SECTIC	N 1: Identification of the subs	tance/mixture and of the company/undertaking
	Dreduct identifier	tance/mixture and of the company/undertaking
I.I. Product n		· Illtrawold Starting Dawder
FIUUUCLII		
1.2.	Relevant identified uses of the substa	ance or mixture and uses advised against
Use of the	e substance/mixture	: Manufacturing
1.3.	Details of the supplier of the safety da	ata sheet
Harger		
Grayslake	ei Diive e, IL 60030	
T 847-548	3-8700 - F 847-548-8755	
1.4.	Emergency telephone number	
No additio	onal information available	
SECTIO	ON 2: Hazards identification	
2.1.	Classification of the substance or mix	cture
GHS-US	classification	
Acute Tox	k. 4 (Oral) H302	
Aquatic A	cute 1 H400	
Aqualic C		
2.2.	Label elements	
GHS-US	labelling	
Hazaro pi	ctograms (GHS-US)	GHS07 GHS09
Signal wo	rd (GHS-US)	: Warning
Hazard st	atements (GHS-US)	: H302 - Harmful if swallowed H400 - Very toxic to aquatic life H410 - Very toxic to aquatic life with long lasting effects
Precautio	nary statements (GHS-US)	<ul> <li>P264 - Wash thoroughly after handling</li> <li>P270 - Do no eat, drink or smoke when using this product</li> <li>P273 - Avoid release to the environment</li> <li>P301+P312 - If swallowed, call a doctor if you feel unwell</li> <li>P330 - If swallowed, rinse mouth</li> <li>P391 - Collect spillage</li> <li>P501 - Dispose of contents/container in accordance with local/regional/national/international</li> <li>regulations.</li> </ul>
2.3.	Other hazards	
No additio	onal information available	
2.4.	Unknown acute toxicity (GHS US)	
No data available		
SECTIC	<b>DN 3: Composition/information</b>	on ingredients
3.1.	Substances	
Not applic	cable	

#### Full text of H-phrases: see section 16

#### 3.2. Mixture

Name	Product identifier	%	GHS-US classification
Copper(I) oxide	(CAS No) 1317-39-1	20 - 40	Acute Tox. 4 (Oral), H302 Acute Tox. Not classified (Dermal)
Ferric oxide black	(CAS No) 1317-61-9	20 - 40	Not classified
Aluminum	(CAS No) 7429-90-5	20 - 40	Not classified

SECTION 4: First aid measures			
4.1. Description of first aid measures			
First-aid measures after inhalation	: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing.		
First-aid measures after skin contact	: Gently wash with plenty of soap and water. Remove contaminated clothing.		
First-aid measures after eye contact	: Flush eyes with water to remove dust, do not rub as particles may cause damage. Seek medical attention if irritation develops or persists.		
First-aid measures after ingestion	: If swallowed: Rinse mouth. Do NOT induce vomiting. Seek medical attention.		
4.2. Most important symptoms and effect	s, both acute and delayed		
Symptoms/injuries after inhalation	: May cause respiratory irritation. Repeated overexposures may affect the respiratory system, live and cause a discoloration of the skin, hair, etc. An excess of Copper in the body may lead to Wilson's Disease. Considered an Irritant.		
Symptoms/injuries after skin contact	: None under normal use.		
Symptoms/injuries after eye contact	: Direct contact with the eyes is likely irritating.		
Symptoms/injuries after ingestion	: May be harmful if swallowed.		
4.3. Indication of any immediate medical	attention and special treatment needed		
No additional information available			
SECTION 5: Firefighting measures			
5.1. Extinguishing media			
Suitable extinguishing media	: Use Dry Sand, Water, Carbon Dioxide		
Unsuitable extinguishing media	: None.		
5.2. Special hazards arising from the sub	stance or mixture		
Fire hazard	: None known.		
Explosion hazard	: The materials are not explosive. If packing materials are ignited, large amounts of water should be applied to prevent the material from igniting. Do not breathe smoke.		
5.3. Advice for firefighters			
Protection during firefighting	: Ultraweld is an exothermic product, which when ignited, produces molten materials in excess of 4000°F and localized smoke. Firefighters should wear full protective gear.		
SECTION 6: Accidental release meas	ures		
6.1. Personal precautions, protective equ	ipment and emergency procedures		
6.1.1 For non-emergency personnel			
No additional information available			
6.1.2. For emergency responders			
No additional information available			
6.2. Environmental precautions			
Avoid release to the environment.			
6.3. Methods and material for containmer	it and cleaning up		
For containment	: Recover the product by vacuuming, shovelling or sweeping.		
Methods for cleaning up	: Minimize generation of dust. Dispose of waste in accordance with local, state and federal regulations.		
6.4. Reference to other sections			
No additional information available			
SECTION 7: Handling and storage			
7.1. Precautions for safe handling			
Precautions for safe handling	: Follow all product handling instructions and observe safety procedures.		
7.2. Conditions for safe storage, including any incompatibilities			
Storage conditions	: Store in a clean and dry restricted acess area. Do not subject to rough handling or physical damage, nor excessive vibration. Store in accordance with "This Side Up" labels. Protect from weather and moisture.		
7.3. Specific end use(s)			
Manufacturing			
SECTION 8: Exposure controls/personal_protection			
8.1 Control parameters			

Aluminum (7429-90-5)				
USA ACGIH	ACGIH TWA (mg/m³)	1 mg/m <sup>3</sup>		
USA OSHA	OSHA PEL (TWA) (mg/m3)	5 mg/m³		
8.2. Exposure controls				
Appropriate engineering controls	E Local exhaust and general ventilation	Local exhaust and general ventilation must be adequate to meet exposure standards.		
Hand protection	: Wear gloves for high temperature pro	: Wear gloves for high temperature protection.		
Eye protection	: Wear safety glasses with side shields	Wear safety glasses with side shields.		
Skin and body protection	: Wear suitable working clothes.	Wear suitable working clothes.		
Respiratory protection	: If airborne concentrations are above t respiratory protection.	If airborne concentrations are above the applicable exposure limits, use NIOSH approved respiratory protection.		

