




NICROBRAZ® Cement 320

Section 1: Identification

Product Name:	Nicrobraz® Cement 320		
SDS Issue Date:	December 06, 2018 (supersedes SDS issued January 19, 2017)		
Synonyms:	320 Cement		
CAS Number(s):	See section 3.		
Product Usage:	Brazing aid for cementing Nicrobraz filler metal powder to the base metal prior to brazing.		
Manufacturer:	Wall Colmonoy Corporation 101 W. Girard Madison Heights, MI 48071-1880	Phone:	800-521-2412
		Fax:	248-585-7960
		E-Mail:	wcc@wallcolmonoy.com
		Web Site:	www.wallcolmonoy.com
Transportation Emergency Number:	CHEMTEL INC 800-255-3924 International 1-813-248-0585 Brazil 0-800-591-6042 China 400-120-0751 India 000-800-100-4086 Mexico 800-099-0731		

Section 2: Hazard(s) Identification

Health – Environmental – Physical		
Flammable Liquids	GHS Category 2 (Danger – Highly flammable liquid and vapor)	 Danger
Skin Corrosion/Irritation	GHS Category 3 (Warning – Causes mild skin irritation)	
Eye Irritation	GHS Category 2B (Warning – Causes eye irritation)	

This product is intended for industrial use by trained individuals. Keep away from children.

Section 3: Composition / Information on Ingredients

Components of mixture*	CAS Number	Weight percentage**
1,3-Dioxolane	646-06-0	40 – 70
Acrylic polymer(s)	Not Hazardous	15 – 40
Toluene	108-88-3	Actual 0.0 – 0.25
Stabilizer mixture	Not Hazardous	0.5 – 1.5

* This material is a mixture of a solubilized acrylic cement mixture.

** This is a general reporting range and is not a product specification.

Exposure limits: See Section 8.

NICROBRAZ® Cement 320**Section 4: First Aid Measures**

Exposure Route	Acute	Chronic (delayed)
Eye contact	Eye irritation. Flush with water for at least 15 minutes and seek medical attention.	If irritation persists seek medical attention.
Skin contact	Itching or irritation. Remove contaminated clothing. Wash skin with mild soap and water. Seek medical advice.	If irritation or rash persists seek medical attention.
Inhalation	Irritation of nose, throat and lungs, headache, drowsiness and dizziness. Remove exposed person to fresh air. If not breathing administer CPR. Seek medical advice. Seek medical attention for severe exposure.	If symptoms persist seek medical attention.
Ingestion	Rinse mouth with water. Do NOT induce vomiting. May drink 1 cup of water to dilute. Seek medical attention.	If unwell seek immediate medical attention.

Section 5: Firefighting Measures

Suitable Extinguishing Media: Flammable in the presence of an ignition source when temperature is above the flash point. Alcohol resistant foam, dry chemical or carbon dioxide to extinguish fire. Use water spray to cool unopened containers.

Specific Hazards during a Fire: Material may break down in fire and may produce toxic decomposition products associated with ingredients including acrylic monomers.

Protective Equipment: SCBA and full protective gear is recommended for firefighting.

Section 6: Accidental Release Measures

- Stay out of spill, floor may be slippery.
- Avoid breathing vapors or mist.
- Ensure adequate ventilation.
- Remove all sources of ignition
- Use personal protective equipment.
- For large spill evacuate non-responding personnel to safe areas.
- Vapors can accumulate in low areas or along the floor to form explosive concentrations.
- Do not allow spill to enter floor drains or storm drains.
- Contain spill with inert materials (eg. Sand, earth). Transfer liquids and solid diking material to separate suitable containers for disposal.
- Use non-sparking tools.

NICROBRAZ® Cement 320**Section 7: Handling and Storage**

- General and/or point ventilation system is recommended to ensure exposure do airborne dust is maintained below allowable exposure limits. Minimum capture velocity of 100 ft/min at the point of vapor evolution.
- Wear PPE such as butyl rubber gloves, safety glasses/goggles. Respiratory protection is recommended, but is required only when exposure limits are be exceeded.
- Wash hands after use before eating or smoking.
- Do not eat or smoke in area where material is being used.
- Store in tightly closed container. When possible store below 80° F (27° C), do NOT store or use if temperature exceeds 120° F (48° C). Move product/operation to a cooler area.
- Keep containers tightly closed. Reseal opened containers to prevent evaporation of liquid.
- Not a shelf life limited material.

Section 8: Exposure Controls / Personal Protection**Exposure Limits:**

Components of mixture*	CAS Number	OSHA PEL	ACGIH TLV
1,3-Dioxolane	646-06-0	Not listed	20 ppm
Plastic	Not Hazardous	Not listed	Not listed
Toluene	108-88-3	200 ppm	20 ppm
Stabilizer mixture	Not Hazardous	Not listed	Not listed

Engineering Controls:

- Local exhaust ventilation may be necessary to control air contaminants to their exposure limits.
- Provide mechanical ventilation for confined spaces or if method of use warrants. Use control suitable for handling flammable vapors.

Personal Protective Equipment:

- Gloves – Non-permeable gloves such as Butyl rubber, fluoro-elastomer, chloroprene rubber or PVC.
- Eyes – Face shield and safety glasses/goggles.
- Clothing – Impervious, flame retardant antistatic clothing is recommended.
- Respirator – NIOSH respirator with organic vapor cartridges and HEPA filter or equivalent alternative is recommended for up to 10 times the exposure limits. If respirator is the sole source of protection a full face-piece supplied air respirator is recommended.

