

Safety Data Sheet: E7014

Supersedes Date 03/02/2009

Issuing Date 06/13/2013

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name E7014

Recommended use Welding

Information on Manufacturer

X-ERGON by Partsmaster, Div of NCH Corp.

P.O. Box 655326

Dallas, TX 75265-5326

Product Code 12007014

Chemical nature Inorganic solid blend

Emergency Telephone Number

CHEMTREC® 800-424-9300

2. HAZARD IDENTIFICATION

Color Light gray

Physical State Solid

Odor Odorless

GHS

Classification

Physical Hazards

None

Health Hazard

Acute Oral Toxicity

Carcinogenicity

Specific target organ systemic toxicity (single exposure)

Specific target organ systemic toxicity (repeated exposure)

Other hazards

None

Category 4

Category 1A

Category 2

Category 2

Labeling

Signal Word

DANGER



Hazard Statements

H302 - Harmful if swallowed

H350 - May cause cancer

H371 - May cause damage to organs

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 dust or fume.

P270 - Do not eat, drink or smoke when using this product

P264 - Wash face, hands and any exposed skin thoroughly after handling.

P281 - Use personal protective equipment as required

P301+ P312 - IF SWALLOWED: Call a physician if unwell

P330 - Rinse mouth

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.

7 % of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS-No	Weight %
Iron	7439-89-6	70-75
Titanium dioxide	13463-67-7	7-13
Sodium silicate	1344-09-8	1-5
Silica mica	12001-26-2	3-7
Manganese	7439-96-5	1-5
Crystalline Silica (Quartz)	14808-60-7	1-5
Calcium carbonate	1317-65-3	.5-1.5

4. FIRST AID MEASURES

General advice	Avoid contact with skin, eyes and clothing. Avoid breathing dust.
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	In case of contact, immediately flush skin with soap and plenty of water. If skin irritation persists, call a physician. Wash off immediately with soap and plenty of water.
Inhalation	Remove person to fresh air. If signs/symptoms continue, get medical attention.
Ingestion	If swallowed, do not induce vomiting - seek medical advice. 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			
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.			
Specific hazards arising from the chemical			
Dust can form an explosive mixture in air.			
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	Wear appropriate protective clothing. Avoid creating dusty conditions. Transfer solid into a properly labeled container for re-use or disposal. If necessary, wash area with water and pick up wash water for disposal. Use personal protective equipment.
Environmental Precautions	Prevent product from contaminating soil or from entering sewage, drainage systems, and bodies of water. Do not flush into surface water or sanitary sewer system.
Methods for Containment	Pick up and arrange disposal without creating dust.
Methods for Cleaning Up	Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid dust formation. Clean contaminated surface thoroughly. Soak up with inert absorbent material.
Neutralizing Agent	Not applicable.

7. HANDLING AND STORAGE

Handling	Do not eat, drink or smoke when using this product. Avoid contact with skin, eyes and clothing. Avoid breathing dust.			
Storage	Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children. Keep containers tightly closed in a cool, 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
Titanium dioxide	TWA: 10 mg/m ³	TWA: 15 mg/m ³	IDLH: 5000 mg/m ³
Sodium silicate	No data available	No data available	No data available
Silica mica	TWA: 3 mg/m ³	No data available	IDLH: 1500 mg/m ³ TWA: 3 mg/m ³
Manganese	TWA: 0.2 mg/m ³	Ceiling: 5 mg/m ³	IDLH: 500 mg/m ³ STEL 3 mg/m ³ TWA: 1 mg/m ³
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
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

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	Wear a helmet or use face shield with filter lens of appropriate shade number (SEE ANSI/ASCZ49.1)

<p>Skin Protection</p> <p>Respiratory Protection</p> <p>General Hygiene Considerations</p>	<p>provide protective screen and flash goggles, if necessary, to shield others. As a rule of thumb, start a shade that is too dark to see the weld zone. Then go next lighter shade which gives sufficient view of the weld zone .</p> <p>Welder's leather gloves, Wear fire/ flame resistant/retardant clothing.</p> <p>Use enough ventilation, local exhaust at the arc, or both to keep the fumes and gasses below the TLV's in the workers' breathing zone and the general area. Train the worker to keep his head out of the fumes. Use MSHA/NIOSH approved or equivalent fume respirator or air supplied respirator when welding in a confined space or when local exhaust or ventilation does not keep exposure below TLV. Do not eat, drink or smoke when using this product. Avoid contact with skin, eyes and clothing. Wear head and body protection which help to prevent injury from radiation, sparks, and electrical shock. See ANSI Z49.1. At minimum, this includes welder's gloves and a protective face shield, and may include arm protectors, aprons, hat, shoulder protection as well as dark nonsynthetic clothing. Train the welder not to touch live electrical parts and to insulate himself from work and ground .</p>
---	---

