Material Safety Data Sheet
Required under USDL Safety and Health Regulations for Shipyard Employment (29 CFR 1915)

U.S. Department of Labor
Occupational Safety and Health Administration

OMB No 1218-0074
Expiration Date 05/31/86

Welding Rod #409*

Section I

Manufacturer's Name: BRANT WELDING ALLOY'S

Emergency Telephone Number: (515) 225-8215

Address (Number, Street, City, State, and ZIP Code): PO BOX 71 CLIVE, IA. 50053

Chemical Name and Synonyms: NOT APPLICABLE

Trade Name and Synonyms: BRANT ALLOYS #409

Chemical Family: NOT APPLICABLE

Formula: NOT APPLICABLE

Section II - Hazardous Ingredients

Paints, Preservatives, and Solvents	%	TLV (Units)	Alloys and Metallic Coatings	%	TLV (Units)
Pigments			Base Metal		
Catalyst			Alloys		
Vehicle			Metallic Coatings		
Solvents			Filler Metal Plus Coating or Core Flux	100	
Additives			Others *SEE ENCLOSURE		
Others					

Hazardous Mixtures of Other Liquids, Solids or Gases

	%	TLV (Units)

Section III - Physical Data

Boiling Point (°F)		Specific Gravity (H_2O=1)	
Vapor Pressure (mm Hg.)		Percent Volatile by Volume (%)	
Vapor Density (AIR=1)		Evaporation Rate _____ =1)	

Solubility in Water: NO

Appearance and Odor:

Section IV - Fire and Explosion Hazard Data

Flash Point (Method Used)	Flammable Limits	Lel	Uel

Extinguishing Media:

Special Fire Fighting Procedures:

Unusual Fire and Explosion Hazards: NOT APPLICABLE

Section V - Health Hazard Data Copies - C.E.P. Mech. Maint - Chief

Threshold Limit Value

SEE ENCLOSURE

Effects of Overexposure

DURING OR AFTER WELDING. FAINTNESS, POSSIBLE NAUSIA

Emergency First Aid Procedures

REMOVE TO FRESH AIR, CALL PHYSICIAN

Section VI - Reactivity Data

Stability	Unstable		Conditions to Avoid
	Stable	X	

Incompatability (Materials to Avoid)

Hazardous Decomposition Products

Hazardous Polymerization	May Occur		Conditions to Avoid NOT APPLICABLE
	Will Not Occur		

Section VII - Spill or Leak Procedures

Steps to be Taken in Case Material is Released or Spilled

Waste Disposal Method

NOT APPLICABLE

Section VIII - Special Protection Information

Respiratory Protection (Specify Type) WELD FUME RESPIRATOR OR AIRLINE RESPIRATOR FOR CONFINED SPACE OR WHERE EXPOSURES ARE ABOVE TLV

Ventilation	Local Exhaust YES, IN CONFINED SPACE	Special YES, IN CONFINED VESSELS
	Mechanical (General) YES, WHERE EXPOSURE EXCEEDS TLV	Other

Protective Gloves WELDERS PROTECTIVE GLOVES	Eye Protection COLORED ADSORPTIVE GLASSES

Other Protective Equipment

WELDING HELMET AND PROTECTIVE CLOTHING SUCH AS LEATHER APRON

Section IX - Special Precautions

Precautions to be Taken in Handling and Storing

AVOID HUMIDITY AND SHOCKS

Other Precautions

ARC AND SPARKS COULD BE SOURCE OF IGNITION OF COMBUSTIBLE PRODUCTS

WELDING ELECTRODE BRAND (BRANT #409)

Section II – HAZARDOUS INGREDIENTS					
COVERING OR FLUX	Wt. % (~)	TLV (Units) MG/M^3	OTHER	Wt. % (~)	TLV (Units) MG/M^3
TiO_2	2o	inert			
SiO_2	25	-			
CaO	5	5			
CO_2	4	9000			
Fe_2O_3	12	1o			
Al_2O_3	1o	inert			
Na_2O, K_2O	6	2			
Mn	4	5			
Cr	14	1			
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Section III – PHYSICAL DATA
NOT APPLICABLE

Section IV – FIRE AND EXPLOSION HAZARD DATA
NOT APPLICABLE