



SAFETY DATA SHEET

Issue Date 13-May-2015

Revision Date 27-May-2015

Version 3

1. IDENTIFICATION

Product identifier

Product Name

Wolmanac® Concentrate 60%

Other means of identification

Product Code

22500

UN/ID no

UN2922

Registration Number(s)

EPA: 62190-14

Recommended use of the chemical and restrictions on use

Recommended Use

FIFRA - Restricted Use.

Details of the supplier of the safety data sheet

Supplier Address

Arch Wood Protection, Inc.
360 Interstate North Parkway, Suite 450
Atlanta, GA 30339

Emergency telephone number

Company Phone Number

1-800-511-MSDS (Outside USA: 1-423-780-2347)

24 Hour Emergency Phone Number

1-800-654-6911 (Outside USA: 1-423-780-2970)

Emergency Telephone

For all transportation accidents call Chemtrec 1-800-424-9300 (Outside USA: 1-703-527-3887)

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Category 3
Acute toxicity - Dermal	Category 3
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1
Skin sensitization	Category 1
Carcinogenicity	Category 1A

Label elements

Emergency Overview

Danger

Hazard statements

Toxic if swallowed
Toxic in contact with skin
Harmful if inhaled
Causes severe skin burns and eye damage
May cause an allergic skin reaction
May cause cancer

**Appearance** Liquid**Physical state** liquid**Odor** Slight metallic**Precautionary Statements - Prevention**

Read label before use
 Obtain special instructions before use
 Do not handle until all safety precautions have been read and understood
 Use personal protective equipment as required
 Wash face, hands and any exposed skin thoroughly after handling
 Do not eat, drink or smoke when using this product
 Use only outdoors or in a well-ventilated area
 Do not breathe dust/fume/gas/mist/vapors/spray
 Contaminated work clothing should not be allowed out of the workplace
 Wear protective gloves

Precautionary Statements - Response

Specific treatment (see first aid section on this label)
 Immediately call a POISON CENTER or doctor/physician
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 Immediately call a POISON CENTER or doctor/physician
 Call a POISON CENTER or doctor/physician if you feel unwell
 Wash contaminated clothing before reuse
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
 If skin irritation or rash occurs: Get medical advice/attention
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
 Call a POISON CENTER or doctor/physician if you feel unwell
 Immediately call a POISON CENTER or doctor/physician
 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
 Rinse mouth
 Do NOT induce vomiting

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not applicable

Other Information

Very toxic to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Chemical Name	CAS No	Weight-%	Trade Secret
Chromic Acid (CrO3)	7738-94-5	28.5	

Arsenic Acid	7778-39-4	24.0	
Cupric Oxide	1317-38-0	11.1	

4. FIRST AID MEASURES

Description of first aid measures

General advice	Emergency telephone number. 1-800-654-6911 (Outside USA: 1-423-780-2970).
Eye contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Do not rub affected area.
Skin contact	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
Inhalation	Remove to fresh air. Call a physician immediately. If not breathing, give artificial respiration.
Ingestion	If swallowed, call a poison control center or physician immediately. If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

Most important symptoms and effects, both acute and delayed

Symptoms See Section 11: TOXICOLOGICAL INFORMATION.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Carbon dioxide (CO₂). Water spray or fog.

Unsuitable extinguishing media Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical

No information available.

Hazardous combustion products Toxic gas.

Explosion data

Sensitivity to Mechanical Impact Warning.

Sensitivity to Static Discharge Warning.

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.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation, especially in confined areas.

For emergency responders Use personal protection recommended in Section 8.

Environmental precautions

Environmental precautions See Section 12: ECOLOGICAL INFORMATION.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Dam up. Prevent product from entering drains. After cleaning, flush away traces with water. Take up mechanically, placing in appropriate containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible materials Reducing agent. Organic. Metals. Zinc.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Chromic Acid (CrO ₃) 7738-94-5	-	TWA: 5 µg/m ³ (vacated) Ceiling: 0.1 mg/m ³ Ceiling: 0.1 mg/m ³ CrO ₃ applies to any operations or sectors for which the Hexavalent Chromium standard [29 CFR 1910.1026] is stayed or is otherwise not in effect	TWA: 0.0002 mg/m ³ Cr
Arsenic Acid 7778-39-4	TWA: 0.01 mg/m ³ As	TWA: 10 µg/m ³ As	IDLH: 5 mg/m ³ As Ceiling: 0.002 mg/m ³ As 15 min
Cupric Oxide 1317-38-0	TWA: 1 mg/m ³ Cu dust and mist	-	IDLH: 100 mg/m ³ Cu dust and mist TWA: 0.1 mg/m ³ Cu fume TWA: 1 mg/m ³ Cu dust and mist

NIOSH IDLH *Immediately Dangerous to Life or Health*

Other Information Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Appropriate engineering controls

Engineering Controls Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Goggles. Face protection shield.

