SAFETY DATA SHEET

TRI KROME BLUE B2

Prepared according to U.S. OSHA, CMA, ANSI, Canadian WHMIS, Australian WorkSafe, Japanese Industrial Standard JIS Z 7250:2000, and European Union REACH Regulations

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME:	**TRI KROME BLUE B2**
PRODUCT CODE:	ZC1400
CHEMICAL FAMILY NAME:	Mixture
U.N. NUMBER:	UN3264
U.N. DANGEROUS GOODS CLASS:	Corrosive liquid, acidic, inorganic, n.o.s. (Contains Nitric Acid), Class 8, PGII
SUPPLIER/MANUFACTURER'S NAME:	**PAVCO INC**
ADDRESS:	1935 John Crosland Jr. Dr, Charlotte, NC 28208 USA
EMERGENCY PHONE:	**TOLL-FREE in USA/Canada** 1-800-424-9300 Chemtrec
BUSINESS PHONE:	1-704-496-6800 (Product Information)
BUSINESS FAX:	1-704-496-6810
WEB SITE:	www.pavco.com
DATE OF PREPARATION:	March 10, 2015
DATE OF LAST REVISION:	October 23, 2013

SECTION 2 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

Product Description: This product is a green/blue liquid with a slight odor.

Health Hazards: Prolonged or repeated exposure to this product may cause skin irritation. Contact with eyes may cause severe irritation. Ingestion may cause gastrointestinal discomfort. Inhalation of vapor or mist may cause respiratory irritation.

Flammability Hazards: This product is Non-Flammable with a flash point greater than 200°F

Reactivity Hazards: Slightly reactive

Environmental Hazards: No data available on this product and its effects on aquatic life if released into the environment. However, release of this product is expected to have adverse long lasting environmental effects.

Emergency Considerations: Emergency responders must wear the proper personal protective equipment (and have appropriate fire-suppression equipment) suitable for the situation to which they are responding.

US DOT SYMBOLS

CANADA (WHMIS) SYMBOLS

EUROPEAN and (GHS) Hazard Symbols

Signal Word: **Danger!**

GHS LABELING AND CLASSIFICATION:

CLASSIFICATION OF SUBSTANCE OR MIXTURE IN ACCORDANCE WITH 29 CFR 1200 (OSHA HCS) AND THE EUROPEAN UNION DIRECTIVES:

This product does meet the definition of a hazardous substance or preparation as defined by 29 CFR 1910. 1200 and the European Union Council Directives 67/548/EEC, 1999/45/EC, 1272/2008/EC and subsequent Directives.

Classification of the substance or mixture according to Regulation (EC) No1272/2008 Annex VI

EC# 231-791-2 This substance is not classified in the Annex I of Directive 67/548/EEC

EC# 231-714-2 Annex I Index# 007-004-00-1

EC# 236-921-1 This substance is not classified in the Annex I of Directive 67/548/EEC

EC# 215-676-4 Annex I Index# 009-009-00-4

EC# 231-639-5 Annex I Index# 016-020-00-8

Substances not listed either individually or in group entries must be self classified.

GHS Hazard Classification(s):

Acute Oral Toxicity Category 4
Skin Corrosive Category 1A
Acute Aquatic Toxicity Category 1
Chronic Aquatic Toxicity category 3

Hazard Statement(s):

H302: Harmful if swallowed

Precautionary Statement(s):

P264: Wash hands thoroughly after handling.

H314: Causes severe skin burns and eye damage
H400: Very toxic to aquatic life

P270: Do not eat, drink or smoke when using this product.
P280: Wear protective gloves/protective clothing/eye protection/face protection

EU HAZARD CLASSIFICATION PER DIRECTIVE 1999/45/EC:
[C] Corrosive, [T] Toxic, [N] Dangerous to the Environment

Risk Phrases:
R22: Harmful if swallowed
R34: Causes burns
R50/53: Very Toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment.

