Safety Data Sheet

Material: 70702061

WACKER

PRIMER G 418

Version: 2.3 (US)

Date of print: 11/21/2018

Date of last alteration: 08/07/2018

1.	Product and company identification			
1.1	Identification of the substance or preparation:			
	Commercial product name:	PRIMER G 418		
	Use of substance / preparation	Industrial. primer , bonding solution .		
1.2	Company/undertaking identification:			
	Manufacturer/distributor:	Wacker Chemical Corporation 3301 Sutton Road Adrian, MI 49221-9397 USA		
	Customer information:	InfoLine: Tel (517) 264-8240, Fax (517) 264-8740 Hours of operation: Monday - Friday,8 am to 5 pm (eastern standard time) Corporate website: www.wacker.com		
	Emergency telephone no. (24h): Transportation emergency:	(517) 264-8500 (800) 424-9300 (CHEMTREC, USA) (703) 527-3887 (CHEMTREC, international)		

This SDS was prepared by the Regulatory Affairs and Product Safety Department (RAPS) of Wacker Chemical Corporation.

2. Hazards identification

2.1 Classification of the substance or mixture

Classification (GHS):

Hazard class	Hazard category	Route of
		exposure
Specific target organ toxicity (single exposure)	Category 3 (narcotic effects)	
Serious eye damage / eye irritation	Category 1	
Skin corrosion/irritation	Category 1B	
Flammable liquids	Category 2	

2.2 Label elements

Labelling (GHS):

Pictogram(s):



Signal Word: Danger

H-Code	Hazard Statements
H225	Highly flammable liquid and vapour.
H314	Causes severe skin burns and eye damage.
H336	May cause drowsiness and dizziness.

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P-Code	Precautionary Statements		
P103	Read label before use.		
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.		
P262	Do not get in eyes, on skin, or on clothing.		
P271	Use only outdoors or in a well-ventilated area.		
P280	Wear protective gloves/protective clothing/eye protection/face protection.		
P243	Take action to prevent static discharges.		
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.		
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.		
P303+P361+P353	F ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.		
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to		
	do. Continue rinsing.		
P310	Immediately call a POISON CENTER/doctor.		
P370+P378	In case of fire: Use extinguishing powder, alcohol-resistant foam or carbon dioxide to extinguish.		
P403+P235	Store in a well-ventilated place. Keep cool.		
P404	Store in a closed container.		
P501	Dispose of contents/container to waste disposal.		

2.3 Other hazards

No data available.

3. Composition/information on ingredients

3.1 Chemical characterization (preparation)

Chemical characteristics organosilane + solvent

3.2 Information on ingredients:

Туре	CAS No.	Substance	Content	[wt. %]	Note
			Lower	Upper	
INHA	109-60-4	Propyl acetate		<=85.0	
INHA	4130-08-9	Triacetoxy vinylsilane		<=15.0	

Type: HYD - by-product upon hydrolysis, INHA - ingredient, NEBE - by-product, MONO - residual monomer, VERU - impurity, VUL - by-product upon vulcanization. *** **Note:** C1 - IARC carcinogen, C2 - NTP carcinogen, C3 - OSHA carcinogen, NH - non-hazardous, R - reproductive toxin.

Substances listed in the Subsections "HAPS" and "California Proposition 65 Carcinogens / Reproductive Toxins" that are not listed in this section are only present at quantities below 0.1% for California Proposition 65 listed toxins or below 1% for non-carcinogenic HAPS or they are inextricably bound in the product. Specific chemical identities and/or exact percentage (concentration) of the composition may have been withheld as a trade secret.

4. First-aid measures

4.1 General information:

Get medical attention if irritation occurs or if breathing becomes difficult. Remove contaminated clothing and shoes.

4.2 After inhalation

If inhaled remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult give oxygen.

4.3 After contact with the skin

For skin contact, immediately wipe away excess material. Use a waterless hand cleaner to remove as much of the remaining material as possible. Wash with soap and water.

4.4 After contact with the eyes

If contact with eyes, immediately hold eyelids apart and flush with plenty of water for at least 15 min. Get medical attention immediately.