Skin and body protection Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Respiratory protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Take off all contaminated clothing and wash it before reuse. Avoid contact with skin, eyes or clothing. Wash face, hands and any exposed skin thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Appearance Color	liquid Liquid orange brown	Odor Odor threshold	Slight metallic No information available
------------------------------------------------------------	----------------------------------	--------------------------------------	---------------------------------------------

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	1.9	
Melting point / freezing point	-30 °C	
Boiling point / boiling range	107 °C	
Flash point	Does not flash	
Evaporation rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit:	No information available	
Lower flammability limit:	No information available	
Vapor pressure	No information available	
Vapor density	No information available	
Relative density	1.8	
Water solubility	Soluble in water	
Solubility in other solvents	No information available	
Partition coefficient	No information available	
Autoignition temperature	No information available	
Decomposition temperature	No information available	
Kinematic viscosity	No information available	
Dynamic viscosity	23 CPS	
Explosive properties	No information available	
Oxidizing properties	Not applicable	

Other Information

Softening point Molecular weight VOC Content (%) Density Bulk density	No information available No information available Not applicable 15 No information available
----------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

Extremes of temperature and direct sunlight.

Incompatible materials

Reducing agent. Organic. Metals. Zinc.

Hazardous Decomposition Products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation	Harmful by inhalation. Inhalation of vapors in high concentration may cause irritation of respiratory system. Aspiration into lungs can produce severe lung damage. Avoid breathing vapors or mists.
Eye contact	Risk of serious damage to eyes. Avoid contact with eyes.
Skin contact	Toxic in contact with skin. May cause burns. Avoid contact with skin.
Ingestion	Toxic if swallowed. Ingestion causes burns of the upper digestive and respiratory tracts. May cause adverse liver effects. May cause adverse kidney effects. Do not taste or swallow.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Chromic Acid (CrO3) 7738-94-5	80 mg/kg (Rat)	-	-
Arsenic Acid 7778-39-4	= 141.4 mg/kg (Rat)	= 1,750 mg/kg Rat(m)	0.794 mg/L Rat(m)
Cupric Oxide 1317-38-0	>2,500 mg/kg LD50 (Rat)	>3,500 mg/kg LD50 (Rat)	-

Information on toxicological effects

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization May cause sensitization by skin contact.

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

Chemical Name	ACGIH	IARC	NTP	OSHA
Chromic Acid (CrO3) 7738-94-5	-	Group 1	Known	X
Arsenic Acid 7778-39-4	A1	Group 1	Known	X

ACGIH (American Conference of Governmental Industrial Hygienists)

A1 - Known Human Carcinogen

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

NTP (National Toxicology Program)

Known - Known Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

Reproductive toxicity This product does not contain any known or suspected reproductive hazards.
Chronic toxicity May cause adverse liver effects.
Target Organ Effects Eyes, kidney, liver, lungs, Lymphatic System, Respiratory system, Skin.

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral)

ATEmix (dermal)

ATEmix (inhalation-gas)

ATEmix (inhalation-dust/mist)

ATEmix (inhalation-vapor)

Numerical measures of toxicity

Oral LD50 188 mg/kg (rat) (rat, 4 hr)

Dermal LD50 520 mg/kg (rabbit)

Inhalation LC50 Estimated > 1 mg/l rat

12. ECOLOGICAL INFORMATION**Ecotoxicity**

No information available

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Arsenic Acid 7778-39-4	31 mg/L EC50 24d Asterionella formosa	28 mg/L LC50 96h Cyprinodon variegatus	2 mg/L EC50 96h Americamysis bahia
Cupric Oxide 1317-38-0	0.031 - 0.51 mg/L EC10 72h Pseudokirchneriella subcapitata	0.1 mg/L LC50 96h Oncorhynchus mykiss	0.0058 - 0.0073 mg/L EC50 48h Daphnia magna

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261).

Contaminated packaging Empty containers must be tripled rinsed prior to disposal. Do not reuse container. Dispose of in accordance with federal, state and local regulations.

US EPA Waste Number D002 D004 D007

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Arsenic Acid 7778-39-4	P010	-	-	-

Chemical Name	California Hazardous Waste Status
Chromic Acid (CrO3) 7738-94-5	Toxic Corrosive Ignitable
Cupric Oxide 1317-38-0	Toxic

14. TRANSPORT INFORMATION

DOT

UN/ID no UN2922
Proper shipping name Corrosive liquid, toxic, n.o.s.
Hazard Class 8
Subsidiary class 6.1
Packing Group II
Special Provisions B3, IB2, T7, TP2
Description UN2922, Corrosive liquid, toxic, n.o.s.(Arsenic Acid, Chromic Acid), 8, 6.1, II
Emergency Response Guide Number 154

TDG

UN/ID no UN2922
Proper shipping name Corrosive liquid, toxic, n.o.s.
Hazard Class 8
Subsidiary class 6.1
Packing Group II
Description UN2922, Corrosive liquid, toxic, n.o.s.(Arsenic Acid, Chromic Acid), 8 (6.1), II

