

# Safety Data Sheet: X-TRACT ALLOY

Supersedes Date 08/02/2013

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## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name** X-TRACT ALLOY

**Recommended use** Welding

**Information on Manufacturer**

X-ERGON by Partsmaster, Div of NCH Corp.

P.O. Box 655326

Dallas, TX 75265-5326

**Product Code** 00420000

**Chemical nature** Inorganic solid blend

**Emergency Telephone**

CHEMTREC® 800-424-9300

**Telephone inquiry**

800-336-0450

## 2. HAZARD IDENTIFICATION

**Color** off-white

**Physical state** Solid

**Odor** No information available.

This Safety Data Sheet (SDS) was prepared in accordance with OSHA 2012 - 29 CFR 1910.1200, "Hazard Communication".

### GHS

#### Classification

##### Physical Hazards

##### Health Hazard

Skin sensitization

Carcinogenicity

Specific target organ toxicity (repeated exposure)

Category 1

Category 1A

Category 2

##### Other hazards

Arc Rays can injure and burn eyes and skin Electric shock can kill FUMES AND GASES can be hazardous to your health.

### Labeling

#### Signal Word

**DANGER**



#### Hazard statements

H350 - May cause cancer

H317 - May cause an allergic skin reaction

H373 - May cause damage to organs through prolonged or repeated exposure

#### Precautionary Statements

P201 - Obtain special instructions before use

P202 - Do not handle until all safety precautions have been read and understood

P260 - Do not breathe fumes

P281 - Use personal protective equipment as required

P280 - Wear protective gloves, protective clothing and eye protection.

P272 - Contaminated work clothing should not be allowed out of the workplace

P312 - Call a physician if unwell.

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water

P333 + P313 - If skin irritation or rash occurs, get medical attention

P363 - Wash contaminated clothing before reuse

P308 + P313 - IF exposed or concerned, get medical attention

P405 - Store locked up

P501 - Dispose of contents and container to an approved waste disposal plant.

41.0 % of the mixture consists of ingredient(s) of unknown toxicity.

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Weight-%
Iron	7439-89-6	15-40
Chromium	7440-47-3	15-40
Titanium dioxide	13463-67-7	7-13
Feldspar	68476-25-5	7-13
Nickel	7440-02-0	5-10
Calcium carbonate	1317-65-3	1-5
Potassium silicate	1312-76-1	1-5
Manganese	7439-96-5	1-5

Calcium Fluoride

7789-75-5

1-5

\*The exact percentage (concentration) of composition has been withheld as a trade secret

#### 4. FIRST AID MEASURES

<b>General advice</b>	If symptoms persist, call a physician. Show this safety data sheet to the doctor in attendance.
<b>Eye Contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.
<b>Skin Contact</b>	Wash off immediately with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Get medical attention if irritation develops and persists. Wash contaminated clothing before re-use.
<b>Inhalation</b>	Remove person to fresh air. If signs/symptoms continue, get medical attention.
<b>Ingestion</b>	Do NOT induce vomiting. Drink plenty of water. If symptoms persist, call a physician. Rinse mouth.
<b>Notes to physician</b>	Treat symptomatically.

#### 5. FIRE-FIGHTING MEASURES

<b>Flash Point</b>	The product is not flammable	<b>Method</b>	No data available
<b>Upper:</b>	No data available	<b>Lower:</b>	No data available
<b>Suitable Extinguishing Media</b>	Carbon dioxide (CO <sub>2</sub> ). Dry chemical. Foam. Water spray.		
<b>Specific hazards arising from the chemical</b>	Arcs and sparks can ignite combustibles and flammable products. See American National Standard Z49.1; Safety in Welding and Cutting published by The American Welding Society.		
<b>Protective Equipment and Precautions for Firefighters</b>	As in any fire, wear self-contained breathing apparatus pressure-demand, NOHSC (approved or equivalent) and full protective gear.		
<b>NFPA</b>	<b>Health</b> 2	<b>Flammability</b> 0	<b>Instability</b> 0
<b>HMIS -</b>	<b>Health</b> 2	<b>Flammability</b> 0	<b>Instability</b> 0

#### 6. ACCIDENTAL RELEASE MEASURES

<b>Personal Precautions</b>	Use personal protective equipment. Prevent further leakage or spillage if safe to do so. Material can create slippery conditions.
<b>Environmental precautions</b>	Do not flush into surface water or sanitary sewer system.
<b>Methods for Containment</b>	Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).
<b>Methods for Cleaning Up</b>	Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth) and transfer to a container for disposal according to local / national regulations (see section 13).
<b>Neutralizing Agent</b>	Not applicable.

