



MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Material name Cherry Red Hardening Compound
Version # 01
Issue date 20-June-2013
Revision date -
Supersedes date -
CAS # Mixture
Manufacturer information
Manufacturer/Supplier Harris Products Group
4501 Quality Place
Mason, Ohio 45040 US
salesinfo@jwharris.com
Telephone number 513-754-2000
Emergency Telephone Numbers 1-866-519-4752 (US, Canada, Mexico only)
(+) 1-760-476-3962
Please quote 333895

2. Hazards Identification

Physical state Solid.
Appearance Gray powder.
Emergency overview WARNING
Causes skin, eye and respiratory tract irritation.
OSHA regulatory status This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication).
Potential health effects
Routes of exposure Inhalation. Skin contact. Eye contact. Ingestion.
Eyes Causes eye irritation. Exposed individuals may experience eye tearing, redness, and discomfort.
Skin Causes skin irritation.
Inhalation Causes respiratory tract irritation. Symptoms may include coughing, difficulty breathing and shortness of breath.
Ingestion May cause irritation of the gastrointestinal tract.
Target organs Respiratory system Eyes. Skin.
Chronic effects Prolonged skin contact may cause dermatitis.
Signs and symptoms Symptoms include nausea, vomiting, and diarrhea. Shortness of breath.
Potential environmental effects The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

3. Composition / Information on Ingredients

Components	CAS #	Percent
Potassium nitrate	7757-79-1	1 - 2.75
Chromium oxide	1308-38-9	0 - 1.5

Composition comments All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First Aid Measures

First aid procedures
Eye contact Rinse immediately with plenty of water for at least 15 minutes. Remove any contact lenses. Get medical attention.

Skin contact	Remove contaminated clothes and rinse skin thoroughly with water for at least 15 minutes. Get medical attention.
Inhalation	Remove person from contaminated area to fresh air. Apply artificial respiration if needed. If breathing is difficult, give oxygen. Call a physician if symptoms develop or persist.
Ingestion	Do NOT induce vomiting. Immediately rinse mouth and drink a cupful of water. Never give anything by mouth to an unconscious person. Get medical attention immediately.
Notes to physician	Treat symptomatically.
General advice	Show this safety data sheet to the doctor in attendance.

5. Fire Fighting Measures

Flammable properties	The product is non-combustible.
Extinguishing media	
Suitable extinguishing media	Use fire-extinguishing media appropriate for surrounding materials.
Unsuitable extinguishing media	None known.
Protection of firefighters	
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do it without risk.

6. Accidental Release Measures

Personal precautions	Keep unnecessary personnel away. Avoid inhalation of dust from the spilled material. Wear protective clothing as described in Section 8 of this MSDS. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not contaminate water.
Methods for containment	Stop leak if you can do so without risk. Local authorities should be advised if significant spillages cannot be contained.
Methods for cleaning up	Large Spills: Sweep up and place into a proper container for disposal. Avoid the generation of dusts during clean-up. Small Spills: Wipe up spilled material and place in a suitable container for disposal. For waste disposal, see Section 13 of the MSDS.
Other information	Clean up in accordance with all applicable regulations.

7. Handling and Storage

Handling	Keep formation of airborne dusts to a minimum. Avoid inhalation of dust and fumes. Avoid contact with skin and eyes. Wear appropriate personal protective equipment (See Section 8).
Storage	Store in tightly closed original container in a dry, cool and well-ventilated place. Store in a closed container away from incompatible materials. Keep away from food, drink and animal feedingstuffs.

8. Exposure Controls / Personal Protection

Occupational exposure limits

US. ACGIH Threshold Limit Values

Components	Type	Value
Chromium oxide (CAS 1308-38-9)	TWA	0.5 mg/m ³

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Chromium oxide (CAS 1308-38-9)	PEL	0.5 mg/m ³

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

Components	Type	Value
Chromium oxide (CAS 1308-38-9)	TWA	0.5 mg/m3

Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

Components	Type	Value
Chromium oxide (CAS 1308-38-9)	TWA	0.5 mg/m3

Mexico. Occupational Exposure Limit Values

Components	Type	Value
Chromium oxide (CAS 1308-38-9)	TWA	0.5 mg/m3

Engineering controls Provide adequate ventilation. Observe Occupational Exposure Limits and minimize the risk of inhalation of dust. Shower, hand and eye washing facilities near the workplace are recommended.

Personal protective equipment

Eye / face protection	Wear safety glasses with side shields (or goggles).
Skin protection	Wear chemical-resistant, impervious gloves. Chemical resistant clothing is recommended.
Respiratory protection	Use a respirator when local exhaust or ventilation is not adequate to keep exposures below the TLV. In a confined space a supplied respirator may be required. Selection and use of respiratory protective equipment should be in accordance with OSHA General Industry Standard 29 CFR 1910.134; or in Canada with CSA Standard Z94.4. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits.
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical & Chemical Properties

Appearance	Gray powder.
Physical state	Solid.
Form	Powder.
Color	Gray green
Odor	Slight odor.
Odor threshold	Not available.
pH	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Boiling point	Not available.
Melting point/Freezing point	Not available.
Solubility (water)	45.24% cold water; 78.15% hot water.
Specific gravity	2.12
Flash point	Not available.
Flammability limits in air, upper, % by volume	Not available.
Flammability limits in air, lower, % by volume	Not available.
Auto-ignition temperature	Not available.

