Safety Data Sheet: X-TRACT ALLOY

Supercedes Date 07/26/2011 **Issuing Date** 08/02/2013

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 Number
CHEMTREC® 800-424-9300

2. HAZARD IDENTIFICATION

Color Off-white **Physical State** Solid **Odor** No information available

GHS Classification

Physical Hazards
None

R48/23 - Toxic: danger of serious damage to health by prolonged exposure through inhalation
R48/20 - Harmful: danger of serious damage to health by prolonged exposure through inhalation

Health Hazard

Acute Oral Toxicity	Category 5
Skin Sensitization	Category 1
Carcinogenicity	Category 1A
Specific target organ systemic toxicity (repeated exposure)	Category 2

Other hazards
None

Labeling
Signal Word
DANGER

Hazard Statements
H303 - May be harmful if swallowed
H317 - May cause an allergic skin reaction
H350 - May cause cancer
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.
P321 - Specific treatment (see supplemental first aid instructions on this label)
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/advice
P405 - Store locked up
P273 - Avoid release to the environment
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

Component	CAS-No	Weight %
Iron	7439-89-6	15-40
Chromium	7440-47-3	10-30
Titanium dioxide	13463-67-7	7-13
Feldspar	68476-25-5	5-10

Nickel	7440-02-0	5-10
Calcium carbonate	1317-65-3	3-7
Potassium silicate	1312-76-1	1-5
Manganese	7439-96-5	.5-1.5
Calcium Fluoride	7789-75-5	.5-1.5
Crystalline Silica (Quartz)	14808-60-7	.5-1.5
Sodium oxide	12401-86-4	.1-1

4. FIRST AID MEASURES

General advice If symptoms persist, call a physician. Show this safety data sheet to the doctor in attendance.
Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.
Skin Contact 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.
Inhalation Remove person to fresh air. If signs/symptoms continue, get medical attention.
Ingestion Do NOT induce vomiting. Drink plenty of water. If symptoms persist, call a physician. Rinse mouth.
Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Flash Point The product is not flammable **Method** Not applicable
Upper No data available **Lower** No data available
Suitable Extinguishing Media
Carbon dioxide (CO2). Dry chemical. Foam. Water spray.
Specific hazards arising from the chemical
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 .
Protective Equipment and Precautions for Firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA	**Health** 2	**Flammability** 0	**Instability** 0
HMIS	**Health** 2	**Flammability** 0	**Instability** 0

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions Use personal protective equipment. Prevent further leakage or spillage if safe to do so. Material can create slippery conditions.
Environmental Precautions Do not flush into surface water or sanitary sewer system.
Methods for Containment 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).
Methods for Cleaning Up 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).
Neutralizing Agent Not applicable.

7. HANDLING AND STORAGE

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

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH
Iron	No data available	No data available	No data available
Chromium	TWA: 0.5 mg/m^3	TWA: 1 mg/m^3	IDLH: 250 mg/m^3 TWA: 0.5 mg/m^3
Titanium dioxide	TWA: 10 mg/m^3	TWA: 15 mg/m^3	IDLH: 5000 mg/m^3
Feldspar	No data available	No data available	No data available
Nickel	TWA: 1.5 mg/m^3	TWA: 1 mg/m^3	IDLH: 10 mg/m^3 TWA: 0.015 mg/m^3

Calcium carbonate	No data available	TWA: 15 mg/m^3 TWA: 5 mg/m^3	TWA: 10 mg/m^3 TWA: 5 mg/m^3
Potassium silicate	No data available	No data available	No data available
Manganese	TWA: 0.02 mg/m^3 TWA: 0.1 mg/m^3	Ceiling: 5 mg/m^3	IDLH: 500 mg/m^3 STEL 3 mg/m^3 TWA: 1 mg/m^3
Calcium Fluoride	TWA: 2.5 mg/m^3	TWA: 2.5 mg/m^3	No data available
Crystalline Silica (Quartz)	: 0.025 mg/m^3 TWA (respirable fraction)	No data available	IDLH: 50 mg/m^3 TWA: 0.05 mg/m^3
Sodium oxide	No data available	No data available	No data available

Engineering Measures 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 .