Safety Phrases:
S24/25: Avoid contact with skin and eyes.
S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S46: If swallowed, seek medical advice immediately and show container or label.
S61: Avoid release to the environment

HEALTH HAZARDS OR RISKS FROM EXPOSURE:
ACUTE:
EYE CONTACT: Eye exposure may produce diffuse or localized blood vessel clots and accumulation of fluid in the eye. Softening, sloughing, and ulcerations of the cornea may occur. Ulcerations may continue to progress for many days. Severe injury may lead to clouding of the eye surface and blindness.
SKIN CONTACT: Can be moderately corrosive. Contact may not cause symptoms for several hours.
INHALATION HAZARDS: May be irritating to the respiratory tract. Swelling or spasms of the layers leading to upper airway obstruction and asphyxia can occur after high-dose inhalation. Inflammation of the lungs and accumulation of fluid in the lungs may also occur.
INGESTION HAZARDS: Can cause spontaneous vomiting, chest and abdominal pain, and difficulty swallowing with drooling. Corrosive injury to the mouth, throat, esophagus, and stomach may result in perforation, hemorrhage, and narrowing of the gastrointestinal tract.
CHRONIC: Material may destroy or damage any organ it comes in contact with.

TARGET ORGANS: ACUTE: Eye, Skin, Respiratory System CHRONIC: Eye, Skin, Respiratory System

SECTION 3 - COMPOSITION and INFORMATION ON INGREDIENTS

HAZARDOUS INGREDIENTS:	CAS #	EINECS #	ICSC #	WT %	HAZARD CLASSIFICATION; RISK PHRASES
Water	7732-18-5	231-791-2	Not Listed	50 - 60%	HAZARD CLASSIFICATION: None RISK PHRASES: None
Nitric Acid	7697-37-2	231-714-2	0183	10 - 30%	HAZARD CLASSIFICATION: [C] Corrosive RISK PHRASES: R35
Chrome III Nitrate	13548-38-4	236-921-1	Not Listed	1 – 5%	HAZARD CLASSIFICATION: [C] Corrosive RISK PHRASES: R34
Ammonium Bifluoride	1341-49-7	215-676-4	Not Listed	1 – 5%	HAZARD CLASSIFICATION: [C] Corrosive, [Xn] Harmful RISK PHRASES: R34, R22
Sulfuric Acid	7664-93-9	231-639-5	0362	1 - 5%	HAZARD CLASSIFICATION: [Xi] Irritant RISK PHRASES: R36/38
Balance of other ingredients are non-hazardous or hazardous in less than 1% in concentration (or 0.1% for carcinogens, reproductive toxins, or respiratory sensitizers).					

NOTE: ALL WHMIS required information is included in appropriate sections based on the ANSI Z400.1-2010 format. This product has been classified in accordance with the hazard criteria of the CPR and the SDS contains all the information required by the CPR, EU Directives and the Japanese Industrial Standard *JIS Z 7250: 2000*.

SECTION 4 - FIRST-AID MEASURES

EYE CONTACT: If product enters the eyes, open eyes while under gentle running water for at least 15 minutes. Seek medical attention.
SKIN CONTACT: Wash skin thoroughly after handling. Seek medical attention if irritation develops and persists. Remove contaminated clothing. Launder contaminated clothing before re-use.

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INHALATION: If breathing becomes difficult, remove victim to fresh air. If necessary, use artificial respiration to support vital functions. Seek medical attention if breathing dificulty continues.

INGESTION: If product is swallowed, call physician or poison control center for most current information. If professional advice is not available, do not induce vomiting. Never induce vomiting or give diluents (milk or water) to someone who is unconscious, having convulsions, or who cannot swallow. Seek medical advice. Take a copy of the label and/or SDS with the victim to the health professional.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Pre-existing skin problems may be aggravated by exposure to this product.

RECOMMENDATIONS TO PHYSICIANS: Treat symptoms and reduce over-exposure.

SECTION 5 - FIRE-FIGHTING MEASURES

FLASH POINT: Non-Flammable >200°F

AUTOIGNITION TEMPERATURE: Not Applicable

FLAMMABLE LIMITS (in air by volume, %): Lower (LEL): Not Applicable Upper (UEL): Not Applicable

FIRE EXTINGUISHING MATERIALS: Use media suitable for surrounding area. Carbon dioxide, foam, dry chemical, halon, water spray.

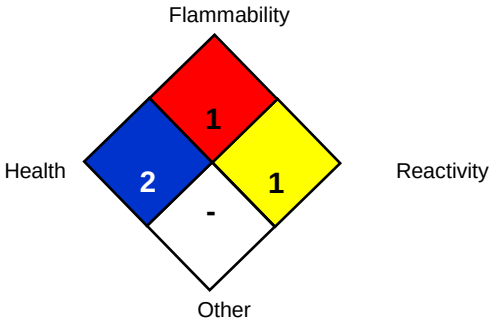
UNUSUAL FIRE AND EXPLOSION HAZARDS: None known

Explosion Sensitivity to Mechanical Impact: Not Sensitive.