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Section 9: Physical and Chemical Properties

Physical State	Clear to yellowish liquid
Odor	Ether-like fruity odor
Odor Threshold	Not available
PH	Not applicable
Melting Point / Freezing Point	-139°F (-95°C)
Boiling Point	~172°F (~78°C)
Flash Point	27°F (-9°C) TAG closed-cup
Evaporation Rate (butyl acetate =1)	~6
Flammability	Flammable liquid and vapor
LFL (LEL) lower flammability (explosive) limit	~2.1% (1,3-Dioxolane)
UFL (UEL) upper flammability (explosive) limit	~20.5% (1,3-Dioxolane)
Vapor Pressure (Isopropyl acetate)	79 mm Hg at 20°C (solvent)
Vapor Density (air = 1)	2.6
Specific Gravity (Bulk Density)	0.9 g/cc
Solubility	Ethanol, ether, acetone; mostly soluble in water
Partition Coefficient (n-octanol/water)	Log Kow -0.37 (1,3-Dioxolane)
Autoignition Temperature	473°F (245°C) (1,3-Dioxolane)
Decomposition Temperature	572°F (300°C) (1,3-Dioxolane)
% VOC's	~660 grams/liter

Section 10: Stability and Reactivity

- **Chemical Stability:** This material is stable.
- **Possibility of Hazardous Reactions:** Stabilizer is present to minimize the risk of hazardous polymerization.
- **Conditions to Avoid:** Avoid elevated temperatures and pressures as well as ignition sources.
- **Incompatible Materials:** Potentially explosive reaction with Lithium perchlorate. Can react with oxidizers.
- **Hazardous Decomposition Products:** Carbon monoxide, formaldehyde, hydrogen, carbon oxides. Heating to decomposition will cause acrid smoke and fumes to be evolved.

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Section 11: Toxicological Information

Likely Routes of Exposure: Skin contact, eye contact, inhalation of vapors.

Skin Contact: May cause mild irritation and dryness. LD50, Rabbit, 15,000 mg/kg. GHS Category 2

Inhalation of Vapors: Inhalation of vapors may cause irritation of nose, throat and lungs, headache, drowsiness or dizziness.

Ingestion: Ingestion is not a likely route of exposure.

Ingredient Name	Oral Toxicity (LD50)	Inhalation Toxicity (LC50)
1,3-Dioxolane	Oral rat 5,200 mg/kg	LD50 rat 4 hr, 20,650 mg/m ³
Acrylic polymer(s)	Oral rat >5,000 mg/kg	*
Toluene	Oral rat 5,000 mg/kg	LCLo 4 hr, rat 4,000 ppm
Stabilizer mixture	*	*

*Toxicity data not available.

Carcinogenicity:

Ingredient Name	NTP Status		IARC Category	OSHA	CA Prop. 65*
	Known	Anticipated			
1,3-dioxolane	No	No	None	No	No
Acrylic polymer(s)	No	No	None	No	No
Toluene	No	No	3	No	Yes
Stabilizer mixture	No	No	None	No	No

*This product may contain a component know to the State of California to cause developmental or other reproductive harm: Toluene.

Section 12: Ecological Information

- **Aquatic Toxicity:** Acute & Chronic – Does not meet any GHS category criteria. (Calculated LC50 of >145 mg/l)

Section 13: Disposal Consideration

- Dispose of in accordance with local, state, and federal regulations for industrial wastes of this type of flammable material.

Section 14: Transport Information

UN Identification Number	UN1166
DOT Classification	Flammable Liquid, Class 3, Packing Group II
DOT Shipping Description	UN 1166, Class 3, Packing Group II, Dioxolane
IATA Shipping Description	UN 1166, Class 3, Packing Group II, Dioxolane
IMDG Shipping Description	UN 1166, Class 3, Packing Group II, Dioxolane (Not a marine pollutant)

NICROBRAZ® Cement 320**Section 15: Regulatory Information**

Toxic Substances Control Act (TSCA)	All ingredients are listed on the TSCA inventory of chemical substances.
Superfund Amendments & Reauthorization Act (SARA)	None
Resource Conservation & Recovery Act (RCRA)	D001 (characteristic of ignitability)

Hazard Codification & Labeling RequirementsHazard Statements:

H225 Highly flammable liquid and vapor

H316 Causes mild skin irritation

H320 Causes eye irritation

H336 May cause drowsiness or dizziness

Precautionary Statements:

P210 Keep away from heat/sparks/open flames/hot surfaces – No smoking.

P261 Avoid breathing dust/fume/gas/mist/vapor/spray

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Section 16: Other Information

NFPA Numbers (estimated)	Health: 1	Flammability: 3	Reactivity: 1
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Canadian Ingredient Disclosure List: Contains 1,3-dioxolane.

**WHMIS Category****Class B, Division 2: Flammable Liquids**

The information supplied herein follows the guidelines of WHMIS, GHS and OSHA Hazard Communication Standard 29 CFR 1910.1200, and to the best of our knowledge, is accurate and complete. The recommended hygiene and handling practices are believed to be appropriate for the use of this material. However, it is up to the end user to review this information and establish their own procedures and guidelines, based upon their particular application(s). Wall Colmonoy Corporation assumes no responsibility for damage or injury resulting from the end use of this product.