 3				
	Extreme 4	_			
	Gloves, Safety Gla	asses B			
	Section 2 – Hazardous Ing	gredients			
Ingredient(s)	CAS Number	% (by Weight)			
Methyl Ethyl Ketone	78-93-3	79.0 - 79.0			
Nitrile Rubber	Trade Secret	9.0 - 13.0			
Alkylphenolic Resin	Trade Secret	4.0 - 8.0			
Calcium Carbonate	471-34-1	1.0 - 5.0			
Formaldehyde	50-00-0	0.1 - 0.1			
	Section 3 – Physical I	Data			
Boiling Point (for product):	176.0°F (80.0°C) @ 760 mm	nHø			
Vapor Pressure (for product):	71.000 mmHg @ 68.00 F				
Specific Vapor Density:	2.500 @ AIR = 1				
Specific Gravity:	.862 @ 77.00 F				
Liquid Density:	7.180 lbs/gal @ 77.00 F				
	.862 kg/1 @ 25.00 C				
Percent Volatiles:	78.0% - 82.0%				
Evaporation Rate:	SLOWER THAN ETHYL ET	ΓHER			
Appearance:	No data				
State:	LIQUID				
Physical Form:	No data				
Color:	TAN COLORED LIQUID				
Odor:	No data				
pH:	Not applicable				

	Section 4 – Fire and Explosion Hazard Data		
Flash Point:	23.0°F (-5.0 C) TOC		
Explosive Limit (for product):			
Autoignition Temperature:	No data		
Hazardous Products of Combu	stion: May form: carbon dioxide and carbon monoxide, hydrogen cyanide, nitrogen		
	compounds, phenols, various hydrocarbons.		
Fire and Explosion Hazards:	Material is volatile and readily gives off vapors which may travel along the ground or may be removed by ventilation and ignited by pilot lights, other flames, sparks, heaters, smoking, electric motors, static discharge, or other ignition sources at locations distant from material handling point. Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively.		
Extinguishing Media:	Regular foam, water fog, carbon dioxide, dry chemical.		
Fire Fighting Instruction:	No data		
	Section 5 – Health Hazard Data		
Potential Health Effects			
Eye:	May cause mild eye irritation. Symptoms include stinging, tearing, redness, and swelling of eyes		
Skin:	Can cause skin irritation. Prolonged or repeated contact may dry the skin. Symptoms may include redness, burning, and drying and cracking of skin, burns and other skin damage. Additional symptoms of skin contact may include: allergic skin reaction (delayed skin rash which may be followed by blistering, scaling and other skin effects)		
Swallowing:	Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful. This material can get into the lungs during swallowing or vomiting. This results in lung inflammation and other lung injury.		
Inhalation:	Breathing of vapor or mist is possible. Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful. Symptoms usually occur at air concentrations higher than the recommended exposure limits (see section 8).		
Symptoms of Exposure:	Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: irritation (nose, throat, airways), central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness), stomach or intestinal upset (nausea, vomiting, diarrhea).		

Alkylphenolic Resin: Calcium Carbonate (471-34-1):

Formaldehyde (50-00-0):

No exposure limits established. No exposure limits established. OSHA PEL 0.750ppm TWA OSHA PEL 2.000ppm STEL OSHA VPEL 0.750 ppm – TWA OSHA VPEL 2.000 ppm – STEL ACGIH TLV 0.300 ppm – Ceiling

Section 9 – Special Precautions		
Handling:	Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed. Static ignition hazard can result from handling and use. Electrically bond and ground all containers, personnel and equipment before transfer or use of material. Special precautions mya be necessary to dissipate static electricity for non-conductive containers. Use proper bonding and grounding during product transfer as described in National Fire Protection Association document NFPA 77.	
Waste Management Information:	. Destroy by liquid incineration in accordance with applicable regulations.	
	Section 10 – Regulatory Information	

US Federal Regulations				
TSCA (Toxic Substances Control Act) Status:	TSCA (United States) The intentional ingredients of this product are listed.			
CERCLA RQ – 40 CFR 302.4(a):	Component	RQ (lbs)		
	METHYL ETHYL KETONE	5000		
	FORMALDEHYDE	100		
CERCLA RQ – 40 CFR 302.4(b):	Materials without a "listed" RQ	without a "listed" RQ may be reportable as an		
	"unlisted hazardous substance". See 40 CFR 302.5 (b)			
SARA 302 Components – 40 CFR 355 Appendix A:	Section 302 Component(s)	TPQ (lbs)	RQ (lbs)	
	FORMALDEHYDE	500	100	
Section 311/312 Hazard Class – 40 CFR 370.2:	<u>4</u> Immediate <u>4</u> Delayed	<u>4</u> Fire		
	Reactive Sudden	Release of Pressure		
SARA 313 Components – 40 CFR 372.65:	Section 313 Component(s)	CAS Number	%	
	METHYL ETHYL KETONE	78-93-3	79.42	
	FORMALDEHYDE	50-00-0	.10	
OSHA Process Safety Management – 29 CFR 1910:	PSM Component(s)	Condition	TQ (lbs)	
	FORMALDEHYDE		1000	
EPA Accidental Release Prevention – 40 CFR 68:	RMP Component(s)	Condition	TQ (lbs)	
	FORMALDEHYDE (SOLUTION)		15000	
International Regulations:	Inventory Status DSL (Canada) The intentional ingredients of this product are			
-				
	listed.	-	_	