10. Chemical Stability & Reactivity Information

Chemical stability	Material is stable under normal conditions.
Conditions to avoid	Moisture. Heat. Dust generation. Incompatible materials.
Incompatible materials	Strong acids. Chlorine trifluoride. Magnesium.

Hazardous decomposition products	Carbon oxides. Potassium oxides.
Possibility of hazardous reactions	Hazardous polymerization will not occur.

11. Toxicological Information

Toxicological data

Components	Species	Test Results
Potassium nitrate (CAS 7757-79-1)		
Acute		
Oral		
LD50	Rabbit	1166 mg/kg
	Rat	3750 mg/kg
Sensitization	Not a skin sensitizer.	
Acute effects	May cause irritation of the gastrointestinal tract.	
Local effects	Irritating to eyes, respiratory system and skin.	
Chronic effects	Prolonged skin contact may cause dermatitis.	
Carcinogenicity	Not classifiable as to carcinogenicity to humans.	
ACGIH Carcinogens		
Chromium oxide (CAS 1308-38-9)	A4 Not classifiable as a human carcinogen.	
IARC Monographs. Overall Evaluation of Carcinogenicity		
Chromium oxide (CAS 1308-38-9)	3 Not classifiable as to carcinogenicity to humans.	
Epidemiology	No data available.	
Mutagenicity	No data available.	
Reproductive effects	No data available.	
Further information	No other specific acute or chronic health impact noted.	

12. Ecological Information

Ecotoxicological data

Components	Species	Test Results
Potassium nitrate (CAS 7757-79-1)		
Aquatic		
Fish	LC50	Western mosquitofish (<i>Gambusia affinis</i>) 22.5 mg/l, 96 hours
Ecotoxicity	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.	
Environmental effects	No data available for this product.	
Persistence and degradability	No data available.	
Bioaccumulation / Accumulation	No data available on bioaccumulation.	
Mobility in environmental media	No data available.	

13. Disposal Considerations

Waste codes	The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Disposal instructions	Dispose in accordance with all applicable regulations.
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport Information

DOT

Not regulated as a hazardous material by DOT.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

TDG

Not regulated as dangerous goods.

15. Regulatory Information**US federal regulations**

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Chromium oxide (CAS 1308-38-9)

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: De minimis concentration

Chromium oxide (CAS 1308-38-9)

1.0 % N090

Potassium nitrate (CAS 7757-79-1)

1.0 % N511

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substance

Chromium oxide (CAS 1308-38-9)

N090 Listed.

Potassium nitrate (CAS 7757-79-1)

N511 Listed.

CERCLA (Superfund) reportable quantity (lbs) (40 CFR 302.4)

Chromium oxide: 10

Superfund Amendments and Reauthorization Act of 1986 (SARA)**Hazard categories**

Immediate Hazard - Yes

Delayed Hazard - Yes

Fire Hazard - No

Pressure Hazard - No

Reactivity Hazard - No

Section 302 extremely hazardous substance (40 CFR 355, Appendix A)

No

SARA 311/312 Hazardous chemical

Yes

Drug Enforcement Administration (DEA) (21 CFR 1308.11-15)

Not controlled

Canadian regulations

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

WHMIS status

Controlled

WHMIS classification

D2B - Other Toxic Effects-TOXIC

WHMIS labeling**Inventory status**

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes

Country(s) or region	Inventory name	On inventory (yes/no)*
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

State regulations This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

US - California Hazardous Substances (Director's): Listed substance

Chromium oxide (CAS 1308-38-9) Listed.

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Not listed.

US - New Jersey RTK - Substances: Listed substance

Chromium oxide (CAS 1308-38-9) Listed.

Potassium nitrate (CAS 7757-79-1) Listed.

US. Massachusetts RTK - Substance List

Chromium oxide (CAS 1308-38-9) Listed.

Potassium nitrate (CAS 7757-79-1) Listed.

US. New Jersey Worker and Community Right-to-Know Act

Chromium oxide (CAS 1308-38-9) 500 lbs

Potassium nitrate (CAS 7757-79-1) 500 lbs

US. Pennsylvania RTK - Hazardous Substances

Chromium oxide (CAS 1308-38-9) Listed.

Potassium nitrate (CAS 7757-79-1) Listed.

Mexico regulations This safety data sheet was prepared in accordance with the Official Mexican Standard (NOM-018-STPS-2000).

16. Other Information

Further information HMIS® is a registered trade and service mark of the NPCA.

HMIS® ratings
Health: 1*
Flammability: 1
Physical hazard: 1

NFPA ratings
Health: 1
Flammability: 1
Instability: 1

Disclaimer The information in the sheet was written based on the best knowledge and experience currently available.