9. PHYSICAL AND CHEMICAL PROPERTIES

<p>Physical State</p> <p>Color</p> <p>Odor Threshold</p> <p>pH</p> <p>Evaporation Rate</p> <p>VOC Content (%)</p> <p>Vapor Density</p> <p>n-Octanol/Water Partition</p> <p>Decomposition Temperature</p> <p>Flammability (solid, gas)</p> <p>Flash Point</p> <p>Autoignition Temperature</p> <p>Upper No data available Lower No data available</p>	<p>Solid</p> <p>Light gray</p> <p>Not applicable</p> <p>Not applicable</p> <p>Not applicable</p> <p>No information available</p> <p>Not applicable</p> <p>No data available</p> <p>No data available</p> <p>No data available</p> <p>The product is not flammable</p> <p>No information available.</p>	<p>Viscosity</p> <p>Odor</p> <p>Appearance</p> <p>Specific Gravity</p> <p>Percent Volatile (Volume)</p> <p>Vapor Pressure</p> <p>Solubility</p> <p>Melting Point/Range</p> <p>Boiling Point/Range</p> <p>Method</p>	<p>Not applicable</p> <p>Odorless</p> <p>Textured black paste</p> <p>No data available</p> <p>No information available</p> <p>Not applicable</p> <p>Insoluble</p> <p>2300 - 3000 °F / 1260 - 1649 °C</p> <p>No data available °F / °C</p> <p>Not applicable</p>
---	--	---	---

10. STABILITY AND REACTIVITY

<p>Chemical Stability</p> <p>Conditions to Avoid</p> <p>Incompatible Products</p> <p>Hazardous Decomposition Products</p> <p>Possibility of Hazardous Reactions</p>	<p>Stable under normal conditions. Hazardous polymerization does not occur.</p> <p>Keep away from open flames, hot surfaces, and sources of ignition</p> <p>Incompatible with oxidizing agents, Strong acids.</p> <p>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</p> <p>None under normal processing</p>
--	---

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, Ingestion.
Primary Routes of Entry	Inhalation
Acute Effects	
Eyes	Causes eye irritation. Welding arc may damage eyes .
Skin	May cause skin irritation. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.
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. May be harmful if swallowed.
Ingestion	May be harmful if swallowed.
Chronic Toxicity	Prolonged exposure may cause chronic effects. Inhalation of dust may cause shortness of breath, tightness of the chest, a sore throat and cough. Long term overexposure to iron fumes may lead to siderosis (iron deposits in the lung) and is believed by investigators to affect pulmonary function. Lungs will clear in time when exposure to iron and its components cease . Inhalation of manganese fumes may affect the central nervous system, may cause spastic gait, drowsiness, paralysis and other neurological problems with symptoms including weakness and tremors resembling Parkinson's disease. Behavioral changes and changes in handwriting may also appear .
Target Organ Effects	Respiratory system, Central nervous system, Kidney, Liver, Blood.
Aggravated Medical Conditions	Pre-existing respiratory and skin conditions such as asthma, emphysema, and dermatitis, Pre-existing liver and kidney diseases, Central nervous system, Allergies, Kidney disorders, Liver disorders.

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
Titanium dioxide	> 10000 mg/kg (Rat)	no data available	no data available	no data available	no data available
Sodium silicate	= 1153 mg/kg (Rat)	> 4640 mg/kg (Rabbit)	no data available	no data available	no data available
Silica mica	no data available	no data available	no data available	no data available	no data available
Manganese	= 9 g/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
Calcium carbonate	= 6450 mg/kg (Rat)	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
Titanium dioxide	no data available	no data available	no data available	no data available	respiratory system
Sodium silicate	no data available	no data available	no data available	no data available	kidneys
Silica mica	no data available	no data available	no data available	no data available	respiratory system
Manganese	no data available	no data available	no data available	no data available	CNS,respiratory system,blood,kidneys
Crystalline Silica (Quartz)	no data available	no data available	no data available	no data available	eyes, respiratory system (in animals: lung cancer), kidneys
Calcium carbonate	no data available	no data available	no data available	no data available	eyes, respiratory system, skin

Carcinogenicity

Component	ACGIH	IARC	NTP	OSHA	Other
Iron	not applicable	not applicable	not applicable	not applicable	not applicable
Titanium dioxide	A4	Group 2B	not applicable	X	not applicable
Sodium silicate	not applicable	not applicable	not applicable	not applicable	not applicable
Silica mica	not applicable	not applicable	not applicable	not applicable	not applicable
Manganese	not applicable	not applicable	not applicable	not applicable	not applicable
Crystalline Silica (Quartz)	A2	Group 1	Known	X	not applicable
Calcium carbonate	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

Titanium dioxide	no data available	no data available	no data available	no data available	N/A
Sodium 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
Silica mica	no data available	no data available	no data available	no data available	N/A
Manganese	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
Calcium carbonate	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
 TDG
 ICAO
 IATA
 IMDG/IMO

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
Manganese	7439-96-5	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	No	No	No	No

CERCLA

Component	Hazardous Substances RQs	CERCLA EHS RQs
Iron	Not applicable	Not applicable
Titanium dioxide	Not applicable	Not applicable
Sodium silicate	Not applicable	Not applicable
Silica mica	Not applicable	Not applicable
Manganese	Not applicable	Not applicable
Crystalline Silica (Quartz)	Not applicable	Not applicable
Calcium carbonate	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
Crystalline Silica (Quartz)	14808-60-7	carcinogen

16. OTHER INFORMATION

Prepared By	Christopher Drogin
Supersedes Date	03/02/2009
Issuing Date	06/13/2013
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.