#### 7. HANDLING AND STORAGE

<b>Handling</b>	Avoid contact with skin, eyes and clothing.			
<b>Storage</b>	Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place.			
<b>Storage Temperature</b>	<b>Minimum</b>	No information available	<b>Maximum</b>	No information available
<b>Storage Conditions</b>	<b>Indoor</b>	X	<b>Outdoor</b>	<b>Heated</b> <b>Refrigerated</b>

#### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

##### Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH
Titanium dioxide	TWA: 10 mg/m <sup>3</sup>	TWA: 15 mg/m <sup>3</sup> total dust	5000 mg/m <sup>3</sup>

<b>Engineering Measures</b>	Use enough ventilation, local exhaust at the arc, or both to keep the fumes and gases below the TLV's in the worker's breathing zone and in the general area. Train the worker to keep his head out of the fumes.
<b>Personal Protective Equipment</b>	
<b>Eye/Face Protection</b>	Safety glasses with side-shields.
<b>Skin Protection</b>	Welder's leather gloves, Wear fire/flame resistant/retardant clothing, Wear suitable protective clothing, Impervious gloves.
<b>Respiratory Protection</b>	Use a NIOSH/MSHA approved or equivalent fume respirator or air supplied respirator when welding in confined spaces, or where local exhaust or ventilation does not keep exposure below TLV's.
<b>General Hygiene Considerations</b>	Remove and wash contaminated clothing before re-use.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state</b>	Solid	<b>Viscosity</b>	Not applicable
<b>Color</b>	off-white	<b>Odor</b>	No information available.
<b>Odor Threshold</b>	Not applicable	<b>Appearance</b>	Textured black paste
<b>pH</b>	Not applicable	<b>Specific Gravity</b>	> 6
<b>Evaporation Rate</b>	No data available	<b>Percent Volatile (Volume)</b>	No information available
<b>VOC Content (%)</b>	No information available.	<b>Vapor Pressure</b>	Not applicable
<b>Vapor Density</b>	Not applicable	<b>Solubility</b>	Insoluble
<b>n-Octanol/Water Partition</b>	No data available	<b>Melting Point/Range</b>	1500 2000 °F / 816 °C
<b>Decomposition Temperature</b>	No data available	<b>Boiling Point/Range</b>	No data available
<b>Flammability (solid, gas)</b>	No data available		
<b>Flash Point</b>	The product is not flammable	<b>Method</b>	No data available
<b>Autoignition Temperature</b>	No information available.		
<b>Upper:</b> No data available <b>Lower:</b> No data available			

## 10. STABILITY AND REACTIVITY

<b>Chemical Stability</b>	Stable under normal conditions.
<b>Conditions to Avoid</b>	None known.
<b>Incompatible Products</b>	Strong acids, Strong oxidizing agents.
<b>Decomposition Temperature</b>	No data available
<b>Hazardous Decomposition Products</b>	Fumes and gasses produced by welding, brazing and similar processes cannot be classified simply. The composition and quantity of both are dependent upon the metal being welded, the process, the procedures and the filler metal being used. Other conditions which also influence the composition and quantity of fumes and gases to which the worker may be exposed include: coatings on the metal being welded, the number of welders and the volume of the work space, the quality and amount of ventilation used, the position of the welder's head in relation to the fume plume, as well as the presence of contaminants in the atmosphere when the filler metal is consumed. The fume and gas decomposition products generated are different in percent and form the product ingredients listed in Section III. The products formed in normal operation include those originating from the volatilization, reaction and oxidation of the filler metal, the metal being welded, the coatings, etc. as noted above. One recommended way to determine the composition and quality of fumes and gases to which workers are exposed is to take an air sample inside the welders helmet if worn or in the workers breathing zone. See ANSI/AWS F1.1 "Method For Sampling Airborne Particles Generated By Welding And Allied Processes" available from the American Welding Society, P.O. Box 35140, Miami, FL 33135, Constant inhalation of chromium (VI) compounds may cause an ulceration and perforation of the nasal septum as well as liver and kidney damage. IARC has concluded that the evidence for carcinogenicity to humans and animals is inadequate for chromium metal and trivalent compounds, but sufficient for hexavalent chromium compounds. Chromium compounds are on the IARC list as posing a carcinogenic risk to humans. OSHA (29 CFR 1910.120) lists chromium as possible carcinogen. Chromium VI compounds are required by OSHA to be considered carcinogenic.
<b>Possibility of Hazardous Reactions</b>	Hazardous polymerization does not occur.

## 11. TOXICOLOGICAL INFORMATION

<b>Product Information</b>	No information available.
<b>The following values are calculated based on chapter 3.1 of the GHS document</b>	
<b>Oral LD50</b>	No information available
<b>Dermal LD50</b>	No information available
<b>Inhalation LC50</b>	
<b>Gas</b>	No information available
<b>Mist</b>	No information available
<b>Vapor</b>	No information available
<b>Principle Route of Exposure</b>	Inhalation.
<b>Primary Routes of Entry</b>	Skin contact.
<b>Acute Effects:</b>	
<b>Eyes</b>	Causes eye irritation.
<b>Skin</b>	May cause allergic skin reaction.
<b>Inhalation</b>	Welding fumes may result in discomfort such as: dizziness, nausea, or dryness or irritation of nose, throat, or eyes. Fumes can aggravate asthma, bronchial conditions, or allergies. Individuals with

**Ingestion**  
**Chronic Toxicity:**

**Target Organ Effects:**  
**Aggravated Medical Conditions**

Component Information

**Acute Toxicity**

allergies or impaired respiratory function may have symptoms worsen by exposure to welding fumes. Excessive inhalation of iron oxides fumes or dust can lead to irritation of the respiratory tract. Inhalation may cause central nervous system effects. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

May cause sensitization by skin contact. Prolonged exposure may cause chronic effects. Prolonged exposure to elevated noise levels during operations may affect hearing.