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Method: (ASTM D93) (DIN 53213) (not specified)

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4.5 After swallowing

For ingestion, if conscious, give several glasses of water but do not induce vomiting. If vomiting does occur, give additional fluids. If unconscious place in stable sideways position.

4.6 Advice for the physician

Treat symptomatically.

5. Fire-fighting measures

5.1 Flammable properties:

Property:	Value:
Flash point	22 °C (71 °F)
Flash point	12 °C (53 °F)
Boiling point / boiling range	101.67 °C (215 °F) at 1013.25 hPa
Lower explosion limit (LEL)	2.0 %(V)
Upper explosion limit (UEL)	8.0 %(V)
Ignition temperature	not determined
NFPA Hazard Class (comb./flam.liquid)	IB

5.2 Fire and explosion hazards:

Vapors are heavier than air and may travel along the ground, be moved by ventilation systems, settle in pits or low areas, and be ignited by ignition sources distant from the handling point. The material is lighter than water, burning spilled material will float on top of any water released from hose or sprinkler systems spreading the fire beyond the initial fire response area. Material supports combustion. Hydrolyzes on contact with moisture releasing ignitable, corrosive vapors.

5.3 Recommended extinguishing media:

AFFF alcohol compatible foam. Carbon dioxide. Dry chemical. Water may be used to cool tanks and structures adjacent to the fire.

5.4 Unsuitable extinguishing media:

Water.

5.5 Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases

Hazardous combustion products: Various hydrocarbon fragments, formaldehyde, carbon monoxide.

5.6 Fire fighting procedures:

Full turn-out gear and Self Contained Breathing Apparatus (SCBA) should be worn when fighting large fires.

6. Accidental release measures

6.1 Precautions:

Shut down all sources of ignition in the area of the spill. Warn others in the area and notify appropriate response personnel, if necessary. Have any persons who are not involved in the spill response leave the area. Turn on all exhaust ventilation units and open any outside doors and windows to help clear vapors from the area. Secure the area. Obtain appropriate PPE, supplies, and equipment prior to attempting any response.

HAZWOPER PPE Level: C

6.2 Containment:

Use loose absorbant material or prefabricated socks to dike around small quantities of spilled material (incidental spills). If safe to do so, stop the leak at its source. Cover openings to underground drains and sewers.

Spills of material which could reach surface waters must be reported to the United States Coast Guard National Response Center's toll free phone number (800) 424-8802.

6.3 Methods for cleaning up

Do not flush away with water. In the event of a large spill, this material will float on the water's surface. Use non-sparking equipment to clean up spills of flammable materials. Liquids may be recovered using suction devices or pumps. If flammable, only air driven or properly rated electrical equipment should be used. Use absorbant materials to pick up residual liquids. Contain larger amounts and pump up into suitable containers.

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7. Handling and storage

7.1 Handling

Precautions for safe handling:

Keep away from heat, sparks and flame. Use with adequate ventilation. When filling containers with flammable liquids use a dip tube to bottom fill the container and minimize free fall and splashing which could lead to a build up of static electricity. When transferring flammable liquids between metal containers, ground and bond the containers to drain off and equalize their static electric charges and reduce the potential for static sparks to occur. Keep container closed when not in use. Hydrolyzes on contact with moisture releasing ignitable, corrosive vapors.

Precautions against fire and explosion:

Keep away from heat, sparks and flame. Where feasible maintain the temperature of flammable or combustible liquids at least 30° F below their flash point. Do not weld, cut, or grind on empty containers. Use explosion-protected equipment/appliances and spark-free tools. Protect against the build-up and discharge of static electricity by grounding and bonding all processing vessels and transfer equipment.

7.2 Storage

Conditions for storage rooms and vessels:

Nitrogen blanket, pad, or purge containers to prevent flammable air-vapor mixtures from forming in the container headspace. Do not store flammable liquids in plastic IBCs (i.e. Intermediate Bulk Containers or plastic tote tanks). Containers used to dispense flammable liquids should be equipped with an earthing cable and self closing spigots.

Advice for storage of incompatible materials:

Do not store with: strong oxidizing agents , peroxides , strong acids .

Further information for storage:

Do not weld, cut, or grind on empty containers. Store flammable liquids in a cool, dry, fire protected storage area, free from sources of ignition, away from compressed or liquid oxygen or other oxidizing agents (e.g. organic peroxides, concentrated oxidizing inorganic acids). Store in a dry location to prevent exposure to water or moist air. Store in the original container.

