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TETRA-CHEM INTERNATIONAL INC.

71 JOHN ST. E., BRIGHT, ON CANADA N0J 1B0  
TOLL FREE: 1-888-658-5515

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**Chem Wash**  
HYDRO-TEK TCI APPLIED SCIENCE

SPECIALTY CHEMISTRY INNOVATIVE ENGINEERING  
APPLICATION TECHNOLOGY WASTE MANAGEMENT SYSTEMS

2012 EDWARDS  
WICHITA, KS 67213 USA



email: [info@tetra-chem.com](mailto:info@tetra-chem.com)



RE-ORDER: 316-744-SOAP

## PRODUCT APPLICATION PRESENTATION

**TCI 712 H.D.™**

**LIQUID BRUSHLESS EXHAUST WASH CONCENTRATE**

### PRODUCT IDENTIFIER:

### PROCESS IDENTIFIER:

### PRODUCT PRESENTATION:

**TCI 712 H.D.** features a new "BRUSH-LESS CONCEPT" in the form of a super concentrated "GREEN" liquid formulation that combines the cleaning ability of biodegradable detergents, environmentally friendly sequestering agents and grease cutting alkalis. Designed with "PHOSPHATE FREE" chemistry. The water adjustable concentration strength is based on the degree of soil complexity encountered in the transportation industry (TRAINS, TRUCKS & TRAILERS, UTILITY TRUCKS, AIRCRAFT, SHIPS & BOATS, AGRICULTURAL EQUIPMENT ie. LIVESTOCK and DRY FEED BULK CARRIERS, BUSES, RV'S, CARS AND VANS) at ambient temperatures. Safe on all common surfaces when used according to directions.

### PROCESS PRESENTATION:

**TCI 712 H.D.** is designed for brushless vehicle washing when applied with the manufacturer's approved stationary **CHEMICAL PROPORTIONER APPLICATOR SYSTEM (SEE BROCHURE)** and sprayed as a light mist directly from the mixing tank onto the surface to be cleaned. The preportioned solution breaks the soil matrix quickly which is then affected by a high pressure (2000-3000 psi) cold water rinse.

**TCI 712 H.D.** is ideal for removing heavy encrustation of mud, bug splatter, excreta and road film with ease, lime dust & oxides from all surfaces sensitive to acid type cleaning solutions, automotive exhaust soot, oil, grease including grime. The chemical solution rinses freely and is thus **harmless to cold aluminum articles and paint** over time. This formulation improves light reflectivity by leaving a rich luxurious sheen behind.

### PROCESS SPECIFICITY:

**PREMIX TCI 712 H.D. CONCENTRATE WITH WATER TO SUIT THE APPLICATION EITHER MANUALLY OR WITH THE RECOMMENDED CHEMICAL PROPORTIONER FOAMING SYSTEM DEPENDING ON SOIL COMPLEXITY AND ACCUMULATED BUILD-UP DIRECTLY RELATED TO TIME.**

The process can be implemented for cleaning all types of painted surfaces, chrome, ferrous and non-ferrous metals (steel and copper), white metals (cold surface aluminum and magnesium) where daily or weekly maintenance will not tarnish or dull wheels, fuel tanks, bodies, stainless steel or truck accessories. Enormous time and labor savings are realized when the surface is rinsed with cold soft water at 4 gpm and 2000 - 3000 psi.

### PRODUCT SAFETY:

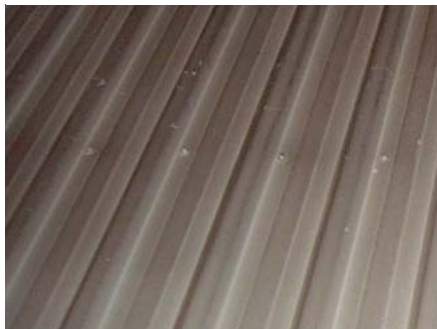
ACCORDING TO GOVERNMENT REGULATIONS READ MATERIAL SAFETY DATA SHEETS BEFORE USING ANY CHEMICAL PRODUCT. Contains mild alkalies and biodegradable surfactants. Do not take internally. If splashed on skin, flush thoroughly with water. Avoid prolonged skin contact with concentrate. If splashed in eyes, flush thoroughly with water. If irritation persists seek medical attention. Keep out of reach of children. FOR INDUSTRIAL AND INSTITUTIONAL USE ONLY.

