


SAFETY DATA SHEET

Grobet File Company of America, LLC
750 Washington Avenue
Carlstadt, NJ 07072
201-939-6700

Section 1: Identification

Product Name: Stop Flow Type II
Product Code: 54.472
SDS Issue Date: May 21, 2013 (supersedes MSDS issued October 19, 2010)
CAS Number(s): See section 3.
Product Usage: Stop off for torch & furnace brazing.
Emergency Number: ChemTel: 800-255-3924

Section 2: Hazard(s) Identification

Health – Environmental – Physical		
Skin Corrosion/Irritation	GHS Category 3 (causes mild skin irritation)	
Inhalation Toxicity	GHS Category 5 (may be harmful if inhaled)	
Aquatic Toxicity	GHS Category 3 (harmful to aquatic life)	
Carcinogenicity	GHS Category 2 (suspected of causing cancer)	
Eye Irritation	GHS Category 2B (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**
Water	7732-18-5	40 – 70
Transition metal oxide	Trade Secret	15 – 40
Ammonium hydroxide	1336-21-6	0.1 – 1
Acrylate mixture	25212-88-8 / 9010-88-2	3 – 7

This material is a mixture of water soluble components and metal oxide compounds.
**** This is a general reporting range and is not a product specification.**
Exposure limits: See Section 8.

Section 4: First Aid Measures

Exposure Route	Acute	Chronic (delayed)
Eye contact	Eye irritation. Flush with water for 15 minutes or until all particles are removed.	If irritation persists seek medical attention.
Skin contact	Itching or irritation. Remove contaminated clothing. Wash skin with mild soap and water.	If irritation or rash persists seek medical attention.
Inhalation	Irritation of nose, throat and lungs, headache and nausea. Remove exposed person to fresh air. If not breathing administer CPR.	If symptoms persist seek medical attention.
Ingestion	Rinse mouth. Drink 1 or 2 glasses of water. Seek medical advice. If large amount induce vomiting.	Seek medical attention.

Never give anything by mouth to an unconscious person. Treat symptomatically and supportively.

Section 5: Firefighting Measures

Suitable Extinguishing Media: Material is not combustible. Use appropriate means to fight surrounding fire. Cool exposed containers if possible using water spray.

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

Protective Equipment: SCBA and full protective gear is recommended for

Section 6: Accidental Release Measures

- Stay out of spill, floor may be slippery.
- Do not allow spill to enter floor drains or storm drains.
- Wear PPE: Respirator and Safety Goggles.
- Contain spill with inert materials (eg. Sand, earth). Transfer liquids and solid diking material to separate suitable containers for disposal.
- Keep spills and cleaning runoff out of municipal sewers and waterways.

Section 7: Handling and Storage

- General and/or point ventilation system is recommended to ensure exposure to 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 neoprene work gloves, safety glasses/goggles. Respiratory protection is recommended, but is required only when exposure limits are to 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. Keep from freezing. Do not store above 120°F.
- Not a shelf life limited material

Section 8: Exposure Controls / Personal Protection

Exposure Limits:

Components of mixture	CAS Number	OSHA PEL	ACGIH TLV
Water	7732-18-5	Not Listed	Not Listed
Transition metal oxide	Trade secret	15 mg/m ³ (5 mg/m ³ respirable)	10 mg/m ³
Ammonium hydroxide	1336-21-6	50 ppm	50 ppm
Acrylate mixture	25212-88-8 9010-88-2	100 ppm (as methyl methacrylate)	50 ppm (as methyl methacrylate)

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.

Personal Protective Equipment:

- Gloves – work gloves or non-permeable gloves such as neoprene.
- Eyes – safety glasses/goggles or face shield.
- Clothing – Cover-all, lab coat or normal work clothing.
- Respirator – NIOSH respirator with organic vapor cartridges and HEPA filter or equivalent alternative offering protection against ammonia and methylamine is recommended for up to 10 times the exposure limits.

Section 9: Physical and Chemical Properties

Physical State	Green Liquid Slurry
Odor	Mild ammonia odor
Odor Threshold	5 – 50 ppm as ammonia
PH	-8
Melting Point / Freezing Point	~32°F (~0°C)
Boiling Point	~212°F (~100°C)
Flash Point	None
Evaporation Rate (butyl acetate =1)	<1
Flammability	Not flammable
LFL (LEL) lower flammability (explosive) limit	Not applicable
UFL (UEL) upper flammability (explosive) limit	Not applicable
Vapor Pressure	About the same as water
Vapor Density	Heavier than air
Specific Gravity (Bulk Density)	~2 g/cc
Solubility	Dilutable with water
Partition Coefficient (n-octanol/water)	Not available
Autoignition Temperature	Not available
Decomposition Temperature	Not available
% VOC's	~80 grams/liter

Section 10: Stability and Reactivity

- **Chemical Stability:** This material is stable.
- **Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.
- **Conditions to Avoid:** None
- **Incompatible Materials:** Strong acids and bases. Acids can cause formaldehyde to be generated.
- **Hazardous Decomposition Products:** Heating can cause Monomer vapors to be evolved. Polymer decomposition can be expected above 350°F (177°C). Decomposition may yield acrylic monomers and formaldehyde.

Section 11: Toxicological Information

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

Skin Contact: May cause mild irritation. Contact toxicity data not available. GHS Category 3

Inhalation of Vapors: Prolonged inhalation of dust may cause irritation of nose, throat and lungs, headache and nausea.

Ingestion of Dust or powder:

Oral toxicity based on ingredients, falls outside of GHS classification range.

Ingredient Name	Oral Toxicity (LD50)	Inhalation Toxicity (LC50)
Water	*	*
Transition metal oxide	*	TCLo 250 mg/kg 6 hr Rat
Ammonium hydroxide	Oral rat 350 mg/kg	*
Acrylate mixtures	Oral rat >5,000 mg/kg	*

Carcinogenicity: Contains an ingredient that is possibly carcinogenic to humans.

Ingredient Name	NTP Status		IARC Category	OSHA	CA Prop. 65*
	Known	Anticipated			
Water	No	No	None	No	No
Transition metal oxide	No	No	2B	No	No
Ammonium hydroxide	No	No	No	No	No
Acrylate mixtures	No	No	None	No	Yes

*This product contains trace levels of a component known to the State of California to cause cancer: Ethyl acrylate and crystalline silica.

Section 12: Ecological Information

- **Aquatic Toxicity:** Acute & Chronic - GHS Category 3
(Contains an ingredient with LC50 of 50 mg/l)

Section 13: Disposal Consideration

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

Section 14: Transport Information

DOT Classification	Not regulated.
UN Identification Number	Not regulated.
DOT Shipping Description	Not applicable.

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)	This product contains trace amounts of Acrylic acid.
Resource Conservation & Recovery Act (RCRA)	This material is not a hazardous waste.

Section 16: Other Information

NFPA Numbers (estimated)	Health: 2	Flammability: 0	Reactivity: 0
-----------------------------	-----------	-----------------	---------------

WHMIS Category: Not classified.

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). Grobet File Company of America, LLC assumes no responsibility for damage or injury resulting from the end use of this product.