8. Exposure controls and personal protection

8.1 Engineering controls

Ventilation:

General ventilation sufficient to provide 1 CFM per square foot of floor area or 6 room air exchanges per hour is recommended.

Local exhaust:

Local exhaust ventilation which meets the requirements of ANSI Z9.2 is recommended to control airborne contaminants at the point of use.

8.2 Associate substances with specific control parameters such as limit values

Maximum airborne concentrations at the workplace:

CAS No.	Material	Туре	mg/m ³	ppm	Dust fract.
109-60-4	Propyl acetate	OSHA PEL	840.0	200.0	
64-19-7	Acetic acid	OSHA PEL	25.0	10.0	
109-60-4	Propyl acetate	ACGIH TWA		200.0	
64-19-7	Acetic acid	ACGIH TWA		10.0	

Re Propyl acetate (CAS no. 109-60-4): STEL is 250 ppm (ACGIH).

Re Acetic acid (CAS-no. 64-19-7): STEL is 15 ppm (ACGIH).

8.3 Personal protection equipment (PPE)

Respiratory protection:

A NIOSH approved air purifying respirator equipped with universal multi-contaminant multi-gas/vapor cartridges is recommended if overexposure to chemical vapors could occur. If eye-irritating dusts or vapors are present, a full-face respirator should be worn.

Hand protection:

butyl rubber protective gloves

Eye protection:

Safety glasses with side shields. Additional eye and face protection, splash-proof goggles, hood, full-faced respirator, or face shield is recommended if splashing could occur.

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Other protective clothing or equipment:

Additional skin protection, such as SARANEX coated Tyvek apron, over-sleeves, lab coat, coveralls, or protective suit should be worn if splashing could occur. Provide eye bath and safety shower.

8.4 General hygiene and protection measures:

Avoid contact with eyes, skin and clothing. Avoid breathing dust/vapor/mist/gas/aerosol. When handling do not eat, drink, smoke or apply cosmetics. Wash thoroughly after handling.

9. Physical and chemical properties

9.1 Appearance

Physical state / form	liquid
Colour	clear, yellow
Odour	fruity

9.2 Safety parameters

Property:	Value:	Method:
Melting point / melting range	not applicable	
Boiling point / boiling range	101.67 °C (215 °F) at 1013.25 hPa	(not specified)
Flash point	22 °C (71 °F)	(ASTM D93)
Flash point	12 °C (53 °F)	(DIN 53213)
Ignition temperature	not determined	
Lower explosion limit (LEL)	2.0 %(V)	
Upper explosion limit (UEL)	8.0 %(V)	
Vapour pressure	33.330500 hPa / 20 °C (68 °F)	(not specified)
Density	: 0.91 g/cm ³	
Water solubility / miscibility	moderately soluble	
pH-Value	not determined	
Viscosity (dynamic)	1 mPa.s	
Further information		
Odour limit	: no data available	
Percent Volatiles		
VOC	: 773.5 g/l	(calculated value)
VOC Released During Cure	: 104.5 g/l	(Estimated Value)
Corrosive to Steel or Aluminum	Not corrosive to steel or aluminum	

10. Stability and reactivity

10.1 General information:

9.3

Stable under normal conditions of use.

10.2 Conditions to avoid

Although this product is not expected to react with commonly used materials of construction and process equipment, it is advised that any rubber or plastic items such as hoses and gaskets be tested prior to large scale processing to ensure there is no degradation of performance or durability. Keep away from incompatible substances.

10.3 Materials to avoid

Bases (alkali or caustic materials). Water. Oxidizing materials (oxygen, oxidizers, peroxides, etc.). Inorganic Acids. This material hydrolyzes slowly on contact with water.

10.4 Hazardous decomposition products

Acetic acid is released upon contact with water.

10.5 Further information:

Hazardous polymerization cannot occur.

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11. Toxicological information

11.1 Information on toxicological effects

11.1.1 Acute toxicity

Assessment:

For this endpoint no toxicological test data is available for the whole product.

11.1.2 Skin corrosion/irritation

Assessment:

For this endpoint no toxicological test data is available for the whole product.