Blood, Central nervous system, Kidney, Lungs, Nasal Cavities, Respiratory system.

Skin disorders, Central nervous system, Kidney disorders, Respiratory system.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50	Draize Test	Other
Iron 7439-89-6	= 984 mg/kg ( Rat )	no data available	No data available	No data available	No data available
Titanium dioxide 13463-67-7	> 10000 mg/kg ( Rat )	no data available	No data available	No data available	No data available
Nickel 7440-02-0	> 9000 mg/kg ( Rat )	no data available	No data available	No data available	No data available
Calcium carbonate 1317-65-3	6450 mg/kg ( Rat )	no data available	no data available	No data available	No data available
Potassium silicate 1312-76-1	= 1300 mg/kg ( Rat )	no data available	No data available	No data available	No data available
Calcium Fluoride 7789-75-5	= 4250 mg/kg ( Rat )	no data available	No data available	No data available	No data available

Chemical Name	Mutagenicity	Sensitization	Developmental Toxicity	Reproductive Toxicity	Target Organ Effects
Chromium 7440-47-3	No data available	No data available	No data available	No data available	Skin; Eyes; Respiratory system
Titanium dioxide 13463-67-7	No data available	No data available	No data available	No data available	Respiratory system
Nickel 7440-02-0	No data available	No data available	No data available	No data available	Lungs; Nasal Cavities; Skin
Calcium carbonate 1317-65-3	No data available	No data available	No data available	No data available	Skin; Eyes; Respiratory system
Manganese 7439-96-5	No data available	No data available	No data available	No data available	Blood; Central nervous system; Respiratory system; Kidney

**Carcinogenicity**

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA	Other
Chromium 7440-47-3	Not applicable	Group 3	Not applicable	Not applicable	Not applicable
Titanium dioxide 13463-67-7	Not applicable	Group 2B	Not applicable	X	Not applicable
Nickel 7440-02-0	Not applicable	Group 2B	Known Reasonably Anticipated	X	Not applicable

## 12. ECOLOGICAL INFORMATION

Product Information

No information available.

Component Information

Chemical Name	Toxicity to Algae	Toxicity to Fish	Microtox	Crustacea	Partition coefficient
Nickel	EC50 = 0.18 mg/L Pseudokirchneriella subcapitata 72 h EC50 0.174 - 0.311 mg/L Pseudokirchneriella subcapitata 96 h	LC50 > 100 mg/L Brachydanio rerio 96 h LC50 = 1.3 mg/L Cyprinus carpio 96 h LC50 = 10.4 mg/L Cyprinus carpio 96 h	No information available	100: 48 h Daphnia magna mg/L EC50 1: 48 h Daphnia magna mg/L EC50 Static	N/A
Potassium silicate	No information available.	LC50 301 - 478 mg/L Lepomis macrochirus 96 h LC50 = 3185 mg/L Brachydanio rerio 96 h	No information available	No information available.	N/A

**Persistence and Degradability**

No information available.

**Bioaccumulation**

No information available.

**Mobility**

No information available.

## 13. DISPOSAL CONSIDERATIONS

**Product Disposal** Dispose of in accordance with local regulations.  
**Container Disposal** Empty containers should be taken for local recycling, recovery, or waste disposal.

#### 14. TRANSPORT INFORMATION

**DOT** Not regulated  
**TDG** Not regulated  
**ICAO** Not regulated  
**IATA** Not regulated  
**IMDG/IMO** Not regulated

#### 15. REGULATORY INFORMATION

##### Inventories

**TSCA** Complies  
**DSL** Complies

##### U.S. Federal Regulations

###### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

###### SARA 311/312 Hazardous Categorization

See Section 2

**CERCLA** None

Chemical Name	Hazardous Substances RQs	CERCLA EHS RQs
Chromium	5000 lb 10 lb	Not applicable
Nickel	100 lb	Not applicable

##### U.S. State Regulations

###### California Proposition 65

This product can expose you to chemicals including those listed in the table below, which is [are] known to the State of California to cause either cancer and/or birth defects or other reproductive harm, (as indicated next to the chemical of concern). For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

Chemical Name	CAS No.	California Prop. 65
Chromium	7440-47-3	carcinogen, initial date 2/27/87, developmental female, male 12/19/08
Titanium dioxide	13463-67-7	carcinogen
Nickel	7440-02-0	carcinogen
Crystalline Silica (Quartz)	14808-60-7	carcinogen

#### 16. OTHER INFORMATION

**Prepared By** Christopher Drogin  
**Supersedes Date** 08/02/2013  
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**Reason for Revision** No information available.  
**Glossary** No information available.  
**List of References.** No information available.

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