Explosion Sensitivity to Static Discharge: Not Sensitive

SPECIAL FIRE-FIGHTING PROCEDURES: Incipient fire responders should wear eye protection. Structural firefighters must wear Self-Contained Breathing Apparatus and full protective equipment. Isolate materials not yet involved in the fire and protect personnel. Move containers from fire area if this can be done without risk; otherwise, cool with carefully applied water spray. If possible, prevent runoff water from entering storm drains, bodies of water, or other environmentally sensitive areas.

NFPA RATING SYSTEM



HMIS RATING SYSTEM

HAZARDOUS MATERIAL IDENTIFICATION SYSTEM

HEALTH HAZARD (BLUE)	**2**
FLAMMABILITY HAZARD (RED)	**1**
PHYSICAL HAZARD (YELLOW)	**1**

PROTECTIVE EQUIPMENT			
EYES	RESPIRATORY	HANDS	BODY
	See Sect 8		See Sect 8

For Routine Industrial Use and Handling Applications

Hazard Scale: **0** = Minimal **1** = Slight **2** = Moderate **3** = Serious **4** = Severe * = Chronic hazard

SECTION 6 - ACCIDENTAL RELEASE MEASURES

SPILL AND LEAK RESPONSE: Personnel should be trained for spill response operations.

SPILLS: SMALL SPILL: Absorb material with rags, floor absorbent, vermiculite, or other absorbent material and transfer to an appropriate container. LARGE SPILL: Dike the area of the spill to prevent spreading. The material may then be taken up with vacuum or absorbent material and transferred to appropriate containers.

Notify proper authorities if required by local, state, or federal regulations.

Dispose of in accordance with applicable Federal, State, and local procedures (see Section 13, Disposal Considerations).

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SECTION 7 - HANDLING and STORAGE

WORK PRACTICES AND HYGIENE PRACTICES: As with all chemicals, avoid getting this product ON YOU or IN YOU. Wash thoroughly after handling this product. Do not eat, drink, smoke, or apply cosmetics while handling this product. Use in a well-ventilated location. Remove contaminated clothing immediately.

STORAGE AND HANDLING PRACTICES: Store in a cool well ventilated location in original container. Protect from physical damage. For storage & usage, it is important to take special notice of the shelf life of this product which is provided on the Cert. of Analysis.

SECTION 8 - EXPOSURE CONTROLS - PERSONAL PROTECTION

EXPOSURE LIMITS/GUIDELINES:

Chemical Name	CAS#	ACGIH TWA	OSHA TWA	WEEL
Water	7732-18-5	Not Listed	Not Listed	Not Listed
Nitric Acid	7697-37-2	2 ppm	2 ppm	2 ppm
Chrome III Nitrate	13548-38-4	Not Listed	Not Listed	Not Listed
Ammonium Bifluoride	1341-49-7	2.5 ppm	Not Listed	Not Listed
Sulfuric Acid	7664-93-9	1.0 mg/m³	1.0 mg/m³	1.0 mg/m³

Currently, International exposure limits are not established for the components of this product. Please check with competent authority in each country for the most recent limits in place.

VENTILATION AND ENGINEERING CONTROLS: Use with adequate ventilation to ensure exposure levels are maintained below the limits provided above. Use local exhaust ventilation to control airborne vapor. Ensure eyewash/safety shower stations are available near areas where this product is used.

The following information on appropriate Personal Protective Equipment is provided to assist employers in complying with OSHA regulations found in 29 CFR Subpart I (beginning at 1910.132) or equivalent standard of Canada, or standards of EU member states (including EN 149 for respiratory PPE, and EN 166 for face/eye protection), and those of Japan. Please reference applicable regulations and standards for relevant details.

RESPIRATORY PROTECTION: Maintain airborne contaminant concentrations below guidelines listed above, if applicable. If necessary, use only respiratory protection authorized in the U.S. Federal OSHA Respiratory Protection Standard (29 CFR 1910.134), equivalent U.S. State standards, Canadian CSA Standard Z94.4-93, the European Standard EN149, or EU member states.

EYE PROTECTION: Safety glasses or chemical goggles as appropriate to prevent eye contact. If necessary, refer to U.S. OSHA 29 CFR 1910.133 or appropriate Canadian Standards.