11.1.3 Serious eye damage / eye irritation

Assessment:

For this endpoint no toxicological test data is available for the whole product.

11.1.4 Respiratory or skin sensitization

Assessment:

For this endpoint no toxicological test data is available for the whole product.

11.1.5 Germ cell mutagenicity

Assessment:

For this endpoint no toxicological test data is available for the whole product.

11.1.6 Carcinogenicity

Assessment:

For this endpoint no toxicological test data is available for the whole product.

11.1.7 Reproductive toxicity

Assessment:

For this endpoint no toxicological test data is available for the whole product.

11.1.8 Specific target organ toxicity (single exposure)

Assessment:

Vapours may be narcotising.

11.1.9 Specific target organ toxicity (repeated exposure)

Assessment:

For this endpoint no toxicological test data is available for the whole product.

11.1.10 Aspiration hazard

Assessment:

For this endpoint no toxicological test data is available for the whole product.

11.1.11 Further toxicological information

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Other information: In contact with dampness product separates a small quantity of acetic acid (64-19-7) which irritates skin and mucous membranes.

12. Ecological information

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12.1 Toxicity

Assessment:

According to current knowledge adverse effects on water purification plants are not expected.

12.2 Persistence and degradability

Assessment:

Organic solvent: readily biologically degradable.

12.3 Bioaccumulative potential

Assessment:

No data known.

12.4 Mobility in soil

Assessment:

The substance displays high volatility from water.

12.5 Other adverse effects

none known

13. Disposal considerations

13.1 RCRA Waste Classification:

D001 (Ignitable)

This classification applies only to the material as it was originally produced.

13.2 Product disposal

Recommendation:

If this material becomes a waste, it is considered a hazardous waste due to its ignitability. Material designated for disposal should be segregated from any substances or materials specified in Sect. 10 "Stability and reactivity". Material that cannot be used or chemically reprocessed should be disposed of at an approved facility in accordance with any applicable governmental regulations. State and local regulations may be more stringent than Federal regulations.

13.3 Packaging disposal

14.2

Recommendation:

Uncleaned packaging should be treated with the same precautions as the material. Uncleaned containers should not be reused to hold another material due to the potential for reaction between residual product and incompatible materials. After emptying contaminated containers may be cleansed and recycled.

14. Transport information

14.1 US DOT & CANADA TDG SURFACE

Valuation	Dangerous Goods Flammable liquid, corrosive, n.o.s. (Contains n-propyl acetate and acetoxysilane) 3 8 2924 II **TL:flammable liquid/3 **TL:corrosive product/8 132
Voluction	Dengerous Coode

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	UN no Proper Shipping Name Technical name Marine Pollutant	2924 Flammable liquid, corrosive, n.o.s. (Contains n-propyl acetate and acetoxysilane) no		
14.3	Air transport ICAO-TI/IATA-DGR			
	Valuation	Dangerous Goods		

15. Regulatory information

15.1 U.S. Federal regulations

TSCA inventory status and TSCA information:

This material or its components are listed on or are in compliance with the requirements of the TSCA Chemical Substance Inventory.

TSCA 12(b) Export Notification:

This material does not contain reportable amounts of any TSCA 12(b) listed chemicals.

CERCLA Regulated Chemicals:

This material does not contain any CERCLA regulated chemicals.

SARA 302 EHS Chemicals:

This material does not contain any SARA extremely hazardous substances.

SARA 311/312 Hazard Class:

Immediate (acute) health hazard. Fire hazard.

SARA 313 Chemicals:

This material does not contain any SARA 313 chemicals above de minimus levels.

HAPS (Hazardous Air Pollutants):

This material does not contain any hazardous air pollutants.

15.2 U.S. State regulations

California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986):

This material does not contain any chemicals known to the State of California to cause cancer.

This material does not contain any chemicals known to the State of California to cause reproductive effects.

Massachusetts Substance List:

109-60-4 Propyl acetate

New Jersey Right-to-Know Hazardous Substance List:

109-60-4 Propyl acetate

Pennsylvania Right-to-Know Hazardous Substance List:

109-60-4 Propyl acetate

15.3 Details of international registration status

Relevant information about individual substance inventories, where available, is given below.