MEX

UN/ID no	UN2922
Proper shipping name	Corrosive liquid, toxic, n.o.s.
Hazard Class	8
Subsidiary class	6.1
Packing Group	II
Description	UN2922, Corrosive liquid, toxic, n.o.s. (Arsenic Acid, Chromic Acid), 8 (6.1), II

ICAO (air)

UN/ID no	UN2922
Proper shipping name	Corrosive liquid, toxic, n.o.s.
Hazard Class	8
Subsidiary hazard class	6.1
Packing Group	II
Special Provisions	A3
Description	UN2922, Corrosive liquid, toxic, n.o.s. (Arsenic Acid, Chromic Acid), 8 (6.1), II

IATA

UN/ID no	UN2922
Proper shipping name	Corrosive liquid, toxic, n.o.s.
Hazard Class	8
Subsidiary hazard class	6.1
Packing Group	II
ERG Code	8P
Special Provisions	A3, A803
Description	UN2922, Corrosive liquid, toxic, n.o.s., (Arsenic Acid, Chromic Acid), 8 (6.1), II

IMDG

UN/ID no	UN2922
Proper shipping name	Corrosive liquid, toxic, n.o.s.
Hazard Class	8
Subsidiary hazard class	6.1
Packing Group	II
EmS-No	F-A, S-B
Special Provisions	274
Marine pollutant	This material meets the definition of a marine pollutant
Description	UN2922, Corrosive liquids, toxic, n.o.s., (Arsenic Acid, Chromic Acid), 8 (6.1), II, Marine Pollutant

RID

UN/ID no	UN2922
Proper shipping name	Corrosive liquid, toxic, n.o.s.
Hazard Class	8
Packing Group	II
Classification code	CT1
Description	UN2922, Corrosive liquid, toxic, n.o.s. (Arsenic Acid, Chromic Acid), 8 (6.1), II
Labels	6.1

ADR

UN/ID no	UN2922
Proper shipping name	Corrosive liquid, toxic, n.o.s.
Hazard Class	8
Packing Group	II
Classification code	CT1
Tunnel restriction code	(E)
Special Provisions	274
Description	UN2922, Corrosive liquid, toxic, n.o.s. (Arsenic Acid, Chromic Acid), 8 (6.1), II, (E)
Labels	8 + 6.1

ADN

Proper shipping name	Corrosive liquid, toxic, n.o.s.
Hazard Class	8
Packing Group	II

Classification code	CT1
Special Provisions	274, 802
Description	UN2922, Corrosive liquid, toxic, n.o.s. (Arsenic Acid, Chromic Acid), 8 (6.1), II
Hazard label(s)	8 + 6.1
Limited quantity (LQ)	1 L
Ventilation	VE02

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	Does not comply
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

US 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

Chemical Name	SARA 313 - Threshold Values %
Chromic Acid (CrO3) - 7738-94-5	0.1
Arsenic Acid - 7778-39-4	0.1
Cupric Oxide - 1317-38-0	1.0

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	Yes
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Chromic Acid (CrO3) 7738-94-5	10 lb	X	-	-
Arsenic Acid 7778-39-4	-	X	-	-
Cupric Oxide 1317-38-0	-	X	-	-

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Chromic Acid (CrO3) 7738-94-5	10 lb	-	RQ 10 lb final RQ RQ 4.54 kg final RQ
Arsenic Acid 7778-39-4	1 lb	-	RQ 1 lb final RQ RQ 0.454 kg final RQ

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals

Chemical Name	California Proposition 65
Chromic Acid (CrO3) - 7738-94-5	Carcinogen Developmental Female Reproductive Male Reproductive
Arsenic Acid - 7778-39-4	Carcinogen
Lead - impurity - 7439-92-1	Carcinogen Developmental Female Reproductive Male Reproductive

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Water 7732-18-5	-	-	X
Chromic Acid (CrO3) 7738-94-5	X	X	X
Arsenic Acid 7778-39-4	X	X	X
Cupric Oxide 1317-38-0	X	-	X
Lead - impurity 7439-92-1	X	X	X

U.S. EPA Label Information

EPA Pesticide Registration Number 62190-14

Difference between SDS and EPA Pesticide label

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

Danger

Corrosive - causes irreversible eye damage and skin burns

The product causes burns of eyes, skin and mucous membranes

Fatal if inhaled.

May be Fatal if swallowed

Can be fatal if absorbed through the skin

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

NFPA	Health hazards 3	Flammability 0	Instability 0	Physical and Chemical Properties -
HMIS	Health hazards 3	Flammability 0	Physical hazards 0	Personal protection X

Issue Date 13-May-2015

Revision Date 27-May-2015

Revision Note

No information available

Disclaimer

The information provided in this Material Safety Data Sheet 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.

End of Safety Data Sheet