HAND PROTECTION: Use chemical resistant gloves to prevent skin contact. If necessary, refer to U.S. OSHA 29 CFR 1910.138 or appropriate Standards of Canada.

BODY PROTECTION: Use body protection appropriate to prevent contact (e.g. lab coat, overalls). If necessary, refer to appropriate Standards of Canada, or appropriate Standards of the EU, Australian Standards, or relevant Japanese Standards.

SECTION 9 - PHYSICAL and CHEMICAL PROPERTIES

PHYSICAL STATE:	Liquid
APPEARANCE & ODOR:	Green/blue liquid with a slight odor.
ODOR THRESHOLD (PPM):	None
VAPOR PRESSURE (mmHg):	Not Available
VAPOR DENSITY:	Not Available
EVAPORATION RATE (nBuAc = 1):	Not Available
BOILING POINT (C°):	95°C - 105°C (203°F - 221°F)
FREEZING POINT (C°):	Not Available
pH:	<2.5
SPECIFIC GRAVITY 20°C: (WATER =1)	1.147

SOLUBILITY IN WATER (%) Complete
% VOLATILE WEIGHT: None

SECTION 10 - STABILITY and REACTIVITY

STABILITY: Product is stable
DECOMPOSITION PRODUCTS: When heated to decomposition this product produces oxides of carbon and nitrogen.
MATERIALS WITH WHICH SUBSTANCE IS INCOMPATIBLE: Reacts with bases, metals such as iron, and zinc, and easly oxidized material.
HAZARDOUS POLYMERIZATION: Will not occur.
CONDITIONS TO AVOID: Incompatible materials. Concentrated material can react violently when mixed with many materials.

SECTION 11 - TOXICOLOGICAL INFORMATION

TOXICITY DATA: Toxicity data is not available for this product
CAS# 7697-37-2:
Inhalation, Rat: LC50 = 260 mg/m3/30M;
Inhalation, Rat: LC50 = 130 mg/m3/4H;
Inhalation, Rat: LC50 = 67 ppm(NO2)/4H;
CAS# 7664-93-9:
Oral LD50 = >5,000 mg/kg
SUSPECTED CANCER AGENT: None of the ingredients are found on the following lists: FEDERAL OSHA Z LIST, NTP, CAL/OSHA, IARC and therefore are not considered to be, nor suspected to be a cancer-causing agent by these agencies.
IRRITANCY OF PRODUCT: Contact with this product can be irritating to exposed skin and eyes.
SENSITIZATION OF PRODUCT: This product does not contain ingredients that is considered a skin and respiratory sensitizer.
REPRODUCTIVE TOXICITY INFORMATION: No information concerning the effects of this product and its components on the human reproductive system.

SECTION 12 - ECOLOGICAL INFORMATION

ALL WORK PRACTICES MUST BE AIMED AT ELIMINATING ENVIRONMENTAL CONTAMINATION.
ENVIRONMENTAL STABILITY: No specific data is available for this product. Material is hazardous due to low pH value. Precautions should be taken to prevent contamination of environment.
EFFECT OF MATERIAL ON PLANTS or ANIMALS: No evidence is currently available on this product's effects on plants or animals.
EFFECT OF CHEMICAL ON AQUATIC LIFE: No data available

SECTION 13 - DISPOSAL CONSIDERATIONS

PREPARING WASTES FOR DISPOSAL: Waste disposal must be in accordance with appropriate Federal, State, and local regulations, those of Canada, Australia, EU Member States and Japan.
RCRA WASTE CODE: Not Known
EU WASTE CODE: Not known – Dependent on use and contamination

SECTION 14 - TRANSPORTATION INFORMATION

US DOT; IATA; IMO; ADR:
THIS PRODUCT IS CLASSIFIED AS DANGEROUS GOODS AS DEFINED BY 49 CFR 172.101 BY THE U.S. DEPARTMENT OF TRANSPORTATION.
PROPER SHIPPING NAME: Corrosive liquid, Acidic, Inorganic, n.o.s. (Contains Nitric Acid)
HAZARD CLASS NUMBER and DESCRIPTION: Class 8 Corrosive
UN IDENTIFICATION NUMBER: UN3264
PACKING GROUP: PGII