Personal Protective Equipment

Eye/Face Protection Safety glasses with side-shields.

Skin Protection Welder's leather gloves, Wear fire/flame resistant/retardant clothing, Wear suitable protective clothing, Impervious gloves.

Respiratory Protection 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 .

General Hygiene Considerations Remove and wash contaminated clothing before re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Solid	**Viscosity**	Not applicable
Color	Off-white	**Odor**	No information available
Odor Threshold	Not applicable	**Appearance**	Textured black paste
pH	Not applicable	**Specific Gravity**	No data available
Evaporation Rate	No data available	**Percent Volatile (Volume)**	No information available
VOC Content (%)	No information available	**Vapor Pressure**	Not applicable
Vapor Density	Not applicable	**Solubility**	Insoluble
n-Octanol/Water Partition	No data available	**Melting Point/Range**	No data available
Decomposition Temperature	No data available	**Boiling Point/Range**	No data available
Flammability (solid, gas)	No data available		
Flash Point	The product is not flammable	**Method**	Not applicable
Autoignition Temperature	No information available.		

Upper No data available **Lower** No data available

10. STABILITY AND REACTIVITY

Chemical Stability Stable under normal conditions

Conditions to Avoid None known

Incompatible Products Strong acids, Strong oxidizing agents.

Hazardous Decomposition Products 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

Possibility of Hazardous Reactions Hazardous polymerization does not occur

11. TOXICOLOGICAL INFORMATION

Product Information

The following values are calculated based on chapter 3.1 of the GHS document (Rev. 3, 2009):

Oral LD50 No information available
Dermal LD50 No information available
Inhalation LC50
Gas No information available
Mist No information available
Vapor No information available

Principle Route of Exposure Inhalation
Primary Routes of Entry Inhalation
Acute Effects
Eyes Causes eye irritation.
Skin May cause allergic skin reaction.
Inhalation 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 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 Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Chronic Toxicity May cause sensitization by skin contact. Prolonged exposure may cause chronic effects. Prolonged exposure to elevated noise levels during operations may affect hearing .
Target Organ Effects Blood, Central nervous system, Kidney, Lungs, Nasal Cavities, Respiratory system.
Aggravated Medical Conditions Skin disorders, Central nervous system, Kidney disorders, Respiratory system.

Component Information

Acute Toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation	Draize Test	Other
Iron	= 984 mg/kg (Rat)	no data available	no data available	no data available	no data available
Chromium	no data available	no data available	no data available	no data available	no data available
Titanium dioxide	> 10000 mg/kg (Rat)	no data available	no data available	no data available	no data available
Feldspar	no data available	no data available	no data available	no data available	no data available
Nickel	> 9000 mg/kg (Rat)	no data available	no data available	no data available	no data available
Calcium carbonate	= 6450 mg/kg (Rat)	no data available	no data available	no data available	no data available
Potassium silicate	= 1300 mg/kg (Rat)	no data available	no data available	no data available	no data available
Manganese	no data available	no data available	no data available	no data available	no data available
Calcium Fluoride	= 4250 mg/kg (Rat)	no data available	no data available	no data available	no data available
Crystalline Silica (Quartz)	= 500 mg/kg (Rat)	no data available	no data available	no data available	no data available
Sodium oxide	no data available	no data available	no data available	no data available	no data available

Chronic Toxicity

Component	Mutagenicity	Sensitization	Developmental Toxicity	Reproductive Toxicity	Target Organ Effects
Iron	no data available	no data available	no data available	no data available	no data available
Chromium	no data available	no data available	no data available	no data available	eyes, respiratory system, skin
Titanium dioxide	no data available	no data available	no data available	no data available	respiratory system
Feldspar	no data available	no data available	no data available	no data available	no data available
Nickel	no data available	no data available	no data available	no data available	nasal cavities, lungs, skin (lung and nasal cancer) lungs, skin, nasal cavities (lung and nasal cancer)
Calcium carbonate	no data available	no data available	no data available	no data available	eyes, respiratory system, skin
Potassium silicate	no data available	no data available	no data available	no data available	no data available
Manganese	no data available	no data available	no data available	no data available	CNS,respiratory system,blood,kidneys
Calcium Fluoride	no data available	no data available	no data available	no data available	no data available
Crystalline Silica (Quartz)	no data available	no data available	no data available	no data available	eyes, respiratory system (in animals: lung cancer), kidneys
Sodium oxide	no data available	no data available	no data available	no data available	no data available