SECTION 9: Physical and chemical properties			
9.1. Information on basic physical and ch	9.1. Information on basic physical and chemical properties		
Physical state	: Solid		
Appearance	: Granules		
Color	: Black/silver		
Odor	: Odorless		
Odor threshold	: No data available		
рН	: No data available		
Relative evaporation rate (butylacetate=1)	: No data available		
Melting point	: No data available		
Freezing point	: No data available		
Boiling point	: No data available		
Flash point	: No data available		
Self ignition temperature	: >1200 °F		
Decomposition temperature	: No data available		
Flammability (solid, gas)	: No data available		
Vapour pressure	: No data available		
Relative vapour density at 20 °C	: No data available		
Relative density	: No data available		
Density	: 4.4		
Solubility	: No data available		
Log Pow	: No data available		
Log Kow	: No data available		
Viscosity, kinematic	: No data available		
Viscosity, dynamic	: No data available		
Explosive properties	: No data available		
Oxidising properties	: No data available		
Explosive limits	: No data available		
9.2. Other information			
No additional information available			
SECTION 10: Stability and reactivity			

10.1.	Reactivity	
No additional information available		
10.2.	Chemical stability	
The product is stable at normal handling- and storage conditions.		
10.3.	Possibility of hazardous reactions	
Will not occur.		
10.4.	Conditions to avoid	
Avoid temperatures above 850°F.		
10.5.	Incompatible materials	
Keep away from strong acids and moisture.		
10.6.	Hazardous decomposition products	
Fumes of copper and aluminum will be given off when ignited.		

EN (English)

SECTION 11: Toxicological information			
11.1. Information on toxicological effects			
Acute toxicity : Harmful if swallowed.			
Ultraweld Starting Powder			
ATE (oral)	500.000 mg/kg bodyweight		
Copper(I) oxide (1317-39-1)			
LD50 oral rat	470 mg/kg		
LD50 dermal rat	> 2000 mg/kg		
LC50 inhalation rat (mg/l)	5 mg/l/4h		
Ferric oxide black (1317-61-9)			
LD50 oral rat	> 10000 mg/kg		
Skin corrosion/irritation	: Not classified		
Serious eye damage/irritation	: Not classified		
Respiratory or skin sensitisation	: Not classified		
Germ cell mutagenicity	: Not classified		
Carcinogenicity	: Not classified		
Reproductive toxicity	: Not classified		
Specific target organ toxicity (single exposure)	: Not classified		
Specific target organ toxicity (repeated	Not classified		
exposure)			
Aspiration hazard	: Not classified		
SECTION 12: Ecological information			
12.1. Toxicity			
Copper(I) oxide (1317-39-1)			
EC50 Daphnia 1	0.51 mg/l (Exposure time: 48 h - Species: Daphnia magna)		
EC50 other aquatic organisms 1	65 mg/l (Exposure time: 96 h - Species: Desmodesmus subspicatus)		
EC50 other aquatic organisms 2	0.021 - 0.037 mg/l (Exposure time: 96 h - Species: Pseudokirchneriella subcapitata)		
12.2 Persistence and degradability			
No additional information available			
12.3. Bioaccumulative potential			
Copper(I) oxide (1317-39-1)			
BCF fish 1	(does not generally accumulate)		
12.4. Mobility in soil			
No additional information available			
12.5. Other adverse effects			
No additional information available			
<b>SECTION 13: Disposal considerations</b>	3		
13.1. Waste treatment methods			
Waste disposal recommendations	: Dispose of contents/container in accordance with local/regional/national/international regulations		
SECTION 14: Transport information			
In accordance with DOT / ADR / RID / ADNR / IMDG / ICAO / IATA			
Not applicable			
14.2. UN proper shipping name			
SECTION 15: Regulatory information			
Copper(I) oxide (1317-39-1)			
Listed on the United States TSCA (Toxic Substances Control Act) inventory			

EN (English)

### **Ultraweld Starting Powder**

Safety Data Sheet

Ferric oxide black (1317-61-9)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory		
Aluminum (7429-90-5)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory Listed on SARA Section 313 (Specific toxic chemical listings)		
SARA Section 313 - Emission Reporting	1.0 % (dust or fume only)	
15.2. US State regulations		

#### Aluminum (7429-90-5)

U.S. - Massachusetts - Right To Know List U.S. - Minnesota - Hazardous Substance List U.S. - New Jersey - Right to Know Hazardous Substance List

U.S. - Pennsylvania - RTK (Right to Know) List

#### **SECTION 16: Other information**

Full text of H-phrases:

Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Acute Tox. Not classified (Dermal)	Acute toxicity (dermal) Not classified
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment - Chronic Hazard Category 1
H302	Harmful if swallowed
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.