**PACKAGING: 005, 055, 330 USgal**

Trailer Tarp Cleaning



Garage Wall - Exhaust Soot - Before



Garage Wall - Exhaust Soot - After



PLEASE CALL OUR **TECHNICAL SUPPORT LINE @ 1-888-658-5515** FOR SOLUTIONS TO YOUR INDUSTRY.  
CONSULT SERVICE REPRESENTATIVE FOR SAFE AND EFFICIENT APPLICATION

THE INFORMATION GIVEN HEREIN IS GIVEN IN GOOD FAITH BUT NO WARRANTY, EXPRESSED OR IMPLIED IS MADE

# M. S. D. S.

## MATERIAL SAFETY DATA SHEET

### SECTION I - PRODUCT IDENTIFICATION AND USE

**PRODUCT NAME:** T C I 7 1 2 H. D.  
**PRODUCT USE:** LIQUID BRUSHLESS TRANSPORTATION  
EQUIPMENT EXHAUST WASH CONCENTRATE  
**EMERGENCY PHONE #:** (519) 454-4370  
**MANUFACTURER'S NAME AND ADDRESS:**  
TETRA-CHEM INTERNATIONAL INC.  
71 JOHN ST. E., BRIGHT ON CA N0J 1B0  
TEL: (519) 454-4370 - FAX: (519) 454-4362  
**SUPPLIER'S NAME:** CHEM WASH  
2012 EDWARDS  
WICHITA, KS 67213 TEL: (316) 744-7627

### SECTION II - HAZARDOUS INGREDIENTS

| HAZARDOUS INGREDIENTS    | CAS #            | % BY WEIGHT      |
|--------------------------|------------------|------------------|
| No Hazardous Ingredients |                  |                  |
| (SPECIES - ROUTE)        | LD <sub>50</sub> | LC <sub>50</sub> |

### SECTION III - PHYSICAL DATA

**PHYSICAL STATE:** SOLID ☐ LIQUID ☒ GAS ☐  
**ODOR AND APPEARANCE:** PLEASANT MILD ODOR, GREEN LIQUID.  
**BOILING POINT:** 100 °C or 212 °F  
**FREEZING POINT:** N.AV.  
**DENSITY (g/ml):** 1.05  
**pH:** 11.9  
**% VOLATILE:** > 60  
**SPECIFIC GRAVITY (WATER=1):** 1.05  
**ODOR THRESHOLD:** N.AV.  
**VAPOR PRESSURE (mm Hg):** N.AV.  
**VAPOR DENSITY (AIR=1):** N.AV.  
**OIL / WATER DISTRIBUTION COEFF.:** N.AV.  
**SOLUBILITY IN WATER:** 100 %  
**EVAPORATION RATE (n-BUTYL ACETATE=1):** N.AV.

### SECTION IV - FIRE AND EXPLOSION HAZARD

**FLAMMABILITY:** YES ☐ NO ☒  
**UNDER WHAT CONDITIONS:**  
**TDG FLAMMABILITY CLASSIFICATION:** N.AP.  
**AUTO-IGNITION TEMPERATURE:** N.AP.  
**FLASH POINT:** N.AP. **METHOD USED:** .  
**FLAMMABLE LIMITS:** LEL (% BY VOLUME): N.AP.  
UEL (% BY VOLUME): N.AP.  
**TDG FLAMMABILITY CLASSIFICATION:**  
**MEANS OF EXTINCTION:**  
WATER ☐ CO<sub>2</sub> ☐ DRY CHEMICAL ☐ OTHER ☐  
**UNUSUAL FIRE AND EXPLOSION HAZARDS / REMARKS:**  
USE AN APPROPRIATE MEAN OF EXTINCTION FOR SURROUNDING FIRE.  
**HAZARDOUS COMBUSTION PRODUCTS:** NONE  
**EXPLOSION DATA:** SENSITIVITY TO MECHANICAL IMPACT: NONE  
SENSITIVITY TO STATIC DISCHARGE: NONE

### SECTION V - REACTIVITY DATA

**STABILITY:** UNSTABLE ☐ STABLE ☒  
**INCOMPATIBILITY OF OTHER SUBSTANCES:**  
STRONG OXIDIZING AGENTS AND ACIDIC MATERIALS.  
**CONDITIONS OF REACTIVITY:** MIXING  
**HAZARDOUS DECOMPOSITION PRODUCTS:**  
OXIDES OF CARBON, NITROGEN, AND PRODUCTS OF INCOMPLETE COMBUSTION.