DOT LABEL(S) REQUIRED: Corrosive
NORTH AMERICAN EMERGENCY RESPONSE GUIDEBOOK NUMBER (2012): 154
MARINE POLLUTANT: This product does contain ingredients that are classified by the DOT as a Marine Pollutant (as defined by 49 CFR 172.101, Appendix B)

TRANSPORT CANADA, TRANSPORTATION OF DANGEROUS GOODS REGULATIONS:
This product is classified as Dangerous Goods, per regulations of Transport Canada

INTERNATIONAL AIR TRANSPORT ASSOCIATION (IATA):
This product is classified as Dangerous Goods, by rules of IATA:

INTERNATIONAL MARITIME ORGANIZATION (IMO) DESIGNATION:
This product is classified as Dangerous Goods by the International Maritime Organization.

EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY ROAD (ADR):
This product is classified by the United Nations Economic Commission for Europe to be dangerous goods.

SECTION 15 - REGULATORY INFORMATION

UNITED STATES REGULATIONS

SARA REPORTING REQUIREMENTS: This product is subject to the reporting requirements of Sections 302, 304 and 313 of Title III of the Superfund Amendments and Reauthorization Act., as follows:
SARA 302 TPQ: CAS# 7697-37-2 TPQ = 1,000 Lbs
SARA 304 RQ: CAS# 7697-37-2 RQ = 1,000 Lbs
SARA 313 Reporting: This material contains Nitric Acid, <30%, (CAS# 7697-37-2) which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373

TSCA: All components in this product are listed on the US Toxic Substances Control Act (TSCA) inventory of chemicals.

SARA 311/312:

Acute Health: Yes Chronic Health: No Fire: No Reactivity: No

U.S. SARA THRESHOLD PLANNING QUANTITY: There are no specific Threshold Planning Quantities for this product. The default Federal SDS submission and inventory requirement filing threshold of 10,000 lb (4,540 kg) may apply, per 40 CFR 370.20.

U.S. CERCLA REPORTABLE QUANTITY (RQ): None

CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT (PROPOSITION 65): None of the ingredients is on the California Proposition 65 lists.

CANADIAN REGULATIONS:

CANADIAN DSL/NDSL INVENTORY STATUS: All of the components of this product are on the DSL Inventory

CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA) PRIORITIES SUBSTANCES LISTS: No component of this product is on the CEPA First Priorities Substance Lists.

CANADIAN WHMIS CLASSIFICATION and SYMBOLS: This product is categorized as Class D2B Materials causing other toxic effects and Class E Corrosive, as per the Controlled Product Regulations

EUROPEAN ECONOMIC COMMUNITY INFORMATION:

EU LABELING AND CLASSIFICATION:
Classification of the mixture according to Regulation (EC) No1272/2008. See section 2 for details.

AUSTRALIAN INFORMATION FOR PRODUCT:

AUSTRALIAN INVENTORY OF CHEMICAL SUBSTANCES (AICS) STATUS: All components of this product are listed on the AICS.

STANDARD FOR THE UNIFORM SCHEDULING OF DRUGS AND POISONS: Not applicable.

JAPANESE INFORMATION FOR PRODUCT:

JAPANESE MINISTER OF INTERNATIONAL TRADE AND INDUSTRY (MITI) STATUS: The components of this product are not listed as Class I Specified Chemical Substances, Class II Specified Chemical Substances, or Designated Chemical Substances by the Japanese MITI.

INTERNATIONAL CHEMICAL INVENTORIES:

Listing of the components on individual country Chemical Inventories is as follows:

Asia-Pac:	Listed
Australian Inventory of Chemical Substances (AICS):	Listed
Korean Existing Chemicals List (ECL):	Listed
Japanese Existing National Inventory of Chemical Substances (ENCS):	Listed
Philippines Inventory if Chemicals and Chemical Substances (PICCS):	Listed
Swiss Giftliste List of Toxic Substances:	Listed
U.S. TSCA:	Listed

SECTION 16 - OTHER INFORMATION

PREPARED BY: Paul Eigbrett MSDS Authoring PLUS

Disclaimer:

The suggestions and data provided herewith are based upon tests which Pavco Inc. believes to be reliable. However, we make no guarantee with respect thereto and assume no liability resulting from the use thereof. Users should make their own investigations to determine the suitability of the information or products for their particular purpose. Furthermore, nothing contained herein is intended as permission, inducement or recommendation to violate any laws or to practice any invention covered by existing patents.

End of SDS Sheet