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

Component	ACGIH	IARC	NTP	OSHA	Other
Iron	not applicable	not applicable	not applicable	not applicable	not applicable
Chromium	not applicable	not applicable	not applicable	not applicable	not applicable
Titanium dioxide	A4	Group 2B	not applicable	X	not applicable
Feldspar	not applicable	Group 2B	not applicable	not applicable	not applicable
Nickel	not applicable	Group 1 Group 2B	Known Reasonably Anticipated	X	not applicable
Calcium carbonate	not applicable	not applicable	not applicable	not applicable	not applicable

Potassium silicate	not applicable	not applicable	not applicable	not applicable	not applicable
Manganese	not applicable	not applicable	not applicable	not applicable	not applicable
Calcium Fluoride	not applicable	not applicable	not applicable	not applicable	not applicable
Crystalline Silica (Quartz)	A2	Group 1	Known	X	not applicable
Sodium oxide	not applicable	not applicable	not applicable	not applicable	not applicable

12. ECOLOGICAL INFORMATION

Product Information No information available.

Component Information

Component	Toxicity to Algae	Toxicity to Fish	Microtox	Water Flea	log Pow
Iron	no data available	LC50 = 13.6 mg/L Morone saxatilis 96 h LC50 = 0.56 mg/L Cyprinus carpio 96 h	no data available	no data available	N/A
Chromium	no data available	no data available	no data available	no data available	N/A
Titanium dioxide	no data available	no data available	no data available	no data available	N/A
Feldspar	no data available	no data available	no data available	no data available	N/A
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 data available	EC50> 100 mg/L 48 h EC50= 1 mg/L 48 h	N/A
Calcium carbonate	no data available	no data available	no data available	no data available	N/A
Potassium silicate	no data available	LC50 301 - 478 mg/L Lepomis macrochirus 96 h LC50 = 3185 mg/L Brachydanio rerio 96 h	no data available	EC50= 216 mg/L 96 h	N/A
Manganese	no data available	no data available	no data available	no data available	N/A
Calcium Fluoride	no data available	no data available	no data available	no data available	N/A
Crystalline Silica (Quartz)	no data available	no data available	no data available	no data available	N/A
Sodium oxide	no data available	no data available	no data available	no data 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

Component	CAS-No	Weight %	SARA 313 - Threshold Values

Chromium	7440-47-3	10-30	1.0
Feldspar	68476-25-5	5-10	1.0
Nickel	7440-02-0	5-10	0.1
Manganese	7439-96-5	.5-1.5	1.0

SARA 311/312 Hazardous Categorization

Acute Health Hazard	Chronic Health Hazard	Fire Hazard	Sudden Release of Pressure Hazard	Reactive Hazard
Yes	Yes	No	No	No

CERCLA

Component	Hazardous Substances RQs	CERCLA EHS RQs
Iron	Not applicable	Not applicable
Chromium	5000 lb	Not applicable
Titanium dioxide	Not applicable	Not applicable
Feldspar	Not applicable	Not applicable
Nickel	100 lb	Not applicable
Calcium carbonate	Not applicable	Not applicable
Potassium silicate	Not applicable	Not applicable
Manganese	Not applicable	Not applicable
Calcium Fluoride	Not applicable	Not applicable
Crystalline Silica (Quartz)	Not applicable	Not applicable
Sodium oxide	Not applicable	Not applicable

U.S. State Regulations

California Proposition 65 This product contains the following Proposition 65 chemicals

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

16. OTHER INFORMATION

Prepared By Christopher Drogin
Supercedes Date 07/26/2011
Issuing Date 08/02/2013
Reason for Revision No information available.
Glossary No information available.
List of References. No information available.

X-ERGON by Partsmaster, Div of NCH Corp.assumes no responsibility for personal injury or property damage caused by the use, storage, or disposal of the product in a manner not recommended on the product label. Users assume all risks associated with such unrecommended use, storage or disposal of the product. The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.