### SECTION VI - TOXICOLOGICAL PROPERTIES

**CANADA WHMIS:** MATERIAL CAUSING OTHER TOXIC EFFECTS (D2)  
**POTENTIAL HEALTH HAZARDS**  
**ROUTE(S) OF ENTRY:**  
**SKIN (CONTACT):** NO (ABSORPTION): NO **INGESTION:** YES  
**INHALATION (ACUTE):** NO (CHRONIC): NO **EYE:** NO  
**INGREDIENTS** ACGIH TLV OSHA PEL  
**EFFECTS OF ACUTE EXPOSURE TO PRODUCT:**  
**EYE CONTACT:** MAY CAUSE PAIN, AND EYE IRRITATION.  
**SKIN CONTACT:** MAY CAUSE SKIN IRRITATION.  
**INHALATION:** MAY IRRITATE NOSE, THROAT AND LUNGS.  
**INGESTION:** MAY CAUSE MOUTH, THROAT AND GASTROINTESTINAL  
IRRITATION, LARGE DOSES MAY CAUSE MUSCLE PARALYSIS.  
**EFFECTS OF CHRONIC EXPOSURE TO PRODUCT:** N.AV.  
**CARCINOGENICITY, REPRODUCTIVE EFFECTS, TERATOGENICITY, MUTAGENICITY:** NO  
REPORTED EFFECTS ON HUMANS UNDER NORMAL CONDITIONS OF USE.  
**TARGET ORGANS:** N. AV.  
**MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:** N.AV.  
**SENSITIZATION TO PRODUCT:** NONE  
**SYNERGISTIC PRODUCTS:** NONE

### SECTION VII - PREVENTIVE MEASURES

**RESPIRATORY PROTECTION AND TYPE:** NONE REQUIRED  
**ENGINEERING CONTROLS:** NORMAL VENTILATION UNDER NORMAL CONDITIONS.  
**PROTECTIVE GLOVES:** RUBBER GLOVES FOR HANDLING CONCENTRATE.  
**EYE PROTECTION:** SAFETY GOGGLES **FOOT WEAR:** SAFETY SHOES  
**OTHER SPECIFIC CLOTHING OR EQUIPMENT REQUIRED:** EYE BATH STATION  
**LEAK AND SPILL PROCEDURE:** FLUSH WITH WATER INTO SANITARY SEWER.  
**FOR LARGE SPILLS, DIKE AND PUMP INTO DOT APPROVED CONTAINERS.**  
**HANDLING PROCEDURES AND EQUIPMENT:** ALKALI LIQUID SAFETY REGULATIONS  
**STORAGE REQUIREMENTS:** NORMAL INDOOR, KEEP FROM FREEZING  
**WASTE DISPOSAL:**  
THE CLEANING PROCESS MAY GENERATE A HAZARDOUS INDUSTRIAL WASTE.  
COMPLY WITH CANADIAN MINISTRY OF THE ENVIRONMENT & ENERGY  
REGULATION 347 AND LOCAL MUNICIPAL BY-LAWS.  
COMPLY WITH USA EPA'S FEDERAL, STATE & LOCAL REGULATIONS.  
**SPECIAL SHIPPING INFORMATION:** NON-REGULATED

### SECTION VIII - FIRST AID MEASURES

**EYE CONTACT:** FLUSH EYES WITH WATER OR SALINE SOLUTION FOR 15 MINUTES.  
TURN BACK EYE LIDS. GET MEDICAL ATTENTION.  
**INHALATION:** MOVE PATIENT TO FRESH AIR. IF BREATHING HAS STOPPED,  
OR IS LABORED, GIVE OXYGEN OR ARTIFICIAL RESPIRATION.  
GET MEDICAL ATTENTION.  
**SKIN CONTACT:** REMOVE CONTAMINATED CLOTHING. FLUSH AREA WITH WATER  
OR A MILD ACID SOLUTION ie VINEGAR FOR 15 MINUTES. GET MEDICAL ATTENTION.  
**INGESTION:** DO NOT INDUCE VOMITING. ONLY IF CONSCIOUS, GIVE LARGE  
AMOUNTS OF MILK OR WATER. KEEP PATIENT CALM. CALL PHYSICIAN IMMEDIATELY.

### SECTION IX - PREPARATION DATA

**PREPARED BY:** HEALTH & SAFETY COMMITTEE **DATE:** 05 JAN 2009  
**CONTACT:** AL STRUTHMANN (Hon. BSc.) **TEL:** (519) 454-4370  
**CANADA & USA TOLL FREE 1-888-658-5515** **FAX:** (519) 454-4362

NOTE: N. AP. = NOT APPLICABLE N. AV. = NOT AVAILABLE

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