South Korea (Republic of Korea): ECL (Existing Chemicals List):

	This product is listed in, or complies with, the substance inventory.
Japan	ENCS (Handbook of Existing and New Chemical Substances):
•	This product is listed in, or complies with, the substance inventory.
Australia	AICS (Australian Inventory of Chemical Substances):
	This product is listed in. or complies with the substance inventory.

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People's Republic of China	IECSC (Inventory of Existing Chemica This product is listed in, or complies w	Il Substances in China): rith, the substance inventory.
Canada	: DSL (Domestic Substance List): This product is listed in, or complies w	ith, the substance inventory.
Philippines		cals and Chemical Substances):
United States of America (USA).		chemical Substance Inventory): ed as active or are in compliance with the
Taiwan (Republic of China)	TCSI (Taiwan Chemical Substance Im This product is listed in, or complies w The Taiwanese chemicals regulation r or TCSI-compliant substances if impor exceed the trigger quantity of 100 kg/a ingredient). It is the duty of the importi this obligation	ventory): ith, the substance inventory. General note: requires a phase 1 registration for TCSI-listed rts to Taiwan or manufacturing in Taiwan a (for mixtures to be calculated per each ng/manufacturing legal entity to take care of
European Economic Area (EEA)	: REACH (Regulation (EC) No 1907/20 General note: the registration obligation manufactured within the EEA by the single the said supplier. The registration oblig by customers or other downstream us	06): ons for substances imported into the EEA or upplier mentioned in section 1 are fulfilled by gations for substances imported into the EEA ers must be fulfilled by the latter.

16. Other information

16.1 Additional information:

This Safety Data Sheet (SDS) meets the requirements of the Federal OSHA Hazard Communication Standard (29 CFR 1910.1200). This information relates to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is to the best of our knowledge and belief accurate and reliable as of the date compiled. However, no representation, warranty or guarantee expressed or implied, is made as to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his own particular use. We do not accept liability for any loss or damage that may occur from the use of this information. Nothing herein shall be construed as a recommendation for uses which infringe valid patents or as extending a license under valid patents. This SDS provides selected regulatory information on this product, including its components. This is not intended to include all regulations. It is the responsibility of the user to know and comply with all applicable rules, regulations and laws relating to the product being used.

Vertical lines in the left-hand margin indicate changes compared with the previous version.

All deliveries are subject to the WACKER SILICONES Health Care Policy, which is available at www.wacker.com.

16.2 Glossary of Terms:

ACGIH - American Conference of Governmental Industrial Hygienists	ppm - Parts per Million SARA - Superfund Amendments and Reauthorization Act
DOT - Department of Transportation	STEL - Short Term Exposure Limit
hPa - Hectopascals	TSCA - Toxic Substances Control Act
mPa*s - Milli Pascal-Seconds	TWA - Time Weighted Average
OSHA - Occupational Safety and Health Administration	WHMIS - Canadian Workplace Hazardous Materials
PEL - Permissible Exposure Limit	Identification System
Flash point determination methods	Common name
Flash point determination methods ASTM D56	Common name Tagliabue (Tag) closed cup
Flash point determination methods ASTM D56 ASTM D92, DIN 51376, ISO 2592	Common name Tagliabue (Tag) closed cup Cleveland open cup
Flash point determination methods ASTM D56 ASTM D92, DIN 51376, ISO 2592 ASTM D93, DIN 51758, ISO 2719	Common name Tagliabue (Tag) closed cup Cleveland open cup Pensky-Martens closed cup
Flash point determination methods	Common name Tagliabue (Tag) closed cup Cleveland open cup Pensky-Martens closed cup Setaflash or Rapid closed cup
Flash point determination methods ASTM D56. ASTM D92, DIN 51376, ISO 2592 ASTM D93, DIN 51758, ISO 2719 ASTM D3278, DIN 55680, ISO 3679 DIN 51755	Common name Tagliabue (Tag) closed cup Cleveland open cup Pensky-Martens closed cup Setaflash or Rapid closed cup Abel-Pensky closed cup

16.3 Conversion table:

Pressure:..... 1 hPa * 0.75 = 1 mm Hg = 1 torr; 1 bar = 1000 hPa Viscosity:..... 1 mPa*s = 1 centipoise (cP)